Best Clinical Practice

Gynaecological Cancer Palliative Care 2008

Developed by the Gynaecological Oncology Palliative Care Working Group of the GMCT’s Gynaecological Oncology Committee
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FOREWORD

By Norelle Lickiss AO
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A diagnosis of gynaecological cancer is for a woman, an entry into a new world, a step along a new path. The world she has entered has a new language, new persons, new institutions, new modes of action, and she has to cope with this dramatic change in context at the same time as she faces a new understanding of herself (maybe as an ill woman, maybe coming towards the close of her life), a new sense of her body, with symptoms not only causing distress, but also having a new significance, markers of a new meaning. The path on which she finds herself may be beset with experiences of unpleasant investigations, unfamiliar treatments, unexpected side effects, and highs of hope and lows of sadness, instead of the more even pattern (maybe) of her life thus far.

Those close to her, even those who depend on her, must also share in the new realities. At times when the news is bad, with outcomes not as favourable as hoped for, and symptoms, whether due to cancer or anti-cancer treatment, more troublesome than expected, her coping mechanisms and relationships may be very strained indeed, and even a previously resilient woman may feel very broken. At times of intense personal distress, she may be faced with participation in difficult decisions, with significant consequences, not only for herself, but for those in relationship with her. Her clinicians will need to understand her priorities, critical relationships, spiritual tradition, cultural perspectives, personal values and preferences, all the while respecting her privacy and dignity, in the face of complex clinical decisions throughout the course of her illness.

All this and more needs to be understood by clinicians populating the world of cancer care, especially those privileged to care for women with gynaecological cancer at any stage. Education and training of professional staff needs to include the understanding of persons and interpersonal skills, knowledge and skills regarding anticancer treatment to reduce the price of the benefit possible, good understanding of the mechanisms of major symptoms and their relief, and of the care of a woman living the last days or hours of her life. In addition there needs to be a pervasive, sound, ethical instinct guiding key clinical decision-makers in sometimes fraught situations: deliberate reflection and ethical transparency are necessary features of contemporary cancer care. All of these build on a basic commitment to the value of each woman and her dignity irrespective of her circumstances, and the context of care.

Each woman is unique, experience of cancer (including symptoms) is subjective, but there are some commonalities, justifying the publication of this document. It is not possible to cover all the diversity to be met with, nor the different ways of evaluating evidence and experience, but principles need to be understood and above all, there needs to be an unshakeable conviction that the care of a woman with gynaecological cancer is far more than anti-cancer treatment - she certainly knows that!
This guideline, with its focus on comprehensive and continuing care (including symptom relief) of women with gynaecological cancer, is a companion volume to the existing Clinical Practices Guidelines, focussed rather on cancer-specific strategies. The complexity of the clinical situations which arise in the care of women with gynaecological cancer is displayed along with the growth of knowledge of the clinical science of symptom relief. The eminent gynaecologists in Sydney, notably at King George V Hospital and Royal Hospital for Women, who focussed on the care of women with gynaecological cancer, and pioneered the speciality in Australia and elsewhere, can be well pleased not only that the community profile of gynaecological cancer is rising and manifest in many ways (for example, the Senate Report of 2007), but also that clinicians are bent on excellence in all aspects of care. This resource is a fine legacy to decades of diligence.

Relief of symptoms throughout the whole course of the disease remains critical. Women in affluent countries such as Australia have access not only to good anti-cancer treatment, but also good symptom relief if the clinical staff involved with them (in hospital, home or residential care facility) pay adequate attention to this matter. This document offers assistance to such clinicians, stressing the need for careful appraisal of the causes as well as relief of symptoms and other elements of distress, and commonsense means of evaluation. Revision will be needed as gaps are recognised, and new strategies are developed, but the platform laid down by the many experienced authors will support future additions. Comprehensive care is everybody's business, but specialist consultative services, nursing, medical, and psychosocial have a part to play, hopefully as soon as a symptom (or other distress) is proving difficult to relieve, irrespective of the prognosis of a patient.

Approaching death is a critical part of living. Patients who are very close to death, and actually dying are a special responsibility, and the quality of their care is a measure of the whole. We have an exquisite responsibility to ensure that women are well prepared to face dying if this is a highly probable outcome, so that they can live well despite even frailty, folding up life with dignity, placing their hope not merely in anti-cancer treatment which will eventually fail, but in the fidelity of their carers and in their own unshakeable value. The dying of a woman is ultimately a personal act, not a therapeutic failure. These are deep issues.

"The longest journey is the journey inward" Forster wrote in "A Passage to India". Some of this journey is made alone, and privacy in every respect, and respect for personal dignity is at the core of care. But we need competent and kind companions also, and so do patients, friends and families, especially if a journey is tough. It can be hoped that this document will assist clinicians to be such companions.
INTRODUCTION

Despite the significant advances in the diagnosis and management of gynaecological cancer that have been made in recent times 492 women died of gynaecological cancer in NSW in 2006, accounting for 8% of all female cancer deaths. It is therefore essential that clinicians who care for these women are aware of what can be done to alleviate suffering.

Women with advanced gynaecological cancer commonly face a wide range of complex and distressing physical and psychosocial symptoms including pain, ascites, bowel obstruction, dyspnoea, anxiety, fistula and ureteric obstruction. Such symptoms prove challenging to the clinicians who care for these women in a wide range of settings, from tertiary hospitals to rural and remote communities. Clinicians must provide psychological, physical, social and spiritual care to address multifactorial, often inter-related symptoms with little access to resources and support. Such symptoms may be experienced throughout the disease trajectory thus it is imperative that palliative care is available from the point of diagnosis.

How to use this document
This document has been prepared by an expert group of experienced clinicians. They represent interpretation of the best available evidence at the time of publication. Palliative care is a dynamic and developing specialty and new research evidence is emerging in the literature for symptom management at a rapid rate. Despite this, high-level literature recommendations for the management of many symptoms are limited because of a lack of high quality research. Thus when evidence levels are low information is based on best practice and consensus management.

SECTION 4 - RESOURCES contains references for further reading and helpful websites.

The aim of the document is to provide clear, practical and concise information to assist busy clinicians in ensuring women with gynaecological cancer receive optimum care.

Principles in the care of women with advanced gynaecological cancer when using the document:

- The woman’s perception of her future:
  It is imperative that the woman and her family are involved in all decisions regarding her care. Despite treatments being perceived as futile, clinicians must be guided by what this woman wants most at this time in order to live her life until her death.

- Complexity of clinical practice:
  The complexity of clinical practice requires that clinicians understand the individual clinical situation and exercise appropriate professional judgement when basing therapy on this document. In complicated situations these recommendations are not a substitute for seeking appropriate advice.
Multidisciplinary care:
The care of women with advanced gynaecological cancer is enhanced if their management is led by a multidisciplinary team involving clinicians from gynaecological oncology, medical oncology, radiation oncology, palliative care, allied health, psychosocial care, General Practice and both generalist and specialist nursing. When making complex clinical decisions it is imperative that clinicians seek advice and support from the woman’s multidisciplinary team.

Response to disease modifying treatments:
When making decisions regarding aggressive symptom management the clinician must consider the woman’s response to current therapies and whether her disease is still responsive to disease modifying treatments.

Questions to ask:
Is this woman unwell because of progressive disease?
Is this woman unwell because of the effects of an acute problem with an easily reversible cause?
PRINCIPLES OF PALLIATIVE CARE

What is palliative care?
Palliative care is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems; physical, psychosocial and spiritual. Palliative care:

• Provides relief from pain and other distressing symptoms
• Affirms life and regards dying as a normal process
• Intends neither to hasten nor postpone death
• Integrates the psychological and spiritual aspects of patient care
• Offers a support system to help patients live as actively as possible until death
• Offers a support system to help the family cope during the patient's illness and in their own bereavement
• Uses a team approach to address the needs of patients and their families, including bereavement counselling if indicated
• Will enhance quality of life and may also positively influence the course of the illness
• Is applicable early in the course of the illness, in conjunction with other therapies that are intended to prolong life such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications

When should palliative care commence?
The World Health Organisation (2002) has defined palliative care as ‘the active total care of patients whose disease is not responsive to curative treatment’. At this time the focus of management changes from ‘cure’ to ‘care’. Thus some women with gynaecological cancer may require a palliative approach from the day of diagnosis if their disease is already not amenable to curative treatment. Others may require a palliative approach at a later time when disease progression produces troublesome symptoms.

Palliative care does not preclude the patient from receiving active or disease modifying treatments. Radiation, chemotherapy and surgery often still have a role in providing symptomatic relief or life prolongation.

Who should provide palliative care?
Provision of high quality palliative care for women with advanced gynaecological cancer requires a multidisciplinary team involving clinicians from gynaecological oncology, medical oncology, radiation oncology, palliative care, allied health, psychosocial care, General Practice and both generalist and specialist nursing.

A palliative approach may be delivered by any clinician. All dying people need access to the philosophical principles of palliative care but not all dying people require specialist palliative care. Specialist palliative care is provided by clinicians who have specialist training in palliative care.
Greater Metropolitan Clinical Taskforce
Gynaecological Oncology Committee

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For further information about GMCT, please see the end of this document.
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AKNOWLEDGEMENT

The Cancer Institute NSW aims to ensure that useful resources are available to enhance cancer treatment and care. Palliation of the symptoms associated with gynaecological cancer requires a high level of knowledge and skill. I pay tribute to the work of the Greater Metropolitan Clinical Taskforce (GMCT) Gynaecology Oncology Network in providing the original training workshop for health professionals, and developing this guideline. These symptoms warrant special attention from those involved in the care of such patients.

This publication covers the management of common palliative care issues in gynaecological cancer and has been developed by the Network with the support of the Cancer Institute NSW. We hope that all clinicians who care for women with gynaecological cancer find this resource useful and practical.

Professor Jim Bishop
Chief Cancer Officer
Cancer Institute NSW

For further information about the Cancer Institute NSW, please see the end of this document.
SECTION 1

FREQUENTLY ENCOUNTERED SYMPTOMS
PSYCHOSOCIAL DISTRESS

COPING AND ADJUSTMENT

Psychological distress is normal and expected as women and their families face “end of life” challenges. All members of the multidisciplinary team have a role in providing support and identifying women whose distress requires more specialised support. For these women, optimal management of the symptoms of psychological distress requires careful assessment by the psychosocial members of the multidisciplinary team (psychiatrist, clinical psychologist and/or social worker) and targeted interventions to address the issues identified. Psychosocial assessments and strategies or interventions for managing psychosocial distress must be communicated to GPs and to local teams, including community oncology and palliative care nurses and care coordinators.

SYMPTOM CHECKLIST

- **Elevated distress**: assess using distress thermometer and accompanying problem checklist (See SECTION 4: RESOURCES)
- **Anxiety / Depression**: refer to psychiatrist or clinical psychologist for clinical assessment
- **Poor sleep**: exclude depression, poor pain control, medication side-effects. Provide education in “sleep hygiene” and refer to specialist allied health professional or nurse for education in relaxation training
- **Somatic symptoms may be multifactorial**: symptoms such as fatigue, anorexia, confusion / delirium, dyspnoea may be exacerbated by psychological distress. Psychological and supportive care has an important role in the assessment and management of such symptoms
- **Coping with physical symptoms**: acknowledge (and treat) the psychological sequelae of managing intractable symptoms such as chronic pain, ascites, bowel obstruction, dyspnoea, nausea / vomiting, bleeding, delirium
- **Existential suffering**: address issues of meaning, spirituality, socio-cultural context, life history
- **Social withdrawal**: actively engage family and social support networks in care and support of patient
ISSUES TO CONSIDER FOR TREATING TEAM

- **Individualised care plans**: develop treatment / management plans in a multidisciplinary team discussion forum, incorporating information such as patient / caregiver preferences, age, comorbidities, geographical location and availability of supportive care resources. Include patients and families, where possible, in the development of the care plan by convening a family conference to clarify the goals of care and the role and use (if indicated) of “active” therapies. Recognise that the continued, judicious use of chemotherapy and/or radiotherapy may be appropriate and valid in the palliative setting, both to maximise symptom control and to address patient / caregiver needs.

- **Communication**: discussing prognosis in the context of the individual’s world view, ceasing active treatment, goals of treatment, quality of life, ongoing supportive care, not-for-resuscitation (NFR) orders, end of life planning, advance care orders (See SECTION 3: CARE OF THE DYING PATIENT).

- **Spiritual / Existential concerns**: acknowledge and consider issues relating to meaning of the disease and its impact on the person; referral to pastoral care worker, hospital chaplain, family’s religious advisor according to patient preferences.

- **Myths / Misconceptions / Fears**: anticipate and address commonly held beliefs, eg. fears of uncontrolled pain, morphine addiction, “abandonment” by treating team (See SECTION 3: CARE OF THE DYING PATIENT).

- **Use of complementary and alternative therapies**: encourage examination of evidence base, cost, side-effects, but acknowledge validity of discussing all options.

- **Family relationships**: engage family in ongoing care and decision-making if capable and available. Assess for strained family relationships or caregiver burden.

- **Maintaining hope**: Facilitate the development of a stance of “realistic optimism”, enabling patients / caregivers to shift their view from “hope for cure” to hope for achievable end-points, eg. alleviation of distress, time with family, death at the place of choice (home or hospital), emotional well-being, ongoing care of survivors. Give permission for patients and families to desist with beliefs which can be an obstacle to confronting and addressing important end of life tasks.

- **Talking to children**: actively assist patients to engage children in age appropriate discussions and activities to maximise their involvement in and understanding of end of life care. Dispel myths about “upsetting the children”; emphasise the benefits for all of preparing the children for the anticipated death. Adequate preparation and time to adjust may result in improved bereavement outcomes. Information booklets and packages are available from organisations such as CanTeen, Cancer Councils and others (See SECTION 4: RESOURCES).

- **Care givers**: acknowledge the enormity of the practical and emotional burden of providing end of life care. Encourage contact with psychosocial team members and link to appropriate support services. Caregivers are not only the providers of physical, psychological and emotional care to the patient; they also have significant support needs in their own right.

- **Body image / Physical appearance**: acknowledge and validate distress associated with visible changes to appearance (hair loss, cachexia, abdominal distention, lower limb oedema, ostomies). Recognise and address more subtle physical changes which contribute to loss of control and autonomy (bodily functions, mobility, level of consciousness).
• **Sexuality:** don’t assume no interest in the context of end stage disease. Discuss validity of continued intimacy in couple relationships, alternative methods of sexual gratification (See SECTION 4: RESOURCES)

• **Practical issues:** wills, enduring Power of Attorney, guardianship, Centrelink benefits, support services in the community, superannuation, life insurance, care arrangements for dependant children, funerals

• **Cultural factors:** acknowledge and support different cultural practices in care of the dying (and deceased). SENSITIVELY address the issues of disclosing diagnosis and prognosis. WORK WITH families towards overcoming obstacles and fears about full disclosure

• **Dealing with uncertainty:** initiate discussions with patient and family about the difficulty of anticipating the prognosis timeframe. Acknowledge the distress associated with uncertainty; such as the inability to plan, problems for caregivers in deciding when to cease working. Assess the level of understanding of the prognosis by patient and family members. Communicate this information to others involved in the care of the patients, including the GP and community nurses

• **Saying goodbye:** rituals, letters, recordings, memory boxes, discussion of preferred place of death and funeral wishes (See SECTION 3: CARE OF THE DYING PATIENT)

• **Euthanasia / Suicide:** frank discussion with patients / families where these issues are raised. Request for euthanasia or threat of suicide is usually in response to overwhelming fear of the anticipated nature of the death from cancer. Discuss fears and reassure about ongoing care and support (See SECTION 3: CARE OF THE DYING PATIENT)

• **Bereavement care for survivors:** develop standard processes for bereavement follow up. Identify specialist services for referral of “high risk” survivors who are at high risk of developing complicated grief reactions

• **Self care:** allow time for reflection on the emotional impact of working in this area. Consider both the strengths and positive outcomes of facilitating a “good death”, as well as encouraging team members to attend to their personal issues of distress and emotional depletion in working with palliative care patients
MANAGING PSYCHOSOCIAL DISTRESS

Information / Education:
- Offer relevant printed information, web-based or audio-visual resources about the physical, psychological and emotional demands of managing advanced disease for both patients and caregivers
- Provide opportunity to discuss information, tailoring to individual preferences and needs
- Source information in languages other than English
- Offer Cancer Council Helpline phone numbers 13 11 20 or toll-free 1800 422 760

Supportive counselling:
- Offer ongoing access to counselling for individuals, couples and families. Ongoing telephone contact from the psychosocial staff of the treating cancer centre is a helpful intervention for patients returning to regional areas for their palliative management
- Consider the availability of telephone (eg. the Cancer Council’s Care Connect and telegroup programs) or internet-based information and support services, especially for patients and families who are isolated due to the burden of illness or geographic location
- Be proactive in encouraging the involvement of children in the counselling process
- Address issues around burden; the perception by patients that their increasing frailty and dependence places an unreasonable burden on their families
- Monitor changing needs and distress levels as disease progresses and end of life approaches; refer for more specialised interventions if indicated
- Address separately the specific needs of caregivers for additional information, respite and other services
- Offer bereavement support for surviving family members; refer to specialist services for those affected by, or at risk of, complicated grief

Medications:
- Consult with psychiatrist regarding the role of psychotropic medications for women with persistent, elevated distress
- Acknowledge the distress associated with caregiving and refer family members or other caregivers to their own GP if elevated distress is a concern and medication is indicated

Exploring hope, changing expectations of hope:
- Initiate conversations that explore dimensions of hope
- Acknowledge the shift of “hope for cure” to a different kind of hope; eg. hope to spend time at home, hope to see child’s next birthday, hope for effective symptom management
- Challenge feelings of worthlessness, hopelessness, guilt, and other unhelpful thoughts
- Assist patients and families to set achievable goals
Euthanasia:
- Explore concerns and reasons for euthanasia request; correct any misconceptions and treat any reversible conditions (depression, pain, anxiety)
- Explore issues around the patient's sense of control and agency
- Assess by direct questioning suicidal ideation or thoughts of death; seek expert opinion if concerned about suicidal risk
- Emphasise commitment of team to ongoing care

Spiritual / Cultural Care:
- Consider spiritual, religious, cultural and existential needs
- Refer to hospital-based pastoral care services where appropriate, or encourage the active participation of the family's community spiritual or cultural advisor

Support Groups:
- If available, support groups may be very effective for both patients and caregivers in providing opportunities to discuss existential concerns and gain reassurance from others in similar situations
- Telegroup services may be the preferable medium for support for a patient group with limited mobility; check availability with Cancer Council

Family conferences / meetings:
- Ongoing communication with the multidisciplinary team is crucial to patient and family satisfaction with care
- Participation in family meetings or conferences at critical time points (ceasing "active" treatment, transfer to palliative care unit), may help to clarify goals of care, alleviate emotional distress and resolve differences among competing family demands
- Where possible, the family GP should be included in end of life planning. Psychosocial information needs to be communicated with the GP, with the consent of the patient; include in the discharge summary. Indicate whether it is necessary for the GP to arrange referral to relevant support services; document to what extent psychosocial staff at the referring hospital will maintain ongoing supportive care

Caregiver support:
- Acknowledge the unique needs and stresses of caregivers in the context of end-stage disease
- Pay particular attention to the needs of partners, who are often referred to as "second order patients" and who may be at high risk of long term psychological morbidity
- Address and normalise individual differences in coping and adjustment
- Encourage self-care of caregiver; "time out", respite, attention to their own health care needs
- Facilitate referral (eg. to own GP) where there is an unusually high or persistent level of distress
Link to services:
For specific support services for patients and caregivers see SECTION 4: RESOURCES
- Provide information about community support services and Centrelink entitlements
- Facilitate referrals to services if required
- Acknowledge the difficulty of accessing and relying on formal support services in the context of loss of role and independent functioning

Specific therapies (eg. Cognitive Behaviour Therapy (CBT), relaxation training, mindfulness training, problem-solving, existential therapy):
- Continue to monitor needs and offer the full range of therapeutic services to dying patients
- Maintain and update information about local specialist service providers
PAIN

Pain syndromes associated with gynaecological malignancy are related to the characteristics and progression of the underlying disease which vary with each primary site. The most common causes of pain in women with advanced gynaecological cancer are direct nerve infiltration, compression of structures by tumour masses, treatment neuropathies, bony or muscular infiltration, peri-tumour oedema, infection or necrosis, and hollow viscus obstruction.

PELVIC PAIN

Acute Onset
Acute onset of pelvic pain that is severe, difficult to localise and is worse with palpation and coughing may be caused by:

- Peritonitis (see abdominal pain, abdominal distention)
- Colitis secondary to radiotherapy or chemotherapy
- Pelvic abscess
- Pelvic thrombophlebitis
- Ovarian vein thrombosis
- Bleed into pelvic mass or cyst

Abrupt onset of pelvic pain associated with flank pain, fever, nausea and vomiting with dysuria and haematuria may be caused by:

- Pyelonephritis
- Other urinary tract infection
- Urinary tract fistula
- Renal infarct
- Renal vein thrombosis
- Papillary necrosis

Distressing, midline suprapubic pain with an associated palpable mass may be caused by:

- Acute urinary retention
- Ovarian mass
- Pelvic abscess
More Gradual Onset

Women with advanced cancer who develop pain that is dull, aching and poorly localised at rest, but more defined with movement may have:

- Bone metastases
- Other soft tissue injury

Visceral pelvic pain is characterised by dull, aching pain associated with a dragging sensation when standing:

- Distinguishing pain of lower gastrointestinal (GI) and gynaecological origin is difficult because the uterus, cervix, and ovaries share the same visceral innervation as the lower ileum, sigmoid colon, and rectum
- Infiltration of the uterus (cancer, adenoma, endometriosis) and stretching of the broad ligament tends to lead to pain that is felt in the midline of the hypogastrium
- Cervix pain (cancer, infection) is usually perceived in the lower back, sacrum and hypogastrium
- Ovarian pain tends to be the most poorly localised due to interconnection of the ovarian and pelvic nerve plexus. It is usually perceived towards either edge of the pelvis

Severe and difficult pain that is worse with hip flexion may be caused by:

- Lumbosacral plexopathy
- Psoas muscle syndrome

Midline or flank pain associated with dysuria, urgency, polyuria, fever, nausea may represent a number of different disorders of the renal tract and may be caused by:

- Cystitis
- Nephrolithiasis
- Perinephric abscess
- Urethritis

Treatment Options

See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT
ABDOMINAL PAIN

Acute Onset
Associated with guarding, worse with palpation or coughing suggests inflammation which may be caused by:

- Ruptured viscus leading to peritonitis where there is associated fever, confusion, nausea and vomiting
- Gut ischaemia
- Other problems to exclude:
  - Lower lobe pneumonia
  - Cholecystitis or cholangitis
  - Pancreatitis
  - Appendicitis

Left lower quadrant pain associated with loose bowel actions, low-grade fever and PR blood loss may be caused by:

- Colitis / mucositis: (See SECTION 2: MUCOSITIS)
  - Ischaemia
  - Infection
  - Post-treatment (radiotherapy, chemotherapy)
- Metastases
- Diverticulitis
- Angiodysplasia

Few physical findings, but escalating pain may be caused by:

- Mesenteric angina or ischaemia
- Gut ischaemia

Cramping abdominal pain associated with altered bowel habit may be caused by:

- Constipation
- Disordered motility
- Early bowel obstruction

Severe right upper quadrant pain may be caused by:

- Subcapsular hepatic bleed
- Subphrenic abscess
- Renal infarction

Sudden onset, left upper quadrant pain that may be associated with fever, nausea and vomiting may be caused by:

- Renal infarction
- Splenic infarction
More Gradual Onset
Generalised abdominal discomfort associated with increased abdominal girth, early satiety, altered bowel habits and increasing shortness of breath particularly when lying flat may be caused by:
- Ascites
- Infiltration of the abdominal wall

Epigastric pain may be caused by:
- Compression of the stomach by a large liver
- Metastatic infiltration of the stomach or upper GI
- Peptic ulcer disease or gastritis secondary to *H. pylori*, NSAIDs (inc. aspirin), corticosteroids, delayed gastric emptying, prolonged hospitalisation
- Upper GI lymphadenopathy

Right upper quadrant pain or discomfort that may radiate to the back or epigastrium may be caused by:
- Hepatic metastases

Focal epigastric pain may be caused by:
- Peptic ulcer
- Metastases

Treatment Options
See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT

- **Colitis:**
  - Collect stool for culture and *C. difficile* toxin
  - If positive for *C. difficile* toxin (the most common cause of colitis) treat with metronidazole (400mg PO tds) and consider stopping other antibiotics. Implement appropriate infection control measures as per local policy
  - If diarrhoea persists see SECTION 1: DIARRHOEA
  - Supportive hydration
  - Radiation enteritis may improve with steroid enemas Prednisolone (20mg PR nocte)

- **Peptic ulcer disease:**
  - Decreasing acid secretion (ranitidine 150mg PO bd or a Proton Pump Inhibitor (PPI) eg. omeprazole 20mg PO daily)
  - Reducing contact of acid with ulcer to promote healing (sucralfate 1gm PO qid)
  - Treat *H. pylori* if present and cease contributing medications if possible

- **Diverticulitis:**
  - Hydration and antibiotics
  - A perforated diverticulum may lead to peritonitis or an abscess

- **Mesenteric Ischaemia:**
  - Early diagnosis is imperative and offers the best opportunity to re-establish blood flow
  - Antibiotics
  - Anticoagulation
  - Fluid management
BACK PAIN

Acute Onset
May be caused by osteoporosis, metastatic bone disease or prolonged corticosteroids, exclude:
- Vertebral crush fractures
- Spinal cord compression or cauda equina compression (See SECTION 2: SPINAL CORD COMPRESSION)

If associated with fever, neutropenia, or epidural or intrathecal lines, possible causes include:
- Epidural abscess
- Meningitis

If associated with coagulopathy or thrombocytopenia, exclude:
- Local epidural bleed

In the presence of malignant disease, with or without neurological changes or changes in continence, exclude:
- Cord compression from direct tumour effects
- Cord compression with vertebral collapse
  (See SECTION 2: SPINAL CORD COMPRESSION)

More Gradual Onset
In patients who are bed-bound, consider:
- Pressure areas
- Patients may experience pain simply from the fact that they are bed bound

Aching discomfort, worse with pressure in the paravertebral area, consider:
- Para-aortic lymphadenopathy
- Malignant bone disease

Unilateral lower back pain radiating to the flank that is severe, intermittent, and dull (sometimes exacerbated by oral fluids) and can be associated with haematuria and/or fever, consider:
- Hydronephrosis or hydroureter (See SECTION 2: URETERIC OBSTRUCTION)
- See SECTION 1: HAEMATURIA
- Pyelonephritis

Dull, poorly localised, non-colicky pain in the flank, back, or lower abdomen, sometimes with fever, lower extremity oedema, phlebitis, and deep venous thrombosis, consider:
- Retroperitoneal fibrosis

Cachexia:
- Wasting of paravertebral muscles

Treatment Options
See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT
CHEST PAIN

Acute Onset
Sharp, pleuritic chest pain, associated with breathlessness may be caused by:
- Pulmonary embolus (PE):
  - Remember the presenting picture of PE differs according to the size and location of the PE (See SECTION 2: THROMBOEMBOLIC EVENT)
- Pneumonia
- Fractured rib
- Oesophageal disorders
- Pericarditis
- Myocardial ischaemia

More Gradual Onset
Gradual onset of chest pain associated with increasing shortness of breath and a non-productive cough may be caused by:
- Pleural effusion (See SECTION 2: PLEURAL EFFUSION)
- Herpes zoster infection (prodromal or following development of vesicles):
  - High index of suspicion in immuno-suppressed individuals
  - Early commencement of antiretroviral therapy may decrease the likelihood of post-herpetic neuralgia
- Bone metastases or fracture (pathological or traumatic) (See SECTION 2: BONE PAIN)
- Chest wall invasion
- Pericardial disease
- Oesophageal disease

Treatment Options
See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT
- Physiotherapy review for advice re splinting rib fractures when moving or coughing
VULVAL PAIN

Symptoms
Vulval burning and discomfort may be caused by:

- Vulvovaginitis
  - Contact vulvitis or vaginitis secondary to an allergic reaction
  - Infection (eg. bacterial, parasitic, fungal)
  - Dysuria may occur if there is erosion of vaginal tumour into the urinary meatus
  - Cutaneous ulceration of vulval tumour (See SECTION 2: FUNGATING WOUNDS)
  - Vulval / vaginal mucositis secondary to chemotherapy or radiotherapy (See SECTION 2: MUCOSITIS)

- Vulvodynia
  - Hyperaesthesia of vulvovaginal skin from tumour infiltration of local nerves or surgery
  - There may be no identifiable cause

- Genital oedema (See SECTION 1: OEDEMA)

Treatment Options

- Psychological and supportive care for women with vulvodynia
- Contact vaginitis or vulvitis may respond to topical corticosteroid (eg. 0.5% hydrocortisone cream bd) and identification of the allergen
- Atrophic vaginitis may respond to topical oestrogen pessary eg. oestradiol (25mcg PV daily for 2 weeks then 1-2 times each week) or oestriol (0.5mg PV daily for 2 weeks then 1-2 times each week) AND treating any aggravating causes
- Treat local infections
- Cancers require prompt diagnosis for consideration of surgery and/or radiotherapy
- The chronic pain of vulvodynia may respond to analgesia (See SECTION 2: NEUROPATHIC PAIN)

See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT
LOWER LIMB PAIN

Symptoms
Pain, tenderness and leg swelling may be caused by:
- Deep Vein Thrombosis (DVT) may occur unilaterally or bilaterally (See SECTION 2: THROMBOEMBOLIC EVENT)
- Lymphoedema (See SECTION 1: OEDEMA)
- Dependant oedema (See SECTION 1: OEDEMA)
- Inferior venal caval (IVC) obstruction
- Fibrosis secondary to treatment

Neuropathic pain radiating to lower limbs may be caused by:
- Spinal cord compression (See SECTION 2: SPINAL CORD COMPRESSION)
- Nerve roots compression (See SECTION 2: NEUROPATHIC PAIN)
- Lumbosacral plexopathy (See SECTION 2: PSOAS MUSCLE SYNDROME)

Treatment Options
See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT
PAIN ASSOCIATED WITH TREATMENT

Symptoms
Neuropathic pain:
- Post-surgical
- Radiation induced plexopathy
- Neurotoxic chemotherapy (paclitaxel, docetaxel, cisplatin, oxaliplatin)

Post-surgical pain:
- Wound infection or abscess
- Peritonitis may occur as a consequence of undetected bowel perforations
- Bowel obstruction (See SECTION 2: BOWEL OBSTRUCTION)
- Enterocutaneous fistula (See SECTION 2: FISTULA)
- Intra-abdominal adhesions
- Thermal injury to the bladder or ureter:
  - Manifests up to 14 days postoperatively with abdominal or flank pain, fever, and peritonitis
  - Findings from an intravenous pyelogram (IVP) demonstrate extravasation of urine or urinoma
  - Patients with mechanical obstruction to urine may present with a similar clinical picture
- Incisional hernias may become incarcerated, although this is rare:
  - Commonly present with abdominal pain and signs of bowel obstruction or perforation
- Thermal bowel injury:
  - Occurs infrequently, but may have serious consequences
  - Symptoms may not occur for days or weeks post surgery, and patients are likely to present with bilateral lower quadrant pain, tenderness, fever, elevated white cell count and may develop peritonitis
  - Changes consistent with a paralytic ileus or free gas under the diaphragm may be noted on a plain abdominal x-ray

Treatment Options
See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT
- Occupational therapy review for management of neuropathic complications
HEADACHE

Symptoms
Dull aching discomfort that is worse in the morning, associated with nausea and vomiting may be caused by:
- Cerebral or leptomeningeal metastases

Treatment Options
See SECTION 2: CEREBRAL METASTASES
PRINCIPLES OF PAIN MANAGEMENT

Principles of Pain Assessment

- Multiple factors can influence a person’s perception of pain
- A comprehensive pain history should include:
  - The site(s) of the pain
  - The severity of the pain. Use scales which may include numeric pain intensity (0 – 10 scale), verbal descriptor scale or face scale
  - Quality of pain described in the patient’s own words
  - Exacerbating and relieving factors: What makes it worse? What makes it better?
  - The onset of pain
  - Interference with activities of daily living, sleep pattern
  - Impact on psychological state
  - Response to previous and current analgesic therapies

Management of Pain

Adhere to the World Health Organisation (WHO) principles of pain management:

- By the mouth:
  - The oral route is preferred
  - Use subcutaneous route as an alternative if unable to swallow or constant nausea and vomiting, or impaired gut function
- By the clock:
  - Analgesia should be ordered at regular intervals either by short-acting analgesia (ie. oral morphine q4hrly) or long-acting opioids (ie. fentanyl patch every 3rd day, MS Contin PO bd)
  - Analgesia should not be written up prn unless it is for a breakthrough order
- By the ladder:
  - The choice of analgesia prescribed is dependant on the type and severity of pain. The principle of the WHO 3-step ladder is to move up the ladder and titrate doses with or without adjuvant analgesia until acceptable analgesia is achieved
  - The WHO ladder should be considered an important component of a flexible approach to adequate analgesia
who analgesic ladder

**step 1: non-opioid + adjuvant**
(eg. paracetamol, NSAIDs)

**step 2: opioid for mild to moderate pain**
+ non-opioid + adjuvant
(eg. tramadol, codeine)

**step 3: opioid for strong pain**
+ non-opioid + adjuvant
(eg. morphine, hydromorphone, oxycodone, fentanyl, methadone)

**persisting pain**

**introduction to prescribing morphine**

- Morphine remains the initial opioid of choice
- Start with clear explanation of the use of morphine
- Address patient and family fears and misconceptions, ie. addiction, tolerance and early demise
- Be aware of the conversion from other analgesia to morphine (eg. tramadol, codeine) (see table: opioid conversion chart)
- Oral administration of opioids is the preferred route, unless the person can not swallow or has uncontrolled nausea and vomiting or severe constipation (absorption impaired). In this case morphine may be given subcutaneously
- Be aware of the need to modify doses in renal failure and the need to exercise caution in impaired liver function (see table: prescribing opioids in special situations)
- Patients who are opioid naïve, start with 2.5 to 5.0mg oral short acting morphine q4hrly or SC with appropriate dose modification if unable to swallow
- Breakthrough analgesia must be available:
  - The breakthrough dose should be 50 – 100% of the 4-hourly dose
  - A breakthrough dose should be given as often as necessary for breakthrough pain but not more frequently than every 30 minutes
  - If 3 or more breakthrough doses are consistently required in a 24 hour period, the regular dose should be reviewed
- Titrate dose to maximise analgesia and limit adverse effects
- Once the patient’s pain is controlled on a short-acting opioid, the total 24-hour requirements can be calculated and switched to a long acting preparation of morphine (see table: australian opioid analgesic oral, rectal and transdermal preparations):
  - MS Contin or Kapanol
  - A short acting opioid breakthrough dose must still be prescribed which should be approximately equivalent to 1/6 of the total morphine dose
  - When switching, ensure the LAST dose of short acting is given with the first dose of long acting MS Contin or Kapanol

**if you are unsure, seek specialist advice**
## Alternative Opioids to Morphine

### Oxycodone:
- Commonly used in place of morphine
- Useful if intolerable side effects from morphine
- Considered more potent than morphine
- Renal excretion of the parent drug, therefore extreme caution in renal failure
- Versatile:
  - Short acting preparation: Oxynorm (See table: Australian Opioid Analgesic Oral, Rectal and Transdermal Preparations)
  - Long acting preparation: Oxycontin (See table: Australian Opioid Analgesic Oral, Rectal and Transdermal Preparations)
  - Rectal: Prolodone (See table: Australian Opioid Analgesic Oral, Rectal and Transdermal Preparations)
  - Parenteral: SEEK SPECIALIST ADVICE

Oxycontin has a biphasic release with onset of analgesia in 1 hour. It is **not necessary** to give the first dose of Oxycontin with a short acting preparation.

**IF YOU ARE UNSURE, SEEK SPECIALIST ADVICE**

### Fentanyl:
- Is available as a transdermal patch or as a lozenge
- Is commonly used in advanced cancer for patients whose pain responds to an opioid, especially for:
  - Intolerable adverse effects from other opioids
  - Impaired gut function
  - Impaired oral absorption
  - Impaired renal function
  - Poor compliance with oral medications
- Should be reserved for stable pain states or when other difficulties are present such as difficult to control nausea, constipation or impaired gut function
- When commencing patches:
  - Apply the patch and continue the previous opioid for 12 hours
  - Cease the previous opioid 12 hours later and encourage the use of breakthrough analgesia until stable
  - Heat increases absorption of fentanyl so care should be taken when using heat sources eg. hot water bottles and therapeutic mattresses
- Fentanyl lozenges are an oromucosal preparation for breakthrough cancer pain for people who are on regular opioids. There is a rapid onset of action within seconds after the lozenge is moved along the inside lining of the cheek. The lozenge must not be chewed or sucked. There is NO dose equivalence between fentanyl lozenges and other opioid formulations. Therefore, all people should be commenced on the 200mcg lozenge and the dose titrated upon each individual's response.

**IF YOU ARE UNSURE, SEEK SPECIALIST ADVICE**
Hydromorphone:
- Strong opioid that is commonly used for opioid rotation when:
  - Patients intolerant of morphine
  - Patients experiencing adverse effects from morphine
- May also be useful as “breakthrough analgesic” for patients on fentanyl, patients who are intolerant of other opioids
- More potent than morphine and care must be exercised when switching from other opioids to hydromorphone
- Like morphine, the parent drug and metabolites are renally excreted and care must be exercised!
- Less versatile than other opioids:
  - Short acting PO preparation (See table: Australian Opioid Analgesic Oral, Rectal and Transdermal Preparations)

IF YOU ARE UNSURE, SEEK SPECIALIST ADVICE

Buprenorphine:
SEEK SPECIALIST ADVICE

Methadone:
SEEK SPECIALIST ADVICE
### Australian Opioid Analgesic Oral, Rectal and Transdermal Preparations

<table>
<thead>
<tr>
<th>Generic name</th>
<th>Commercially available long acting preparation</th>
<th>Commercially available short acting preparation</th>
</tr>
</thead>
</table>
| **Morphine** | MS Contin (bd dosing)  
5, 10, 15, 30, 60, 100, 200mg BD doses  
MS Mono (daily doses)  
30, 60, 90, 120 mg  
Kapanol (daily or bd dosing)  
10, 20, 50, 100mg | Ordine liquid  
1mg/ml, 2mg/ml, 5mg/ml, 10mg/ml  
Anamorph tablets  
30mg |
| **Oxycodone** | Oxycontin (bd or tds dosing)  
5, 10, 20, 40, 80 mg | Endone tablets  
5mg  
Oxynorm capsules  
5, 10, 20mg  
Oxynorm liquid  
1mg/ml, 10mg/ml  
Prolodone suppositories  
30mg |
| **Hydromorphone** | | Dilauidid tablet  
2, 4, 8mg  
Dilauidid liquid  
1mg/ml |
| **Fentanyl** | Durogesic patches (Change every 72 hours)  
12mcg/hr, 25mcg/hr/ 50mcg/hr, 75mcg/hr/ 100mcg/hr | Actiq (fentanyl lozenge)  
200 mcg, 400mcg, 800mcg |
# Opioid Conversion Chart

## Approximate Equivalent Doses of Alternative Opioids

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Oral dose</th>
<th>Equivalent parenteral dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>30mg</td>
<td>10mg SC / IM / IV</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>6 to 7.5mg</td>
<td>1.5mg SC / IM / IV</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>15mg</td>
<td>10mg SC / IM</td>
</tr>
<tr>
<td>Tramadol</td>
<td>100 to 150mg</td>
<td>100mg IM / IV / SC</td>
</tr>
<tr>
<td>Fentanyl</td>
<td></td>
<td>100mcg IV / IM / SC</td>
</tr>
</tbody>
</table>

(Adopted from Australian Therapeutic Guidelines: Analgesia)

## Dose Conversion of Transdermal Fentanyl Patches to Oral Morphine

<table>
<thead>
<tr>
<th>Total patch strength in milligrams:</th>
<th>Hourly dose in micrograms:</th>
<th>Oral morphine dose in milligrams per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>12</td>
<td>&lt;60</td>
</tr>
<tr>
<td>4.2</td>
<td>25</td>
<td>60-100</td>
</tr>
<tr>
<td>8.4</td>
<td>50</td>
<td>120-200</td>
</tr>
<tr>
<td>12.6</td>
<td>75</td>
<td>180-300</td>
</tr>
<tr>
<td>16.8</td>
<td>100</td>
<td>240-400</td>
</tr>
</tbody>
</table>

(Adopted from Australian Therapeutic Guidelines: Palliative Care)

NB These doses are approximate and care must be exercised when commencing or switching opioids. Most opioid conversion tables are based on single dose studies and there is wide individual variation.

It is recommended that when one opioid is substituted for another, the dose of the second opioid is commenced at approximately one-third less than the first opioid.

In palliative care, the preferred routes of administration are either PO or SC. In some situations, such as shock or coagulopathic states, the IV route of administration is preferable. In these situations, urgent consults with Acute Pain or Palliative Care teams are recommended.

When commencing a fentanyl patch it is strongly recommended that the manufacturer’s guidelines and Specialist Palliative Care Teams are consulted.
Opioid Toxicity

Pre-empt the adverse effects of morphine (and other opioids)

<table>
<thead>
<tr>
<th>Adverse Effects of Opioids</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gastrointestinal:</strong></td>
</tr>
<tr>
<td>- Constipation</td>
</tr>
<tr>
<td>- Nausea and vomiting</td>
</tr>
<tr>
<td>- Delayed gastric emptying</td>
</tr>
<tr>
<td>- Anorexia</td>
</tr>
<tr>
<td><strong>Neurological:</strong></td>
</tr>
<tr>
<td>- Sedation</td>
</tr>
<tr>
<td>- Clouded thinking</td>
</tr>
<tr>
<td>- Delirium</td>
</tr>
<tr>
<td>- Myoclonic jerks</td>
</tr>
<tr>
<td><strong>Dermatological:</strong></td>
</tr>
<tr>
<td>- Pruritus</td>
</tr>
<tr>
<td>- Flushing</td>
</tr>
<tr>
<td>- Sweating</td>
</tr>
<tr>
<td><strong>Cardiovascular:</strong></td>
</tr>
<tr>
<td>- Postural hypotension</td>
</tr>
<tr>
<td>- Bradycardia</td>
</tr>
<tr>
<td><strong>Urological:</strong></td>
</tr>
<tr>
<td>- Acute urinary retention</td>
</tr>
<tr>
<td><strong>Respiratory:</strong></td>
</tr>
<tr>
<td>- Dose related respiratory depression</td>
</tr>
<tr>
<td>- Bronchospasm</td>
</tr>
</tbody>
</table>

Guide to the table:
- Respiratory depression is very unlikely if opioids are titrated appropriately. Should this happen, the first step must be to withhold the morphine or other opioid and to check for other causes of respiratory depression (eg. hypercapnia). Use of Naloxone to reverse opioid analgesia should only be considered in the circumstance of significant respiratory compromise (ie. respiratory rate < 8/min, barely rousable)
- Naloxone should not be used diagnostically to “exclude” opioid toxicity in patients with ongoing requirement for opioid analgesia
- When commencing opioids, warn patients about the possibility of adverse effects. Aside from constipation, most of the effects are self-limiting and can be easily managed with antiemetics, adequate hydration and appropriate titration. Adverse effects that fail to settle require repeat biochemistry, exclusion of other contributing factors and may require opioid switching
Prescribing Opioids in Special Situations

Impaired renal function:
- Increased accumulations of parent drug and metabolites may occur if renal function is impaired and therefore caution must be exercised.
- **Codeine should not be used**
- Morphine, hydromorphone and oxycodone should be dose-reduced with extended dosing frequency. Extreme caution should be used.
- Fentanyl and methadone are considered safe, but should be prescribed with caution and specialist advice.

Impaired liver function:
- The liver is the major site of metabolism of opioids from parent compounds to active or inactive metabolites. In patients with liver failure, reduced metabolism usually results in accumulation of the parent drug in the body with repeated administration. Therefore care must be exercised. Generally, patients with severe liver disease should be prescribed lower doses of opioids, with extended dosing frequency.
- **Codeine and methadone should not be used**
- Morphine, hydromorphone and oxycodone should be used very cautiously with close supervision.
- Fentanyl is considered safe, but specialist advice is recommended.

Opioid-induced adverse events

People who have been on stable doses of opioids and then become unwell, is a separate issue to short-term problems when commencing opioids.

Opioid-induced adverse events may be numerous and include toxicity presenting in a variety of ways and may include confusion, drowsiness, delirium, hallucinations, nausea, vomiting, myoclonic jerks, seizures, pruritus, respiratory depression and constipation.

This occurs when:
- Either the parent drug or its metabolites accumulate.
- Other medications have synergistic or cumulative adverse reactions or alter the metabolism of opioids.
- Other patient related factors mimic opioid toxicity.

Unfortunately the tendency is to blame the opioid medications as the cause of changes in people’s clinical situation and so, alternative diagnoses must always be considered. Common differential diagnoses are summarised in the following table.
### Common Causes of Changes in People’s Cognitive State in Advanced Gynaecological Malignancies

#### Metabolic:
- Liver failure
- Renal failure
- Adrenal failure
- Hypoxia
- Electrolyte disturbance (hyponatraemia, hypercalcaemia)
- Dehydration

#### Endocrine:
- Hyper / hypoglycaemic
- Hypo / hyperthyroid

#### Sepsis

#### Cerebral disorders:
- Cerebral metastases
- Vascular accidents
- Paraneoplastic (cerebellar, limbic encephalitis)

#### Iatrogenic:
- Opioids
- Antidepressants
- Benzodiazepines
- Corticosteroids
- NSAIDs
- Anticholinergics
- Serotonin syndrome

#### Substance withdrawal:
- Alcohol
- Benzodiazepines
- Illicit drugs

#### Physical discomfort:
- Acute retention of urine
- Constipation

#### Psychological distress

#### Impending death
Management is tailored to the clinical situation. Suggested interventions include some or all of the following:

- Distinguish the most likely cause of the problem (reversible vs irreversible)
- Reduce the background dose of opioid medication if adequate analgesia
- Treat the distressing symptoms (e.g., delirium, nausea, vomiting, myoclonic jerks)
- Ensure adequate hydration

In some situations, opioid switching may be beneficial (see above).

Opioid antagonists i.e. naloxone:

- **Should not be used “diagnostically” to exclude opioid toxicity in patients with ongoing requirement for opioid analgesia (e.g., cancer pain)**
- **Should only be considered in the circumstance of significant respiratory compromise**
- **Rousability in conjunction with respiratory rate is the most appropriate measure of impending airway compromise**
- **Confusion and pinpoint pupils are unreliable signs**

The main concern with naloxone is that this will reverse opioid analgesia and may prompt a drug withdrawal and a situation of uncontrolled pain. This medication should not be given unless it is clinically indicated. A better approach may be to:

- Closely observe
- Ensure adequate hydration
- Withhold the next dose, but ensure breakthrough analgesia readily available should pain be bothersome
- Consider dose reduction

If naloxone is considered clinically indicated, it is recommended that it is given in increments:

- Dilute a standard 400mcg ampoule of naloxone to 10ml with 0.9%NaCl for injection
- Administer 0.5ml (20mcg) IV every 2 minutes until the patient’s respiratory status is satisfactory
- Naloxone is rapidly metabolised and further doses may be necessary
- Titrate naloxone dose against respiratory function without necessarily fully reversing sedation as full reversal can precipitate hyperalgesia and agitation
- Ensure opioids are charted at either a lower dose or an appropriate alternative opioid. Remember that adjuvant analgesia can allow better analgesia than purely relying on an opioid

- **SEEK SPECIALIST ADVICE**
Adjuvant Medication

- Defined as drugs with other indications that may be analgesic in specific circumstances
- Numerous drugs in diverse classes
- May be introduced at any point in the analgesic ladder with the main aim to improve pain control and limit adverse effects of medications
- Antidepressants and anticonvulsants are the first choice of medications for neuropathic pain however, choice is still often based on local availability, previous experience and evidence derived form non-cancer pain use
- With all adjuvant agents, response is highly variable and individual
- This list is not comprehensive and serves as a starting point only

<table>
<thead>
<tr>
<th>Drug Group (suggested starting doses)</th>
<th>Mechanism of Action</th>
<th>Indication</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paracetamol (1g PO qid, 500mg PR qid, 1g IV qid)</td>
<td>Activates the descending pathways of pain</td>
<td>Recommended as a universal adjuvant in the management of cancer pain</td>
<td>Consider addition of paracetamol in all people with cancer pain except the elderly, past history of heavy alcohol use and liver failure</td>
</tr>
<tr>
<td>NSAID/COX-II inhibitor * eg. ibuprofen (200-400mg PO bd-tds) naproxen (250mg PO tds-qid) (LA: 750mg-1g PO daily) celecoxib (100-200mg PO daily) ketorolac (seek specialist advice) (10 SC tds)</td>
<td>Inhibits prostaglandin release in the tissues Decreases inflammation</td>
<td>Bone pain Inflammatory pain Colicky pain of the renal tract</td>
<td>Use NSAIDs or COX-II inhibitors with caution if there is potential for or past history of cardiac, renal or GI disease. Avoid the use of multiple NSAIDs or corticosteroids concomitantly if possible There is no therapeutic benefit to using COX-II over NSAIDs except if concern over platelet aggregation</td>
</tr>
<tr>
<td>Tricyclic Antidepressant eg. amitriptyline (25-50mg PO nocte)</td>
<td>Blocks descending pain pathway through blocking serotonin &amp; noradrenaline</td>
<td>Nerve pain</td>
<td>Start with low doses and titrate upwards every three days to 150mg/day according to analgesia and adverse effects especially constipation and postural hypotension</td>
</tr>
<tr>
<td><strong>Corticosteroids</strong> <em>&lt;br&gt;eg. dexamethasone (4-16mg PO/SC daily)</em></td>
<td>Inhibits prostaglandin release&lt;br&gt;Decreases swelling &amp; inflammation in tumour mass</td>
<td>Nerve compression&lt;br&gt;Raised intracranial pressure&lt;br&gt;Spinal cord compression&lt;br&gt;Organ infiltration&lt;br&gt;Bone pain</td>
<td>The doses of corticosteroids recommended are variable&lt;br&gt;The recommendation is that the lowest effective dose is used for as short a time as possible</td>
</tr>
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</tr>
<tr>
<td><strong>Anti-convulsants</strong>&lt;br&gt;eg. carbemazepine (200mg PO bd)&lt;br&gt;sodium valproate (200mg PO bd)&lt;br&gt;gabapentin (300mg PO tds)</td>
<td>Suppression of neuronal hyperexcitability</td>
<td>Neuropathic pain</td>
<td>Carbemazepine and sodium valproate are readily available. The starting doses are listed and these should be titrated upwards depending upon tolerability and effectiveness&lt;br&gt;Gabapentin is expensive and not available on the PBS. However, it is commonly used by specialist palliative care units and advice re its use and availability must be sought</td>
</tr>
<tr>
<td><strong>Anti-spasmodics</strong>&lt;br&gt;eg. hyoscine butylbromide (20mg SC qid)</td>
<td>Decreases myotonic activity in smooth muscle</td>
<td>Bladder spasm&lt;br&gt;Renal colic&lt;br&gt;Rectal tenesmus&lt;br&gt;Gastric colic</td>
<td>Use with caution if impaired gut function. Major impact through anticholinergic activity</td>
</tr>
</tbody>
</table>

*Gastric protection should be prescribed:* PPI eg. omeprazole (20mg PO daily) or ranitidine 150 mg bd
Non-Pharmacological Management

The goal of non-pharmacological pain management is to decrease patients' perceptions of pain by reducing pain intensity and increasing pain tolerance, increasing adaptive pain behaviour and decreasing maladaptive behaviour. Clinicians who are knowledgeable about such interventions can identify and educate patients who may benefit from their use and provide measures or refer patients to appropriate healthcare providers.

<table>
<thead>
<tr>
<th>Complementary Therapies</th>
<th>Psychological Interventions</th>
<th>Physical Modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Medicine</td>
<td>Cognitive behavioural therapy</td>
<td>Application of heat or cold</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>Relaxation</td>
<td>Transcutaneous electrical stimulation</td>
</tr>
<tr>
<td>Qigong</td>
<td>Meditation (mindfulness)</td>
<td>Positioning</td>
</tr>
<tr>
<td>Hypnosis</td>
<td>Hypnosis</td>
<td>Rehabilitative therapy</td>
</tr>
<tr>
<td>Therapeutic massage</td>
<td>Imagery</td>
<td>Radiotherapy</td>
</tr>
<tr>
<td>Reiki</td>
<td>Support groups</td>
<td></td>
</tr>
<tr>
<td>Aromatherapy</td>
<td></td>
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</tr>
</tbody>
</table>

Positioning
Correct patient positioning helps maintain body alignment, prevent or alleviate pain, reduce the risk of injury and prevent pressure ulcers. Bed-confined patients need to be assessed frequently and turned every two hours to promote comfort and help prevent pressure ulcers. Patients at high risk for developing pressure ulcers are likely to benefit from pressure relieving mattresses eg. Spenco or constant low or alternating pressure mattresses. Other comfort strategies include encouraging patients to use their own pillows when hospitalised, straightening or changing bed linen, ensuring proper body alignment and using positioning aids such as pillows, blankets or towels.

Application of Heat or Cold
Thermal measures may help to reduce pain by alleviating joint and muscle aches and providing comfort. Local application of heat or a warmed blanket may enhance comfort. External heat sources should not be placed over transdermal fentanyl analgesic patches as external heat increases fentanyl release. Patients who are undergoing external beam radiotherapy should not place heat packs on the treatment field. Cold gel pads to the forehead provide symptomatic headache relief whilst tepid sponging may provide comfort to those with fever.

Relaxation
Relaxation therapy encourages patients to focus on soothing images, tense and relax muscles and breathe deeply. Generally relaxation is self-induced or guided by another person or an audio recording. One of the most common techniques is progressive muscle relaxation whereby major muscle groups are alternately contracted and relaxed.

Radiotherapy
Radiotherapy is effective in palliating pain that is due to malignant infiltration and should be considered in soft tissue, bony and neuropathic pain. It is less effective in visceral pain.
RESPIRATORY

DYSPNOEA
Defined as a sensation of the uncomfortable awareness of breathing. It is a common and distressing symptom in cancer patients and can prove difficult to manage. It is often multifactorial and can be cancer related, treatment related or related to other underlying illnesses such as COPD. Dyspnoea may limit a patient’s physical ability and result in reduced quality of life from a sense of hopelessness, dependence and social isolation.

Acute Onset
- Pulmonary embolus (PE) (See SECTION 2: THROMBOEMBOLIC EVENT)
- Cardiac events
- Infection
- Pericardial effusion
- Large airway compression

More Gradual Onset
- Anaemia
- Anxiety (See SECTION 2: ANXIETY)
- Ascites (See SECTION 2: ASCITES)
- Cachexia (See SECTION 1: GASTROINTESTINAL - Anorexia and Weight Loss)
- Cardiac failure
- Chronic Obstructive Pulmonary Disease
- Hepatomegaly
- Lymphangitis / lung metastases
- Mediastinal masses
- Pleural effusion (See SECTION 2: PLEURAL EFFUSION)
- Pneumonia
- Radiation or chemotherapy induced pneumonitis
- Superior Vena Cavali Obstruction

Treatment Options
The goal of treatment is to relieve the patient’s awareness of the effort of breathing. This should be balanced against the patient’s prognosis and stage of care - supportive, palliative or terminal:
- Pleural Effusion (See SECTION 2: PLEURAL EFFUSION)
- Pulmonary Embolus (See SECTION 2: THROMBOEMBOLIC EVENT)
- Lymphangitis:
  May respond to corticosteroids eg. dexamethasone (4mg PO daily). Treatment of the underlying malignancy with chemotherapy should be considered, and if appropriate, should be commenced while receiving this supportive care
- Ascites (See SECTION 2: ASCITES)
- Pericardial Effusion
  Pericardiocentesis or formation of a pericardial window for a recurrent presentation may be considered
• **Superior Vena Caval (SVC) Obstruction**
  This would be an unusual occurrence in women with gynaecological cancer but may occur with nodal disease. High dose corticosteroids such as dexamethasone (16mg PO daily for 5-7 days). Palliative radiotherapy and SVC stents may relieve these symptoms

• **Large airway compression**
  High dose corticosteroids such as dexamethasone (16mg PO daily for 5-7 days). Palliative radiotherapy and endobronchial stents may relieve these symptoms. If identified early, chemotherapy depending on the chemosensitivity of the tumour can also be considered

• **Radiation or chemotherapy induced pneumonitis**
  Should be considered if the lungs are in the radiation field. Requires high dose steroids tapered according to clinical response

• **Anaemia**
  Blood transfusions can rapidly improve anaemia induced dyspnoea. The benefits however decrease as disease progresses. The use of erythropoietin is contentious and requires specialist advice

• **Anxiety** (See SECTION 2: ANXIETY)

• **Pneumonia and Cardiac failure**

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### Recommendations

<table>
<thead>
<tr>
<th>Non-pharmacological:</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of a fan or open window to create a gentle breeze at the patient’s face is thought to stimulate the thermal and mechanical receptors of the trigeminal nerve in the cheek and nasopharynx</td>
<td>Non-pharmacological care has been shown to be very effective</td>
</tr>
<tr>
<td>Physiotherapy and occupational therapy review</td>
<td>The suggested strategies are recommended in context of the person’s life expectancy</td>
</tr>
<tr>
<td>Controlled breathing techniques:</td>
<td></td>
</tr>
<tr>
<td>o Breathing out for longer than breathing in encourages gaseous exchange at the base of the lungs, slows breathing and aids relaxation</td>
<td></td>
</tr>
<tr>
<td>o Pursed lip breathing – breathing in through nose and exhaling through pursed lips</td>
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</tr>
<tr>
<td>Positioning – upright or slightly inclined backwards to allow for expansion of the abdomen. Relaxation of the neck and shoulder muscles discourages use of the upper chest muscles</td>
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<tr>
<td>Planning and pacing activities</td>
<td></td>
</tr>
<tr>
<td>Relaxation therapy</td>
<td></td>
</tr>
<tr>
<td>Counselling to provide reassurance as the patient may link dyspnoea to imminent death</td>
<td></td>
</tr>
<tr>
<td>Pharmacological:</td>
<td>Opioid use, especially morphine has been reviewed and is strongly recommended in the management of dyspnoea</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td><strong>Opioids:</strong></td>
<td></td>
</tr>
<tr>
<td>• Opioids are useful for patients with dyspnoea at rest. Opioid titration as per analgesic use for opiates. Anxiolytics can be added as second line</td>
<td></td>
</tr>
<tr>
<td>• <strong>Opioid naïve</strong></td>
<td></td>
</tr>
<tr>
<td>o Morphine sulphate (1-2.5mg PO 4hrly or 10-20 mg SR) - equivalent doses of alternate opioids may be considered if morphine not tolerated)</td>
<td></td>
</tr>
<tr>
<td>o Breakthrough, equivalent dose every 1-2 hr prn</td>
<td></td>
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<tr>
<td>• <strong>Patients with baseline opioids</strong></td>
<td></td>
</tr>
<tr>
<td>25% increase in baseline dose is effective</td>
<td></td>
</tr>
<tr>
<td>• <strong>Nebulised opioids are not effective and their use should not be encouraged</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Oxygen:</strong></td>
<td>The use of oxygen is most effective in people with hypoxia. However, observations suggest that some people without hypoxia benefit. In the palliative situation, a trial of oxygen may be undertaken and the longer term provision based on the success of this trial. It is strongly recommended that this be discussed with a specialist palliative care team</td>
</tr>
<tr>
<td>• Has provided symptomatic relief in hypoxaemic and non-hypoxaemic patients, but has not yet been proven to be better than air alone</td>
<td></td>
</tr>
<tr>
<td>• Consider the discomfort of mucosal dryness, cost, self perception and imposition on mobility</td>
<td></td>
</tr>
<tr>
<td>• Oxygen concentrators are useful to maintain constant flow at home. Small oxygen cylinders that last 3 to 4 hours allow more freedom outside the home</td>
<td></td>
</tr>
<tr>
<td>Nebulisers and Bronchodilators:</td>
<td>Bronchodilators are most likely to be useful if underlying airways limitations are present</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Bronchodilators can be useful if underlying airway disease. Nebulised normal saline can assist patients to improve a weakened cough, to expectorate sputum plugs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benzodiazepines:</th>
<th>Although clinical observations support the strong association between anxiety and dyspnoea, automatic prescription of benzodiazepines should not be undertaken but considered on a case by case basis. Non-pharmacological interventions must be considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dyspnoea and anxiety commonly coexist and may potentiate one another. Benzodiazepines may be useful:</td>
<td></td>
</tr>
<tr>
<td>o <strong>Short acting:</strong></td>
<td></td>
</tr>
<tr>
<td>- alprazolam (0.25-1.0mg PO 4-6hrly) or lorazepam (0.5-2.0mg PO/SL 4-6hrly). If ongoing consider longer acting</td>
<td></td>
</tr>
<tr>
<td>o <strong>Longer acting:</strong></td>
<td></td>
</tr>
<tr>
<td>- clonazepam: (0.25-2.0mg SL bd)</td>
<td></td>
</tr>
<tr>
<td>- diazepam (2-5mg PO tds). For nocturnal dyspnoea a single nocte dose (5-10mg) may be given</td>
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</tr>
<tr>
<td>- midazolam (2.5-5 mg SC 2hrly)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Antidepressants:</th>
<th>SSRI antidepressants may be useful in some situations and should be considered on a case by case basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• May have a role to play in profoundly anxious people with dyspnoea. <strong>SEEK SPECIALIST ADVICE</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terminal phase with increased secretions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• See SECTION 3: CARE OF THE DYING PATIENT</td>
<td></td>
</tr>
</tbody>
</table>
COUGH

Acute Onset
• Mucous plugs

More Gradual Onset
• Airway metastases irritating bronchus
• Exacerbations of asthma, COPD, CCF
• Iatrogenic eg. ACE-inhibitors

Treatment Options
• Repositioning, physiotherapy to shift mucous plugs
• Bronchospasm may present as cough; try nebulised bronchodilators (salbutamol 2.5-5mg in 5mls 0.9% NaCl nebs qid)
• Nebulised normal saline (0.9% NaCl) may assist mucous plugging and reduce irritation
• Anti-tussives:
  o Centrally acting opioids eg. codeine (15-30mg PO qid) or oxycodone (5mg PO qid)
  o Peripheral agents eg. pholcodeine (5-15mg PO qid), dextromethorphone (5-15mg PO qid) or sodium cromoglycate (20mg nebs qid)
• Boiled sweets – sugary solutions coating nerve endings will make a cough less problematic
• Palliative radiotherapy may provide relief
• Specialised treatments eg. nebulised lignocaine can be used as a last resort for short term relief. SEEK SPECIALIST ADVICE
GASTROINTESTINAL

ANOREXIA and WEIGHT LOSS
Anorexia and weight loss are common in patients with advanced cancer. Reversible causes should be addressed. If no alternative cause is found, consider anorexia-cachexia syndrome. Cancer cachexia is a complex metabolic process characterised by unintentional weight and muscle loss. The syndrome may be accompanied by fatigue, impaired performance status, anaemia and oedema. Early intervention is imperative.

Acute Onset
- Nausea and vomiting (See SECTION 1: NAUSEA and VOMITING)
- Metabolic derangement, bowel obstruction, etc.
- Impaired gastric emptying:
  - Post prandial discomfort, early satiety
  - Bloating / Ascites
  - Drugs eg. opioids, anticholinergics
- Pain
- Constipation (SEE SECTION 1: CONSTIPATION)
- Mood disturbance especially depression
- Mucositis (See SECTION 2: MUCOSITIS)
- Dry mouth
- CNS disease
- Treatment related (eg. medications, chemotherapy, radiotherapy)
- Malabsorption, diarrhoea

More Gradual Onset
- Anorexia–cachexia syndrome
- Progressive disease
- Intermittent partial bowel obstruction

Treatment Options
- Nutritional assessment and support (See SECTION 2: NUTRITION)
- Exercise to maintain strength, lean body mass and body weight:
  - Physiotherapy
- Prokinetic agents: metoclopramide (10mg PO/SC qid ac) may improve appetite particularly in patients with impaired gastric emptying. Consider prior to appetite stimulants
- Omega-3-fatty acids (fish oil, EPA) can increase body weight and mass. Seek further advice from dietitian
- Corticosteroids eg. dexamethasone (2-4mg PO mane) can improve appetite, food intake and a sense of well-being. However the duration of their effect is limited and prolonged use is not recommended
- Progestational drugs eg. megestrol acetate (160mg PO bd) improve appetite and increase weight
NAUSEA and VOMITING

Nausea and vomiting result from a complex reflex that is coordinated by the vomiting centre in the brain. Nausea is a common symptom in patients with gynaecological malignancies and is often multifactorial. It may be associated with vomiting. However they may occur independent of each other.

Acute Onset
- **Acute bowel obstruction:**
  - Vomiting is a common presenting symptom of acute bowel obstruction (See SECTION 2: BOWEL OBSTRUCTION)
- **Treatment related:**
  - Chemotherapy, medication (opioids, NSAIDs, antibiotics), radiotherapy (if directed to the abdomen, pelvis or brain)
- **Metabolic disturbance:**
  - Hypercalcaemia (See SECTION 2: HYPERCALCAEMIA)
  - Acute renal failure (eg. secondary to acute ureteric obstruction)
  - Impaired liver function
  - Infection
  - Oropharyngeal candidiasis
- **Delayed gastric emptying:**
  - Gastroparesis, squashed stomach, partial high obstruction
- **Gastric irritation**
- **Raised intracranial pressure / CNS disease**
  - Cerebral or leptomeningeal metastases (See SECTION 2: CEREBRAL METASTASES)
- **Vestibular disturbance**
  - Drug toxicity, infection, and benign positional vertigo
  - Neoplastic and paraneoplastic syndromes

More Gradual Onset
- Intermittent partial bowel obstruction (See SECTION 2: BOWEL OBSTRUCTION)
- Liver metastases
- Carcinomatosis peritonei
- Drug related toxicity
- Constipation (See SECTION 1: CONSTIPATION)
- Ascites (See SECTION 2: ASCITES)
- Anxiety (See SECTION 2: ANXIETY)

Treatment Options
- Small regular meals for gastroparesis or delayed gastric emptying
- Anxiety management
- Reduce offensive smells (may include the smell of cooking)
- Acupuncture, meditation, relaxation
### Treatment 1 | Treatment 2 | Treatment 3 | Treatment 4
--- | --- | --- | ---
A | Prochlorperazine 5mg tds | Haloperidol 0.5-1mg nocte | Haloperidol 0.5-1mg bd | Call palliative care consult
B | Dexamethasone 8mg mane & midi | Call palliative care consult | X | X
C | Metoclopramide 10mg qid | Metoclopramide 10mg q4h | Metoclopramide 10mg q4h + dexamethasone 4mg mane & midi | Call palliative care consult
D | Prochlorperazine 5mg tds | Promethazine theoclate 10mg tds | Chlorpromazine 10mg tds | Call palliative care consult
E | Metoclopramide 10mg qid | Metoclopramide 10mg q4h | Metoclopramide 10mg q4h + dexamethasone 4mg mane & midi | Call palliative care consult
F | Haloperidol 0.5-1mg nocte | Haloperidol 0.5-1mg bd | Haloperidol 0.5-1mg bd + dexamethasone 4mg mane & midi | Call palliative care consult

**Acknowledgement:** Associate Professor Paul Glare for use of his algorithms
Comments:

- **Corticosteroids** have a role, in combination with other drugs, in the management of nausea and vomiting: dexamethasone (4 mg PO mane). If no benefit is obtained within 5-7 days it should be ceased.

- **Gastritis / mucosal erosion and hyperacidity:** (See SECTION 2: MUCOSITIS)
  - Simple antacids may be sufficient
  - Gastroprotectant eg. ranitidine (150mg PO bd) or a PPI eg. omeprazole (20mg PO daily)

- **Drugs such as cyclizine, levomepromazine and 5HT3 antagonists eg. ondansetron** have a role to play in certain situations. SEEK SPECIALIST ADVICE.

- **In suspected bowel obstruction, metoclopramide or other prokinetics is contraindicated.** (See SECTION 2: BOWEL OBSTRUCTION)
EARLY SATIETY
This is a commonly occurring problem faced by women with gynaecological cancers presumably occurring secondary to peritoneal disease, ascites or altered gut function. Slow gastric emptying may manifest as satiety, regurgitation, reflux, nausea and/or vomiting, discomfort or pain. Symptoms are often worse after eating. Occasional intermittent large volume vomits may occur.

Acute Onset
- Partial obstruction - may be amenable to surgery
- Pseudo-obstruction or motility disorder of entire GI tract

More Gradual Onset
This presentation is more commonly seen. It may be related to or exacerbated by:
- Intra-abdominal masses
- Ascites
- Hepatomegaly

Treatment Options
Treatment involves:
- Improving gastric emptying, reducing gastric volumes and considering the associated problems of nausea and vomiting (See SECTION 1: NAUSEA and VOMITING), anxiety (See SECTION 2: ANXIETY) and discomfort / pain (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Increased gastric emptying</td>
<td></td>
</tr>
<tr>
<td><strong>Prokinetic medications:</strong></td>
<td></td>
</tr>
<tr>
<td>• Metoclopramide (10mg PO qid, ac &amp; nocte)</td>
<td>Metoclopramide and domperidone are the best described agents in this situation. However, the recommendations are still largely anecdotal. It is widely accepted that if vomiting worsens with the use of these medications, their use should be stopped</td>
</tr>
<tr>
<td>• Domperidone (10mg PO qid, ac &amp; nocte)</td>
<td></td>
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<tr>
<td>• Cisapride</td>
<td>Cisapride may be an alternative, but due to potential adverse effects requires specialist advice</td>
</tr>
<tr>
<td>• Dexamethasone (4-8mg PO mane)</td>
<td>A trial of dexamethasone may be initiated if a mass effect on the upper gut is suspected, either by an enlarged liver ascites or metastatic deposits</td>
</tr>
</tbody>
</table>
### Reduce gastric volumes

<table>
<thead>
<tr>
<th>Proton pump inhibitors</th>
<th>Either class of medication will reduce the volume of gastric fluid produced. However, the clinical impact of this in palliative care is not yet clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg. omeprazole (20mg PO daily)</td>
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<tr>
<td><strong>H2 receptor antagonists</strong></td>
<td></td>
</tr>
<tr>
<td>eg. ranitidine (150mg PO bd)</td>
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</tr>
<tr>
<td><strong>Dietary changes</strong></td>
<td>Dietitian review may be offered to consider provision of small regular meals, low fat meals</td>
</tr>
</tbody>
</table>

- Other environmental changes that be useful include minimising offensive smells or cooking smells
CONSTIPATION
Health professionals consider constipation as the passage of small, dry, hard stool. Patients however, may report:
• A reduction of stool frequency
• Straining to open bowels
• Sensation of incomplete emptying
Constipation may be accompanied by rectal and abdominal pain, nausea and vomiting. It is especially common in patients receiving opioid analgesia, but there are multiple contributing factors.

Acute Onset
Intestinal obstruction - acute constipation may result from small or large bowel obstruction due to tumour involvement or adhesive disease.

More Gradual Onset
• Bowel disease – hernia, rectocoele, haemorrhoids, anal fissure, rectal prolapse diverticular disease, colitis, irritable bowel syndrome
• Environmental – lack of privacy, unfamiliar environment
• Medications – common contributors to constipation include opioid analgesics, anticholinergics, calcium channel antagonists, antacids, 5HT3 antagonists, diuretics, iron supplements, antidepressants, chemotherapeutic agents (esp. carboplatin)
• Metabolic and electrolyte disturbances – hypokalaemia, hypercalcaemia
• Medical disorders – diabetes, hypothyroidism, depression
• Neurological – damage to spinal cord, cauda equina, pelvic plexus and autonomic nervous plexus
• Tumour related – altered food intake, dehydration, reduced mobility and performance status

Treatment Options
• Early surgical referral if bowel obstruction, bowel perforation or other surgical cause is suspected
• Encourage mobility and ensure adequate hydration
• Dietitian review (See SECTION 2: NUTRITION)
• Correction of electrolyte imbalances (hypokalaemia, hypercalcaemia)
• Ensure privacy and appropriate positioning for women who are opening their bowels
• Discontinue or substitute medications which cause constipation
• Laxatives
Constipation
- History
- Physical examination

Consider Bowel Obstruction

no

PR

Full rectum

hard
Glycerol suppository & PO laxative

soft
Bisacodyl suppository & PO laxative

Empty rectum

X-ray
Bowel obstruction

yes
See SECTION 2: BOWEL OBSTRUCTION

no
PO laxative

Full colon

No, reconsider diagnosis

yes
PO laxative

58
Prescribing Laxatives

<table>
<thead>
<tr>
<th>Laxatives Commonly Used in Palliative Care</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stool softening combined with stimulant laxatives:</strong></td>
<td>Although laxatives are recommended, the prescription of laxative remains based on practice guidelines rather than evidence based guidelines</td>
</tr>
<tr>
<td>• docusate &amp; sennoside (2 to 4 tablets PO bd)</td>
<td></td>
</tr>
<tr>
<td>• docusate &amp; bisacodyl suppository (1 suppository PR as necessary)</td>
<td></td>
</tr>
<tr>
<td><strong>Stimulant laxatives:</strong></td>
<td>It is important to acknowledge the mechanisms of action of the agents and prescribe according to the clinical situation</td>
</tr>
<tr>
<td>• bisacodyl tablets (5mg PO bd)</td>
<td>All agents must be reviewed regularly, and continued or changed based upon the patient’s description of response</td>
</tr>
<tr>
<td>• bisacodyl enema (2mg/ml enema, administer 5mls PR daily)</td>
<td></td>
</tr>
<tr>
<td>• bisacodyl suppositories (10mg suppository PR daily)</td>
<td></td>
</tr>
<tr>
<td>• sennoside granules (1-2 teaspoons daily)</td>
<td></td>
</tr>
<tr>
<td>• sennoside tablets (15 mg PO bd)</td>
<td>Fibre-containing laxatives ARE NOT included in this table</td>
</tr>
<tr>
<td><strong>Osmotic laxatives:</strong></td>
<td>Clinical observation supports that use of these agents is probably best avoided in women with gynaecological cancers</td>
</tr>
<tr>
<td>• macrogol (1 to 3 sachets daily; titrate to stool consistency)</td>
<td></td>
</tr>
<tr>
<td>• lactulose syrup (10 to 30 mls PO bd)</td>
<td></td>
</tr>
<tr>
<td>• magnesium sulfate crystals enemas (5mls PR daily)</td>
<td></td>
</tr>
<tr>
<td><strong>Stool softening laxatives:</strong></td>
<td></td>
</tr>
<tr>
<td>• docusate (100 to 240 mg PO bd)</td>
<td></td>
</tr>
<tr>
<td><strong>Lubricant laxatives:</strong></td>
<td></td>
</tr>
<tr>
<td>• liquid paraffin (30 to 60 mg PO bd)</td>
<td></td>
</tr>
<tr>
<td>• glycerol suppository (1 daily)</td>
<td></td>
</tr>
</tbody>
</table>

- **Faecal impaction:**
  - If rectal or colonic impaction is suspected the use of rectal softeners may sometimes need to be combined with stimulant agents. Glycerol suppositories or oil enemas soften the stool and irritate the bowel which leads to increased peristaltic activity and stool movement. If the stool softens but peristalsis remains ineffective seek specialist advice regarding high enemas
  - Manual removal of impacted faeces might be required to allow laxatives to be effective. The administration of midazolam (2.5-5mg SC 10 minutes pre procedure) may make this more tolerable for the patient
**DIARRHOEA**

Diarrhoea is defined as the passage of more than 3 unformed stools in 24 hours, usually associated with urgency. This is a significant problem in patients with advanced malignancy and may lead to dehydration, electrolyte imbalance, renal failure, thromboembolic events, malnutrition, pressure ulcers, loss of patient dignity and increased burden on carers and support personnel.

**Acute Onset**

Acute infective gastroenteritis (*Clostridium difficile*, Salmonella, *E coli*, Campylobacter)

**More Gradual Onset**

- Bacterial overgrowth
- Bowel obstruction and constipation with overflow diarrhoea
- Chemotherapy agents – 5FU, capcitabine, irinotecan, docetaxel
- Coeliac plexus block
- Colectomy with short bowel syndrome
- Concurrent disease – thyrotoxicosis, inflammatory bowel disease
- Enteral feeding – hyperosmolar enteral feeds
- Malabsorption – pancreatic disease, biliary obstruction, pancreatic cancer, short bowel syndrome
- Medications – laxatives or magnesium containing antacids
- Radiotherapy – acute radiation enteritis

**Treatment Options**

- Oral or intravenous hydration depending on the extent of the dehydration
- Correct hypokalaemia and other electrolyte imbalance
- Avoid milk and dairy products if an infective diarrhoea is suspected
- Stop hyperosmolar enteral feeds
- Skin barrier creams

Identify and treat cause:

- Loperamide (2mg PO after each loose stool or 2-4mg PO qid)
- Codeine (15-30mg PO 4-6hrly)

Severe persistent diarrhoea unresponsive to above treatments:

- Octreotide (100mcg SC tds)

Chemotherapy induced diarrhoea is a separate and specialised situation. Immediate management includes:

- Fluid resuscitation
- IV antibiotics
- Communication with treating team
UROLOGICAL

ANURIA / OLIGURIA
Uraemic symptoms mostly occur slowly, including oedema, poor urine output and confusion leading to delirium and coma. Sudden death may occur from unsuspected cardiac arrhythmia

Acute Onset
- Sepsis
- Acute urinary retention

More Gradual Onset
- Dehydration
- Nephrotoxic drugs, eg. platinum based chemotherapy, NSAIDs (renal)
- Ureteric obstruction (unilateral / bilateral) – pelvic tumour, para-aortic nodal metastases
- Bladder atony
- Bladder outlet obstruction (post-renal)
- Benign disease – calculi, retroperitoneal fibrosis
- Dehydration exacerbating pre-existing renal disease

Treatment Options
- Pre-renal:
  - Encourage oral intake (where this is appropriate)
  - Consider temporary intravenous fluids if a remediable co-morbidity is present
- Renal:
  - Consider substitution of nephrotoxic drugs
  - Uraemia may be transient and renal function may recover (but may require temporary renal dialysis via a subclavian / jugular intravenous catheter). This decision requires careful consideration of all factors
  - Acute tubular necrosis secondary to dehydration is also potentially reversible with dialysis support, but the underlying cause must be remediable
- Post renal:
  - Ureteric obstruction is treatable, where indicated (See SECTION 2: UTETERIC OBSTRUCTION)
  - Bladder atony may be treated with an indwelling catheter
  - Bladder outlet obstruction should instigate placement of a suprapubic catheter after ultrasound confirmation of a dilated bladder. A Foley catheter with an introducer can be introduced after skin preparation and instillation of local anaesthetic (10ml of Marcaine with adrenaline). Alternatively, a Bonano catheter (supplied in a kit) may be used after preparing the skin
DYSURIA
Women report a burning sensation during micturition and often will reduce their fluid intake to minimise the need to pass urine

Acute Onset
Urinary tract infection

More Gradual Onset
- Infection and ulceration of vulval or vaginal tumour
- Radiation cystitis
- Vesico-colic fistula
- Hyperaesthesia of vulvovaginal skin from tumour infiltration of local nerves

Treatment Options
- Facilitate hydration – encourage oral intake
- Consider change of indwelling catheter if present
- Consider insertion of indwelling or suprapubic catheter if local excoriation / tumour
- Treat any urinary tract infection
- Treat initially with trimethoprim (300mg PO nocte) or cephalexin (250mg PO bd) pending results of urine culture
- Modify antibiotic selection on basis of culture and sensitivity
- Consider topical metronidazole powder if infected tumour (eg. vulval or proximal vaginal cancer) near urethra
- Prescribe urinary alkalinising medication eg. Ural (1 sachet PO tds)
- Encourage careful vulval hygiene
- Cranberry juice and capsules
HAEMATURIA
If the problem is not resolved blood clots may obstruct ureters causing hydronephrosis of the urethra with acute urinary retention. Heavy bleeding may result in anaemia.

Acute Onset
- Urinary tract infection
- Contamination from vaginal or rectal bleeding

More Gradual Onset
- Radiation nephritis or cystitis
- Renal stones secondary to dehydration and/or hyperuricaemia
- Drug induced interstitial nephritis (eg. cisplatin) or cystitis (cyclophosphamide / ifosfamide)
- Chemotherapy related thrombocytopenia
- Tumour infiltration of kidney, ureter or bladder

Treatment Options
- Three-way Foley urinary catheter with continuous irrigation if blood clots causing urinary retention
- Treat possible urinary tract infection or coagulopathy
- Transfuse if Hb <70g/dl or symptomatic
- Consider ureteric stenting (See SECTION 2: URETERIC OBSTRUCTION) if partial ureteric obstruction
- Consider lithotripsy for ureteric stones (requires referral to urologist)
- Consider palliative targeted radiotherapy
- Advise medical oncology team if chemotherapy related haematuria is suspected. Further doses of chemotherapy may require urothelial protectants such as Mesna
- Tranexamic acid (500mg PO qid) can cause blood to clot within the bladder resulting in clot retention. It should only be used if an irrigating catheter is in place. As tranexamic acid is excreted renally the dose should be reduced and the interval extended in patients with renal impairment. Any past history of ischaemic heart disease or thromboembolic complications limits the use of this medication.
URINARY INCONTINENCE

Women with gynaecological cancer are at greater risk of incontinence as a result of the cancer itself or its management. Incontinence disrupts sleep and social activities, impacts significantly on a woman’s self esteem and dignity and places an increased burden on carers.

**Acute Onset**
Urinary tract infection

**More Gradual Onset**
- **Intrinsic:**
  - Irritable bladder
  - Pelvic floor weakness secondary to immobility, cachexia
- **Tumour related:**
  - Vesicovaginal fistula, ureterovaginal fistula, vesicocutaneous fistula
    (See SECTION 2: FISTULA)
  - Pelvic mass compressing / displacing urethra or bladder
- **Neuropathic:**
  - Post surgical neuropathy (radical hysterectomy)
  - Tumour invading pelvic splanchnic nerves
  - Chemotherapy related autonomic neuropathy (paclitaxel, cisplatin)
  - Paraneoplastic autonomic neuropathy
- **Constipation**

**Treatment Options**
- **Involvement of continence nurse**
- **Intrinsic:**
  - May require urethral or suprapubic catheterisation in the palliative setting
- **Tumour Related:**
  - Neurogenic bladder may necessitate urethral catheterisation
- **Treat potential UTI**
- **Irritable bladder may respond to solifenacin (5mg PO daily) - beware anticholinergic side effects**
- **Urgency incontinence may respond to oxybutynin (2.5mg PO bd)**
- **Stress incontinence may respond to amitriptyline (25mg PO nocte)**
OEDEMA

Lymphoedema and oedema are seen regularly in advanced gynaecological cancer and cause pain, immobility, infection, skin problems and significant distress. Oedema refers to excessive accumulation of fluid within interstitial tissues. Lymphoedema is oedema that arises principally from failure of lymphatic function. A number of coexisting factors may contribute to oedema formation in women with advanced cancer. Lymphatic obstruction may coexist with hypoalbuminaemia and obstructive uropathy to generate gross lower limb swelling.

Acute Onset

- The risk of **venous thromboembolism** is high in people with advanced cancer. Pelvic tumours may compress or infiltrate major vessels including the inferior vena cava
- Local **infection / inflammation** alters the permeability of the endothelial wall of blood capillaries, increasing capillary filtration into the tissues. Most infections develop subcutaneously beneath intact skin

More Gradual Onset

- **Tumour recurrence / obstruction** – metastatic cancer can obstruct lymphatic and venous return. Vulval cancers commonly metastasise to the inguinal nodes. An abdominal tumour mass or **ascites** may lead to genital and bilateral leg oedema
- **Lymphatic insufficiency** secondary to lymph node dissection and/or radiotherapy
- The general fatigue and debility associated with advanced cancer can lead to **immobility** and dependency. Immobility leads to chronic lymph stasis which is compounded by enhanced lymph formation from venous hypertension in a dependent lower limb
- **Hypoproteinaemia** may occur in women with hepatic disease, nephrotic syndrome or nutritional deficiency as in **cancer cachexia** and produces a generalised peripheral oedema
- **Effects of medication** – swelling may be worsened by corticosteroids and NSAIDs. Docetaxel is commonly associated with fluid retention
- **Cardiac failure**
- **Chronic renal failure**

Treatment Options

- **Referral to a lymphoedema practitioner is imperative.** Modified lymphoedema or palliative bandaging can reduce swelling, reshape the limb, greatly reduce lymphorrhoea and significantly improve pain and altered sensations attributed to the stretching of the skin or heaviness of the limb
- Hosiery in the weakest class of compression will give a feeling of support to the tissues. Maternity panty hose can be a particularly useful alternative if the patient has ascites or finds pressure on the abdomen uncomfortable. The use of swimwear, cycling shorts or other lycra based underwear can be very effective for genital oedema
- If lymphorrhoea is present very light bandaging with minimal compression is usually effective within 48 hours
Although diuretics are not usually indicated for lymphoedema, in advanced cancer it is not unusual for both venous and lymphatic obstruction to occur. In this situation potent diuretics may be necessary to achieve some symptom relief. Spironolactone (25-50mg PO bd) may be useful for its potassium sparing effect.

Corticosteroids eg. dexamethasone (4-8mg PO mane for 5-7 days) may reduce peritumour oedema and re-open venous and lymphatic channels.

Cellulitis

Women with oedema are prone to cellulitis. It is therefore important to maintain skin integrity and minimise the likelihood of infection. Women should be encouraged to:

- Dry well between the toes and inspect feet daily for signs of fungal infection
- Moisturise the legs with bland non-perfumed emollient cream
- Insect repellents should be applied to reduce the risk of insect bites. Any bites should be treated promptly with antiseptics and/or antihistamines
- The skin on the legs and feet should be protected from minor injuries. Any scratches or cuts should be treated promptly by cleansing and application of antiseptics

Suspected skin infections require urgent antibiotic treatment eg. flucloxacillin (500mg PO qid) for 7-10 days. During an infective episode, absolute rest is essential. The woman should rest in bed and elevate the affected limb. Analgesics and antipyretics should be given as necessary.
FATIGUE

Fatigue is the most frequent symptom in patients with advanced cancer, though in the majority of patients the aetiology is unclear. In patients with advanced cancer it usually co-exists with a number of other symptoms that may include pain, anorexia, nausea, vomiting, dyspnoea, anxiety or depression.

Symptoms

• The presence of a tumour can induce the production of a number of inflammatory cytokines which are involved in the anorexia-cachexia syndrome. Similarly there may be release of substances by the tumour that lead to fatigue
• Fatigue and cachexia often coexist but are not synonymous. The loss of muscle mass resulting from progressive cachexia provides a reason for profound weakness and fatigue
• Prolonged bed rest and immobility leads to loss of muscle mass. Such deconditioning means reduced endurance for exercise and activities of daily living
• Fatigue is frequently associated with infections, particularly when infections are recurrent or protracted. It may occur as a prodromal symptom and may outlast the infection by weeks or months. Immunosuppression as a result of the cancer or its management increases the risk of infection
• Anaemia: myelosuppression, bleeding and nutritional deficiencies
• Anxiety, depression and stress can all contribute to fatigue (See SECTION 2: ANXIETY and DEPRESSION)
• Endocrine disorders - diabetes mellitus, Addison's disease and hypothyroidism
• Electrolyte disorders - hyponatraemia, hypokalaemia and hypercalcaemia
• Paraneoplastic neurological syndromes are rare but often associated with fatigue
• Pain and other symptoms such as dyspnoea and nausea may exacerbate fatigue
• Worsening of fatigue is common during chemotherapy and radiotherapy
• Medications: opioids, hypnotics, anxiolytics, antihistamines, antiemetics and antihypertensives

Treatment Options

• Educating the patient about the possible causes of fatigue and the therapeutic options available provides the woman and her family the opportunity to develop realistic expectations. As disease progresses the woman will be required to constantly adapt to progressive limitations in physical function and activity
• Ensure adequate hydration and nutrition (See SECTION 2: NUTRITION)
• Counselling should be considered for patients with adjustment disorders, depression, anxiety and coping difficulties
• Significant anaemia can be treated by blood transfusion
• Unnecessary bed rest and reduced physical activity can worsen symptoms due to deconditioning. Low level regular exercise such as walking can reduce fatigue, increase appetite and improve well-being even in those with advanced disease
• Referral to an occupational therapist and physiotherapist should be considered for practical assistance in minimising daily energy requirements
• Promote sleep by avoiding stimulants such as alcohol and caffeine in the evening, limiting day time naps to fifteen minutes and establishing regular bed and waking routines
• In addition to beneficial effects on fatigue, corticosteroids can have beneficial effects on several other symptoms such as nausea, appetite and pain which may be exacerbating fatigue. Dexamethasone (4mg PO mane for 5-7 days then review)
• Psychostimulants are increasingly used but require specialist advice
• See SECTION 1: ANOREXIA and WEIGHT LOSS
• Antidepressant medication if depression has been diagnosed (See SECTION 2: DEPRESSION)
CONFUSION

Acute Onset
- Change in environment in a patient with existing cognitive impairment eg. dementia
- Constipation
- Hypoxaemia (See SECTION 1: DYSPNOEA)
- Medications
- Metabolic - hypercalcaemia (See SECTION 2: HYPERCALCAEMIA) uraemia, liver failure, dehydration, metabolic disturbance
- Sepsis
- Urinary retention

More Gradual Onset
- Anxiety may rarely present with features of delirium
- Cerebral or leptomeningeal metastases (See SECTION 2: CEREBRAL METASTASES)
- Depression: Hypoactive delirium may be mistaken as depression
- Dementia
- Substance withdrawal including benzodiazepines, alcohol, opioids, SSRIs, corticosteroids, marijuana, or nicotine

Treatment Options
(See SECTION 2: DELIRIUM)
- Review medications and address poly-pharmacy
- Treat sepsis as appropriate
- Hypoxia - consider patient's past history of airways disease and treat appropriately
- Hypercalcaemia (See SECTION 2: HYPERCALCAEMIA)
- Avoid hypoglycaemia: Relax glycaemic control (8-14 mmol/l). BSL may be avoided altogether in deteriorating or dying phase
- Reduce cerebral oedema (See SECTION 2: CEREBRAL METASTASES)
- Correct dehydration and mild opioid neurotoxicity, hydration by appropriate route (oral, IV, subcutaneous)
- For severe opioid neurotoxicity SEEK ADVICE FROM PALLIATIVE CARE SERVICES
SECTION 2

SPECIFIC CLINICAL CONDITIONS
ANXIETY

“Anxiety” is often considered to be a “normal” consequence of advanced disease. However, anxiety disorders:

- Are not normal
- Are under-diagnosed
- Are a treatable co-morbidity
- May arise as a side effect of other treatments (e.g., corticosteroids)
- May complicate the management of other symptoms (e.g., nausea)
- Should be anticipated and excluded by routine screening
- Are best managed by a multi-modality approach; biological, psychological, psychosocial, spiritual, cultural

Patients may still benefit from treatment though they may not meet all criteria for a diagnosis of a specific anxiety disorder, as anxiety occurs on a spectrum.

Untreated anxiety is highly likely to impede communication between the patient and the treating team and within the patient’s support network.

Diagnosis

May be complicated as symptoms of anxiety (e.g., agitation, insomnia, dyspnoea) often overlap with symptoms of advanced disease, side effects of treatment or other disorders such as delirium. Symptoms may wax and wane quite dramatically over the 24 hours of the day.

Made from a combination of:

History

- Personal history of pre-morbid anxiety disorder
- Detailed account of the sequence of symptoms, including cognitive precursors of physical symptoms
- Identification of pre-morbid stressors (usually multiple)

Examination Findings

- Mental state examination: agitation and restlessness; affect is anxious, distressed, preoccupied, irritable; reports of worry, often intrusive; foreboding, apprehension; feelings of dread; preoccupation with possible problems in immediate future; catastrophic thoughts about future
- Physical examination: elevated respiratory rate, elevated pulse, blood pressure; diaphoreses, facial flushing, fine tremor; exaggerated startle response
- Use of a symptom checklist or other measure of symptom burden to aid diagnosis and outcome measurement eg. DASS (See SECTION 4: RESOURCES)

Investigations

- Exclude sepsis, hypoxia, pulmonary embolus, electrolyte imbalance
- Urine drug screen if drug intoxication / withdrawal are possibilities
Management Decisions

Issues to be considered:

- Treatment of anxiety reduces suffering, prevents the development of conditioning, improves the outcome of management of other symptoms and reduces the risk of deterioration into depression
- Patient may feel stigmatised by the attachment of a mental health diagnosis and associated assessments and interventions

Treatment Options

Prognosis measured in hours to days prior to the onset of this problem

- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort
- Identification of, and attention to patient concerns
- Education about anxiety, including for the carers and family
- Consider use of anxiolytic such as clonazepam drops (0.25-0.5mg SL PRN or 0.25-1.0mg SL bd)
- Low dose antipsychotic medication may be useful. SEEK SPECIALIST ADVICE

Prognosis measured in weeks to months prior to the onset of this problem

- Initiate timely review by a mental health professional; Social Worker, Psychologist, Psycho-oncology Counsellor, Psychiatrist
- Involve carers as far as possible, especially during education about anxiety
- Concurrent management of other symptoms likely to exacerbate anxiety (eg. dyspnoea, nausea, pain). Identify medications contributing to the symptoms (eg. corticosteroids, anti-emetics) and modify prescribing if possible
- Elicit concerns – in as much detail as possible; and address these as far as possible, including making appropriate referral within the team or to specialist services outside the team
- Cognitive Behavioural Therapy (CBT) as for anxiety management in other populations: education about anxiety response, slow breathing, relaxation training, distraction, identification of anxious cognitions, thought challenging, panic surfing
- Meditation, especially mindfulness meditation techniques
- Psychotherapy with a supportive focus or with an existential focus, according to assessment of concerns and patient’s capacity to work within these models
- Identify any psychosocial causes of symptoms, such as concurrent life stresses, family / relationship issues and address these where possible
- Provide patient and carers with information about the diagnosis and the interaction of psychological / emotional / physical symptoms
- Referral to physiotherapist for an appropriate exercise program (multiple benefits, including sleep quality and mood stability)
- Referral to other allied health as appropriate (eg. OT if anxiety is triggered by functional deficits)
- Pastoral care referral if concerns are spiritual / existential
• SSRI anti-depressant – start with low dose and titrate up – may take 12-14 days to take effect
• SNRI – venlafaxine (37.5mg PO daily) and titrate up. Effective doses usually between 75mg and 150mg/day in controlled release format
• Tricyclic antidepressant such as nortriptyline (25mg PO daily) – good effect is often achieved at low doses
• Low dose antipsychotic medication may be useful SEEK SPECIALIST ADVICE
• In some cases a regular dose of long acting benzodiazepine may be helpful, either long term or as a short term measure until anti-depressant effect is achieved. Diazepam (2-10mg PO bd) would be recommended
ASCITES

Ascites is defined as the pathological accumulation of fluid in the peritoneal cavity. Women with gynaecological cancer are most likely to experience peripheral or exudative ascites, arising from increased permeability of the peritoneal capillaries and lymphatic obstruction. Central or transudative ascites may be seen when extensive hepatic metastases force fluid out of the venous system. Ascites contributes to multiple debilitating symptoms including dyspnoea, fatigue, anorexia, nausea, pain and impaired mobility. This increasing accumulation of abdominal fluid can severely compromise quality of life and challenge patients and caregivers.

Diagnosis
Made from a combination of:

History
- Recent weight gain, increases in abdominal girth (with or without protrusion of the umbilicus), a sensation of fullness or bloating and early satiety suggest the presence of ascites. The patient may describe vague generalised abdominal discomfort or a feeling of heaviness with ambulation
- Increased intra-abdominal pressure can produce oesophageal reflux symptoms. Delayed gastric emptying may prompt complaints of indigestion, nausea and vomiting
- Fevers or an influenza-like illness raise the possibility of spontaneous bacterial peritonitis (See SECTION 2: PERITONITIS)

Physical Examination
- Small amounts of ascites are asymptomatic and presentation may relate to the cause of the ascites
- Patients with large volumes of ascites present with weight gain, abdominal distention, abdominal pain, reflux, nausea, dyspnoea and orthopnoea
- 1.5-2l of ascitic fluid is necessary to produce bulging and distention of the flanks. Dilated abdominal veins, marked stretching of the skin and eversion on the umbilicus may be evident. Lower limb oedema may be an associated feature
- An abdominal fluid thrill and shifting dullness help confirm the diagnosis. The absence of these clinical signs may occur with loculated ascites or occurs in patients with large abdominal cysts presenting as abdominal distention
- A careful chest examination will reveal an associated pleural effusion in 5% of patients

Investigations
- An abdominal x-ray typically reveals a ground glass or hazy pattern
- Abdominal ultrasound detects as little as 100ml of ascites
- CT scanning has an equivalent accuracy to ultrasound in detecting ascites and may provide additional information about the cause of the ascites (primary tumour, recurrence, liver involvement)
A diagnostic paracentesis will confirm the diagnosis and help identify an underlying cause of the ascites:
- A gram stain and culture may be requested if an infective process is suspected
- The presence of milky white fluid at the time of paracentesis should raise the suspicion of chylous ascites suggesting lymphatic obstruction
- Serum to ascites albumin gradient (SAAG) can help in the differential cause - >11g/l is observed in transudative ascites caused by hepatic metastases, cardiac failure or cirrhosis

Management Decisions
Issues to be considered:
- Loculation of ascites
- Neutropenic status
- Coagulation status

Treatment Options
Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- The immediate aim of therapy is to provide relief with minimal complications. If the patient is frail, consider whether paracentesis is appropriate or whether alternative symptom control measures are to be preferred:
  - Abdominal discomfort and breathlessness requires SC opioids
  - Squashed stomach or hypomotile gut requires antiemetics eg. metoclopramide (10mg SC qid)
- Therapeutic paracentesis provides effective, although temporary symptom relief:
  - Ultrasound guided paracentesis may lower the risks of bowel injury and tumour related bleeding and is recommended in patients who have had multiple previous paracenteses as it allows better localisation of loculated ascitic collections
  - Up to 5l of ascitic fluid may be safely removed without complications and without fluid replacement
  - Hypovolaemia, prerenal failure and hyponatraemia may be associated with too rapid removal of large volumes of ascitic fluid
  - Remove the drain after about 6 hours or sooner if drainage stops
  - Patients often feel ‘washed out’ and weak during and immediately following the procedure and experience abdominal discomfort. If experiencing significant discomfort exclude peritonitis

Prognosis measured in weeks to months prior to the onset of this problem
- Clinical observations support the best outcomes are associated with cancer-modifying treatments. Newly diagnosed gynaecological malignancy is best treated with appropriate chemotherapy. In the setting of recurrent malignancy and ascites, the use of chemotherapy is recommended in patients with potentially chemosensitive disease
- In patients with refractory ascites paracentesis (as detailed above) is the most effective method to address symptoms associated with ascites
Evidence is not strong to support measures to avoid repeated paracenteses. However, the following may be considered but this must be on a case by case basis:

- A trial of diuretics (Spironolactone PO 100mg bd, Frusemide PO 40mg daily) as tolerated. This is most likely to be beneficial in the small number of patients with transudative ascites. Injudicious use of diuretic therapy may lead to pre-renal failure and electrolyte disturbances and can result in incontinence, sleep deprivation from frequent urination, and falls from postural hypotension

- The insertion of abdominal ports or pigtail catheters for women who reaccumulate ascites at a rapid rate can provide ongoing comfort care within the community, but there is a risk of infection and blockage

- Peritoneovenous shunting
BLEEDING / HAEMORRHAGE

Bleeding problems are important causes of morbidity and mortality, giving rise to distressing symptoms and are often difficult to manage. Due to the sites of cancer and their patterns of metastatic spread women with gynaecological cancer often experience bleeding and thrombosis concurrently.

Diagnosis
Made from a combination of:
History
Bleeding is a distressing problem and women will usually report episodes of obvious frank blood loss such as vaginal bleeding. Attempts to estimate the amount is useful by asking how frequently pads or tampons need changing. The colour of blood loss and presence of clots may help give some indication of the briskness with which bleeding is occurring. Necrotic tumour masses may also become infected so that the woman reports a dark malodorous vaginal discharge.

Examination Findings
The woman’s limbs, trunk and chest should be inspected for bruising or petechial rashes to determine if bleeding is secondary to a coagulopathy.

Investigations
- FBC, clotting screen, U&E, LFT
- Vaginal examination – care should be taken if patient is neutropenic due to risk of bacteraemia

Management Decisions
Issues to be considered:
- Proximity of bleeding site to major vessel

Treatment Options
Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort
- A plan should be in place for dealing with the possibility of a massive brisk haemorrhage as a terminal event. Under these circumstances the woman should not be left alone and medication to provide sedation (midazolam 5-10mg SC / IM stat) should be given as soon as possible if distress is evident. It is useful to have green or dark blue towels and sheets available for a woman who is likely to bleed, reducing the alarming visual impact of bleeding on patient and carers
Prognosis measured in weeks to months prior to the onset of this problem

Small haemorrhages:
- Can occur with dressing changes with a fungating wound or when superficial blood vessels are eroded by tumour
- Dressings that absorb haemoserous fluids and promote clot formation include calcium alginate, absorbable gelatin foams and absorbable oxidised cellulose
- Sucralfate paste (1gm mixed with a water-based lubricant helps produce an adherent protective barrier)
- Stomal adhesive powder can be used for control of minor bleeding and odour
- Topical adrenaline causes vasoconstriction and can therefore be used as a haemostatic agent. Silver nitrate sticks can be used as a cautery agent. Both can cause necrosis of surrounding tissue

Larger haemorrhages:
- Torrential distressing vaginal bleeding may require packing whilst more definitive treatments are being considered
- Radiotherapy provides good symptomatic relief of vaginal bleeding
- Arterial embolisation / laparoscopic ligation of the internal iliac
- Correcting drug-induced anticoagulation is an important consideration when patients are on warfarin or heparin. Any drugs with antiplatelet effects (e.g. NSAIDs including aspirin) should be stopped
- For many women drug therapy provides an acceptable approach to control bleeding. Tranexamic acid (500mg-1g PO qid) should be continued until clinical symptoms resolve. Bleeding often improves within two days and ceases within four. As tranexamic acid is excreted renally the dose should be reduced and the interval extended in patients with renal impairment. Any past history of ischaemic heart disease or thromboembolic complications limits the use of this medication
- Antibiotic treatment is indicated when women experience offensive blood stained vaginal discharge as successful treatment of infection may help stop the bleeding
BONE PAIN SECONDARY TO METASTATIC CANCER

Pain due to metastatic bone deposits occurs because of disruption of the normal bone and surrounding tissues leading to nociceptive pain and/or mechanical pain due to actual or impending fractures.

The actual mechanisms that underlie bone pain are unclear but numerous causes are likely:
- Bone destruction
- Disruption of normal balance between resorption and formation of bone
- Reactive muscle spasm
- Increased local and blood concentrations of calcium ions and inflammatory mediators

**Diagnosis**
Made from a combination of:

**History**
- Pain is the most common problem that patients present with and focal pain in a patient with cancer must prompt consideration of bone metastases. It is however important to consider referred pain with the site of the problem distant to the presenting problem eg. hip pathology presenting as knee pain
- The pain is typically described as deep and aching, associated with sharp exacerbations on movement
- Neuropathic pain may be present if there is associated compression of adjacent structures

**Examination Findings**
- Point tenderness or localised swelling
- Back pain must always prompt a full neurological examination, with the diagnosis of spinal cord compression always considered

**Investigations**
- Plain x-rays of the region
- CT / MRI
- Bone scan

**Management Decisions**
Issues to be considered:
- Previous response to radiotherapy
- Previous response to opioids
- Bleeding diatheses
- Risk of, or acute spinal cord compression
Treatment Options

Prognosis measured in hours to days prior to the onset of this problem

- Analgesia:
  - Opioid
  - Paracetamol (1gm PO qid, 500mg PR qid)
  - An anti-inflammatory eg. ketorolac (10mg SC tid) or dexamethasone (4mg SC daily)
  - Regardless of the stage of life, it is important to consider gastro-protection eg. ranitidine (150mg PO bd) or omeprazole (20mg PO daily)
  - Consider nerve block depending on local expertise
  - Sometimes lignocaine patches over the affected area may be useful, particularly in spinal fractures
- Immobilise fracture with splinting if necessary

Prognosis measured in weeks to months prior to the onset of this problem

- Radiotherapy
- If fractures, immobilisation of the affected area if possible
- A physiotherapy consult is necessary
- Other modalities to improve or maintain function depend upon the location of the bone metastases
- Surgical fixation, actual or threatened long bone fracture:
  - Crush fractures of the vertebrae may be suitable for vertebroplasty
  - Patients with painful pelvic metastases may benefit from epidural pain relief whilst they are undergoing radiotherapy
- Analgesia (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
- IV bisphosphonate eg. pamidronate (90mg in 500mls 0.9% NaCl IV over 2 hours stat then reassess. This may be repeated monthly if effective). Observe for flare response, flu like symptoms. Hypocalcaemia may also result. The choice of bisphosphonate is best based on local availability
BOWEL OBSTRUCTION

- Bowel obstruction is a common complication of gynaecological malignancies, especially ovarian cancer and is the most common cause of death in this group
- Predisposing factors include peritoneal metastases, a history of previous intra-abdominal surgery and pelvic disease from any cause
- The small bowel is more commonly affected than the large bowel but both may be simultaneously involved
- Most women with ovarian cancer and bowel obstruction will live less than one year, the majority dying within 6 months of presentation

Diagnosis
Made from a combination of:

History
The timing and severity of symptoms depend on the level and mechanism of the obstruction

- **Nausea and vomiting are common:**
  - Initially, the volume and frequency of vomiting depend on the level of the obstruction
  - High obstructions may be associated with large volume, forceful vomiting of undigested food
  - Low obstructions may initially have very little vomiting

- **Abdominal distention**

- **Pain:**
  - Colicky abdominal pain often occurs early
  - Continuous pain can also be present or develops later

- **Absence of stool or flatus:**
  - Early in large bowel obstruction, later in higher obstruction
  - *Spurious diarrhoea does not exclude obstruction*

Examination

- Assess hydration:
  - Pulse, BP, skin turgor, axillary moisture
- Mouth may be dry and coated
- Palpation of the abdomen:
  - Abdominal masses
  - May be unremarkable, particularly with high obstructions
  - Abdominal distention
  - Acute abdomen is a poor sign
- Percussion of the abdomen:
  - Hypertympanic
  - Ascites may be present
Auscultate for bowel sounds:
- Reduced
- Increased
- High pitched and tinkling
- Absent
- A gastric splash may be present

Rectal examination:
- Full rectum suggests constipation
- Empty dilated (ballooned) rectum may occur with previous PR interventions, constipation, obstruction or a large pelvic mass. Imaging may be appropriate
- Rectal or pelvic mass may be palpated

Investigations
- Abdominal x-ray (erect / supine, look for fluid levels, faecal loading)
- CT scan with oral contrast
- Gastrograffin swallow with follow through and/or enema if possible surgical candidate. It has been suggested that Gastrograffin may reverse partial bowel obstructions. Barium studies are best avoided
- If there is no radiological evidence of an obstructive lesion on gastrograffin swallow with follow through, consider “pseudo obstruction” (motility disorder) as possible diagnosis
- FBC, EUC (including calcium, magnesium, phosphate), LFT (including albumin), coagulation studies

Management Decisions
Bowel obstruction is a complex management issue which requires input and involvement of the gynaecological oncology multidisciplinary team (MDT).

Issues to be considered:
It is imperative that a surgical opinion is sought if the obstruction has not resolved within 48 hours of conservative management (NBM, IV or SC hydration). Attention to symptom control is paramount but withhold dexamethasone until surgical opinion obtained.

Surgery
- Most suitable surgical candidates include those with:
  - Good performance status
  - Good nutritional status
  - Minimal ascites
  - Unifocal or non-malignant obstruction
  - Options for future disease modifying treatment
- Absolute contraindications to surgery:
  - Results of previous laparotomy demonstrating that corrective surgery is not possible
  - Diffuse intra-abdominal tumours or multiple palpable masses
  - Irreversible poor nutritional status
  - Poor performance status
  - Large volume of ascites
Relative contraindication to surgery:
  o Previous abdominal radiotherapy
  o Multiple recurrent partial bowel obstructions
  o Short disease-free interval
  o Multiple previous lines of chemotherapy
  o Multi-focal obstruction
  o Frailty

**Treatment Options**

**Prognosis measured in hours to days prior to the onset of this problem**

- This is a clinical diagnosis
- No further investigations are indicated
- Attempt temporary reversal of obstruction
- **Medical management of bowel obstruction**
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Management</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous pain</td>
<td>Opioids</td>
<td>A parenteral route of administration is necessary for opioids</td>
</tr>
<tr>
<td></td>
<td>Paracetamol</td>
<td>Paracetamol may be given IVI or PR, depending upon local availability and if an IVI cannula is deemed appropriate</td>
</tr>
<tr>
<td>Colicky pain</td>
<td>Hyoscine butlybromide (20mg SC qid) for cramping pain</td>
<td>There is a possibility that the use of hyoscine butylbromide will further worsen gut function. The dose of the medication needs to be tailored to the clinical situation, especially the clinician's assessment of whether there is any degree of reversibility.</td>
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<tr>
<td></td>
<td>Cease medications that are known to be prokinetic or to stimulate gut function</td>
<td>Metoclopramide and domperidone are known to have prokinetic activity, through dopaminergic and serotonin receptors. The generally accepted view is that these medications should be stopped when cramping pain is present. Other agents such as stimulant laxatives should be stopped</td>
</tr>
<tr>
<td></td>
<td>Dexamethasone 4-8mg SC daily</td>
<td>Dexamethasone may reduce pain and vomiting. The underlying mechanisms probably relate to the antiinflammatory action of dexamethasone. There is wide variability in the doses suggested and the duration of administration. Specialist advice should be sought</td>
</tr>
<tr>
<td>Nausea</td>
<td>Metoclopramide 10 mg SC qid</td>
<td>In the absence of colicky pain, metoclopramide may be used</td>
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<tr>
<td></td>
<td>Haloperidol 0.5 to 1.0mg SC bd</td>
<td>When colicky pain is present, alternative agents such as haloperidol are generally recommended</td>
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<td></td>
<td></td>
<td>Seek specialist advice if necessary</td>
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<tr>
<td>Vomiting</td>
<td>Octreotide (50mcg to 500mcg SC daily) and/or Hyoscine butylbromide (20mg SC qid)</td>
<td>The choice of the medications is based on local availability and cost</td>
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<tr>
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<td>Octreotide may have some advantages in relieving partial obstructions and reducing the total volume of vomiting compared to hyoscine, however hyoscine is probably better to reduce the amount of associated pain</td>
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<tr>
<td></td>
<td></td>
<td>It is strongly recommended that specialist advice is sought</td>
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<tr>
<td>Dry mouth</td>
<td>Regular mouth washes</td>
<td>See SECTION 2: MUCOSITIS</td>
</tr>
</tbody>
</table>

**Prognosis measured in weeks to months prior to the onset of this problem**

- **Investigations**
- **Surgical review**
- **Decompression**
  - A nasogastric tube can be used to decompress the stomach. This is often indicated when surgery is being considered. A nasogastric tube may be uncomfortable however some women find this more acceptable than uncontrolled vomiting.
  - A venting gastrostomy is a more acceptable method for long-term decompression and allows the patient to eat and drink
- **Hydration**
  Artificial hydration is indicated if fluid balance is impaired. Subcutaneous fluids (eg. 1 litre of 0.9% NaCl 24-48 hrs) are an alternative to intravenous hydration. The subcutaneous route can be easily established and maintained at home. **Too much intravenous fluid may worsen symptoms and increase the volume of vomitus**
• Stenting is an alternative to surgery for the patient who has a single level obstruction and for those with relative / absolute contraindication to surgery but potentially stentable single lesion
• **Nutrition (See SECTION 2: NUTRITION):**
  o Refer to dietitian
  o With established malignant obstruction: Patients can eat and drink whatever is tolerated but may be more comfortable on a clear fluid diet
  o For prolonged partial or recurrent obstruction: consider low residue diet and fluid supplements
• If inoperable, medical management of bowel obstruction as detailed above
• If there is a motility disorder or incomplete obstruction, a prokinetic antinauseant eg. metoclopramide (10mg PO tds), or if this is contraindicated domperidone (10mg PO tds) may be useful **MANAGEMENT OF THIS SITUATION REQUIRES SPECIALIST ADVICE**
CEREBRAL METASTASES

A diagnosis of metastatic cancer should prompt consideration of cerebral metastases in anyone with an atypical headache.

**Diagnosis**
Made from a combination of:

**History**
- Raised intracranial pressure:
  - Headaches, worse in the morning
  - Nausea
  - Vomiting
- Mass lesion:
  - Weakness
  - Seizures
  - Speech difficulties
  - Personality changes
  - Altered levels of consciousness
- These changes are typically progressive and may evolve over days to weeks

**Examination Findings**
- Papilloedema
- Focal neurological changes
- In very advanced disease, bradycardia and hypertension may co-exist

**Investigations**
- Cerebral CT
- Cerebral MRI

**Treatment Options**

**Prognosis measured in hours to days prior to the onset of this problem**
- This is a clinical diagnosis
- No further investigations are indicated
- Attention must be paid to symptom control

**Headache:**
- Dexamethasone (8-16mg PO / SC daily)
- Parenteral opioids (SEE SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
- Paracetamol (1g PO qid or 500mg PR qid)

**Nausea and vomiting** (SEE SECTION 1: NAUSEA and VOMITING)

**Seizures:**
- Clonazepam (0.5mg SC bd)
- Midazolam (2.5-5.0mg SC 2hrly PRN)
- **Status epilepticus requires specialist advice**

**Delirium** (SEE SECTION 2: DELIRIUM)
- Terminal secretions (See SECTION 3: CARE OF THE DYING PATIENT)
Prognosis measured in weeks to months prior to the onset of this problem

- Symptom control
- Investigations
- Dexamethasone (8-16mg PO daily). If a response is not seen within 5-7 days it should be discontinued. If a response is obtained attempts should be made to reduce to the minimum effective dose to minimise side effects
- Radiotherapy consult
- Neurosurgical consult if no greater than two lesions
DELIRIUM

Delirium is common in cancer and is associated with significant mortality and morbidity. The cardinal features are:

- **Disturbance of consciousness with a loss of the ability to shift, sustain and focus attention**
- Association with an underlying physiological disturbance which may not always be apparent
- Hyperactive and hypoactive subtypes which may progress to somnolence, coma, seizures, death
- Prevention is effective but underutilised, with management of risk factors indicated
- **Early detection aids management of symptoms and underlying cause**

**Diagnosis**
Made from a combination of:

**History**
- Delirium is often under-diagnosed and commonly misdiagnosed as depression, dementia or psychosis
- It develops over a short period of time and is a clinical diagnosis:
  - Patients will usually do poorly on bedside tests of attention and cognition
  - May be disorientated to place and time
  - May suffer hallucinations or delusions
  - The severity of the condition fluctuates over the course of the day but is usually worse at night
- There is always underlying physiological cause or causes, but these may not be apparent initially. Identified risk factors include:
  - Age
  - Severity of medical illness
  - Medications especially those with high cholinergic load
  - UTI / sepsis
  - Constipation
  - Urinary retention
  - Cerebral metastases
  - Other organ failure (liver, kidney, heart, lung)
  - Hypercalcaemia
- **Collateral history from family or carer aids identification**

**Examination**
Physical examination must be comprehensive and must consider vital signs and assessment of cognitive state
Investigations
As delirium commonly occurs as part of the normal dying process clinical judgement is necessary to determine whether investigations are appropriate

- To aid in identifying aetiology where potential benefit outweighs the burden of investigation
- The diagnosis is made clinically and normal investigations do not exclude a delirium. Delirium is often multifactorial
- Tests to exclude cause as appropriate:
  - Pulse oximetry
  - Septic screen
  - Bloods (FBC, EUC, LFT, calcium, TFT, B12)
  - Head CT may be considered to exclude cerebral metastases

Treatment Options
Prognosis measured in hours to days prior to the onset of this problem

- Delirium in the last days of life is most often a clinical diagnosis
- Investigations are to be avoided (See SECTION 3: CARE OF THE DYING PATIENT)
- Treatments that are burdensome or those that simply forestall death without expected benefit to patient are to be avoided. Attention to symptom control and patient comfort with interventions on case by case basis
- Management of symptoms that may contribute:
  - Pain / uncomfortable positioning
  - Acute urinary retention
  - Constipation
  - Infection
  - Hypoxia
**Prognosis measured in weeks to months prior to the onset of this problem**
Both pharmacological and non-pharmacological interventions are indicated

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>Non-pharmacological:</strong></td>
<td>These simple non-pharmacological measures are often overlooked, but may be very useful</td>
</tr>
<tr>
<td>• Quiet environment, avoiding over stimulation</td>
<td></td>
</tr>
<tr>
<td>• Familiar people and objects</td>
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</tr>
<tr>
<td>• Re-orientation in discussions with the person</td>
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<tr>
<th>Interventions</th>
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<tbody>
<tr>
<td><strong>Pharmacological:</strong></td>
<td>Haloperidol is readily available, and there is probably no advantage to haloperidol over the other listed agents at lower doses and for people who do not have contraindications to haloperidol. However, at higher doses and in those with contraindications, discussion with either a psychiatrist or specialist palliative care team is indicated. In these situations, alternatives to haloperidol are probably a better choice.</td>
</tr>
<tr>
<td>• Antipsychotics:</td>
<td>Benzodiazepines are not the first choice in the management of delirium and the use of these agents should be reserved for situations of agitation or when the person is at risk of harming themselves or others around them. Inappropriate use of benzodiazepines may worsen a delirium</td>
</tr>
<tr>
<td>o Haloperidol (0.5 to 1.0mg SC as necessary 4-6 hourly)</td>
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<tr>
<td>o Risperidone (0.5 to 2mg PO daily in divided doses)</td>
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<tr>
<td>o Olanzapine (2.5 to 10mg PO / SL in divided doses)</td>
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<tr>
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<tbody>
<tr>
<td>• Benzodiazepines:</td>
<td></td>
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<tr>
<td>o Lorazepam (0.5 to 2.0mg PO / SL 4 hourly as needed)</td>
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<tr>
<td>o Midazolam (2.5 to 5.0mg SC 1-4 hourly)</td>
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DEPRESSION

“Depression” in the context of advanced disease is often considered “normal”. However, clinical depression:

- Is not normal even in situations of great loss or stress
- Is under-diagnosed in palliative care settings
- Is a treatable co-morbidity – response rates in palliative care patients with depression are better than those in the general community
- Should be anticipated and excluded by routine screening
- Is best managed by a multi-modality approach; biological, psychological, psychosocial, spiritual, cultural
- Is common in the general population and more common in palliative care populations
- Is common in patients requesting euthanasia
- May complicate the treatment of other symptoms e.g. pain

Diagnosis

May be complicated as some symptoms of depression (e.g. fatigue, social withdrawal, anorexia, sleep disturbance, poor concentration) often overlap with symptoms of advanced disease or side effects of treatment.

Made from a combination of:

History

- Personal or family history of affective disorder
- History of depressed mood, which is pervasive and present for at least 2 weeks, and which does not improve with external positive events (e.g. visit from best friend)
- Loss of interest in, and pleasure in, most activities, present for at least two weeks
- Hopelessness
- Poor concentration and attention, subjective experience of poor short term memory
- Predominant negative cognitions in a ruminative pattern
- Cognitions often have themes of guilt, worthlessness, loss of a sense of value, distress at being a burden on others
- Restricted affective range and reduced affective reactivity
- Withdrawal from those usually very close to the patient e.g. avoiding contact with grandchildren
- Somatic symptoms including loss of appetite, change in taste (food tastes like chalk), poor sleep, especially early morning wakening (mood often at its lowest in the early hours of morning); loss of weight, constipation, increased sensitivity to cold
- Mood often varies over the 24 hours of the day in a predictable pattern – usually best in the early evening
Examination Findings

- Mental state examination: poor grooming, self care; stooped posture, fixed sad facial expression, poor eye contact, voice low and soft; reduced speech – may give one or two word answers; sad mood which does not lift during the interview; thoughts dominated by themes of sadness, self criticism, possibly even delusional beliefs usually of poverty, criminality; hopelessness, sees no future or present value or worth; thoughts of self harm, others being better off if patient was dead
- Physical examination: motor slowing, weight changes, may be dehydrated
- Use of symptom checklist or other measure of symptom burden (DASS, Beck Depression Inventory) to aid diagnosis and outcome measurement

Investigations
Initiate appropriate screening by mental health professional.

Treatment Options

Prognosis measured in hours to days prior to the onset of this problem

- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort, including sedation if sleep is very disrupted and patient is agitated
- Pharmacological interventions include haloperidol (0.5mg PO/SC bd and PRN). If this is contraindicated consider low dose olanzapine (2.5-5mg SL nocte)

Prognosis measured in weeks to months prior to the onset of this problem

Combining non-pharmacological and pharmacological treatments gives optimal outcomes:

- Initiate timely review by a mental health professional
- Assess risk of self harm and make provision for safe environment for patient care
- Identify psycho-social contributing factors, such as other recent losses, absence of social supports, family / relationship issues
- Education about depression, including advice for carers
- Provide supportive psychotherapy, or where possible, Cognitive Behaviour Therapy (CBT). CBT does require the patient to be well enough to hope that things will improve, tolerate a focus on negative cognitions and be able to conceive more positive substitute cognitions
- Plan positive or potentially pleasurable events / activities within the patient’s physical capacities (eg. listening to favourite pieces of music, hand or foot massage) and plan these for the patient’s ‘best’ part of the day (late afternoon)
- Focus on setting realistic goals, especially given any functional limitations arising from the cancer or its treatment
- Where possible refer to physiotherapist to plan a suitable exercise program (shown to improve mood and sleep quality)
- For patients with limited access to mental health services consider e-therapy sites like Mood Gym, www.moodgym.anu.edu.au and Bluepages, www.bluepages.anu.edu.au
• Concurrent management of medical problems (eg. nausea, pain) which may be contributing to mood. Identify medication possibly contributing to mood symptoms (eg. corticosteroids) and metabolic / nutritional / endocrinological / neurological disorders as contributing factors, eg. abnormal electrolytes, anaemia, hypothyroidism
• Engage social and spiritual support networks and provide education about depression
• Initiate anti-depressant medication
• Either tricyclic antidepressants as first line as they improve sleep, improve appetite and can assist in pain management (amitriptyline 10-25mg PO nocte) or selective serotonin uptake inhibitors eg. fluoxetine (10mg PO daily) or paroxetine (10mg PO daily) if life expectancy is more than 6 weeks
• Note the possible delay in onset of effect (usually 10-14 days)
• Psychostimulants, mood stabilisers and MAOI have all been used in terminally ill people. However, these interventions require specialist consultation and these consultations should be sought as a matter of urgency
FISTULA

A fistula is an abnormal opening that connects two hollow organs or a hollow organ and the skin. The common types of fistula involve the vagina. The loss of continence caused by fistulae into the vagina is a most distressing and undignified symptom for a woman to suffer. It is essential that in every case consideration is given to restoring control if possible.

Diagnosis
Made from a combination of:

History
- The history depends on the site of the fistula
- The typical history of a vaginal fistula is of persistent continuous discharge which is either watery (vesico- or uretero-vaginal) or faeculent (recto- or entero-vaginal)
- Enterocutaneous fistula is typically preceded by an erythematous swelling
- The type of material draining from the fistula can help determine its site:
  - A low-volume smelly discharge is more likely to be colonic in origin
  - A high-volume non-smelly but corrosive type of effluent is more typical of a small bowel fistula

Examination Findings
- Physical examination may be unremarkable
- An already formed enterocutaneous fistula is obvious with the discharge of intestinal contents to the skin, often with surrounding cellulitis and excoriation
- If small bowel is involved, there is a significant risk that there will be dehydration as the volume of faecal fluid output may be 2-3L/day
- Abdominal examination may reveal localised tenderness or palpable mass as pathology may be multifocal
- For vaginal fistulae, inspect the perineal region for localised excoriation
- Check temperature, pulse, blood pressure (standing and sitting) for fluid status

Investigations
Investigations are dictated by the presumed site of the fistula and the condition of the patient
- Check FBC, EUC (there can be significant loss of K⁺ and Na⁺ in small bowel enterocutaneous fistulae), LFT, albumin, coagulation studies
- If febrile – septic screen
- Diagnosis of bowel-to-bowel fistulae can be difficult. Plain abdominal x-rays may be of no help, and contrast studies at times are difficult to interpret. A gastrograffin study should be done if a bowel-to-bowel fistula is suspected. Abdominal CT scan will give the most information about the location and cause of the fistula
- Endoscopy may be useful to assess whether or not stenting is possible especially for rectal lesions
Treatment Options

Prognosis measured in hours to days prior to the onset of this problem

- The immediate priority is to control pain, infections and dehydration
- It is reasonable to reverse a coagulopathy with vitamin K (10mg IV / IM / PO daily)
- Other interventions at this stage of life are to control the outputs from a fistula. This may be achieved by decreasing parenteral fluid intake and the use of octreotide (100mcg SC tds) which can be increased every 48 hours if there is no obvious response. Current evidence suggests that no further response will be achieved by increasing the total daily dose above 1200mcg
- Women with enterocutaneous fistulae require review by a specialist stoma therapy / wound care nurse for the best application of drainage bags and to minimise skin problems including autodigestion, and secondary bacterial and fungal infections. The surrounding skin needs protection from the corrosive ileal fluid with a barrier cream
- There is a risk of torrential bleeding from fistulae and crisis medications must be readily available (See SECTION 3: CARE OF THE DYING PATIENT/ THERAPEUTICS FOR SYMPTOM MANAGEMENT IN LAST 24-72 HOURS)

Prognosis measured in weeks to months prior to the onset of this problem

- Psychological support is imperative - not only is the fistula a constant reminder of the recurrent disease but the uncontrolled loss of bodily fluids, often associated with a foul smell, is degrading
- Surgical intervention depends upon the location and prognosis. Malignant fistulae or fistulae at the site of previous radiotherapy may require surgical diversion, as primary repair is often contraindicated. The uncontrolled loss of faeces or urine can often be managed with a stoma or diversion
- Fistulae may be amenable to palliative stenting if the duodenum, rectum or ureter are involved
- Enterocutaneous fistulae are usually accompanied by malnutrition and there needs to be early consideration of parenteral feeding on a case-by-case basis. Vitamin deficiencies need correction especially if distal small bowel is involved
- Octreotide may reduce outputs from enteric fistulae and may assist with spontaneous closure (as detailed above). Long acting preparations are available that are suitable in a stable chronic situation SEEK SPECIALIST ADVICE
- The symptoms from a vaginal fistula may be helped by a tampon giving temporary relief which allows the woman to mobilise for short time periods. A urethral catheter may help in reducing the loss by keeping the bladder empty
- With a low recto-vaginal fistula a bulking agent such as ispaghula may be helpful in reducing the loss from the defect
FUNGATING WOUNDS

Fungating wounds arise from primary, secondary or recurrent malignant disease and are associated with advanced cancer. Such wounds develop in women with gynaecological cancer in circumstances that result in tumour mass eroding through epithelium to the surface or through its mucosal surrounding into another organ or body cavity. Fungating wound management usually aims to slow disease progression and optimise quality of life by alleviating physical symptoms such as copious exudate, malodour, pain and the risk of haemorrhage through appropriate dressing and topical agent selection. It is clear that a persisting unpleasant odour can have a profound effect on any woman who develops a fungating tumour. It is imperative that clinicians make every possible effort to reduce the impact of the problem for the patient and her family.

Diagnosis
Made from a combination of:

History
The history should place particular emphasis on any observations the woman may have had of events or activities that exacerbate or relieve the problem. Review of operative notes or radiotherapy records may be sufficient to make a diagnosis. Factors to consider include:

- Rate and change of size of lesions
- Volume and nature of discharge
- Bleeding
- Pain and response to analgesia
- In addition to the social and psychological effects the odour of a necrotic tumour mass may have more direct effects. Many women complain of anorexia and alteration of the sensation of taste or persistent nausea. These symptoms are also suffered by those close to the patient.

Examination Findings
It is usually helpful to acknowledge the unpleasant odour rather than pretend not to notice it. This provides an opportunity to reassure the woman that you will be able to suggest strategies to reduce it. Consider:

- Size of lesion and relationship to other structures
- Volume and nature of discharge
- Potential for treatment
- Ease of containment
Investigations
- Imaging may be required if the full extent of the lesion is not apparent (cross-sectional images will define tumour masses and special relationships)
- Microbiological screen
- Biopsy to distinguish between tumour, infection or radiation necrosis
- **Psychological assessment is an important part of the initial evaluation as the symptoms may be causing the woman significant distress.** Many women go to extreme lengths to conceal such problems and may admit to being unable to leave the house, or engage in any form of social or family intimacy such as cuddling their grandchildren

Treatment Options

Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort
- Cutaneous ulceration:
  - **Consult with wound care nurse specialist and stomal therapist**
  - Keep the affected area as cool as possible
  - Regular (3-4 times daily) irrigation with normal saline and dressing changes
  - Odour and discharge can be reduced by topical de-sloughing agents
  - Exudate can be reduced by high absorbency dressings and foams. For low exudate wounds hydrocolloid dressings, semipermeable films or low adherent dressings are recommended. High exudate wounds require nonadherent and absorbent dressings. Alginites, hydrogel sheets and hydropolimer foam dressings may be left in place for several days
  - Stoma bags can be tailored to cover the area
  - Topical metronidazole gel (0.5%) will reduce anaerobic infection and odour. Crushed metronidazole tablets mixed with sterile water to make 0.5-1% solution can be used to irrigate or applied with soaked gauze
  - Charcoal impregnated coverings will contain odour
- Mucosal and internal ulceration:
  - Regular douching with 0.9% NaCl
  - Tampons will absorb discharge
  - Treat infections with optimal dose local therapy
  - Charcoal impregnated dressings worn inside loose fitting cotton underwear will contain odour
- The characteristic pervasive odour of a necrotic infected tumour has significant social and psychological effects. This odour can be improved by:
  - Frequent changes of clothing and bed linen
  - Circulation of air if the space is confined
  - Kitten litter, coffee beans or activated charcoal placed under the bed will absorb malodour
  - Aromatherapy burners or atomisers using citrus oils – particularly grapefruit
  - Small portable air filters can be helpful in small spaces
**Prognosis measured in weeks to months prior to the onset of this problem**

- Primary closure
- Radiotherapy
- Selective interventional radiology techniques may be useful, particularly if the lesion is bleeding
- Debridement of the mass can significantly improve odour and discharge. However, debridement should be used with great caution as the friable vessels within fungating wounds significantly increase the risk of haemorrhage
HYPERCALCAEMIA

Malignant tumours cause hypercalcaemia by producing a protein with parathyroid hormone-like action. Symptoms may develop rapidly and require urgent intervention to improve the patient’s comfort.

**Diagnosis**
Made from a combination of:

**History**
- Confusion
- Thirst
- Vomiting
- Constipation

**Examination Findings**
- Confusion
- Signs of dehydration – decreased skin turgor, dry mucous membranes

**Investigations**
- Elevated corrected serum calcium

<table>
<thead>
<tr>
<th>Level</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild elevation</td>
<td>2.6 to 2.9 mmol/L</td>
</tr>
<tr>
<td>Moderate elevation</td>
<td>3.0 to 3.4 mmol/L</td>
</tr>
<tr>
<td>Severe elevation</td>
<td>&gt; 3.5 mmol/L</td>
</tr>
</tbody>
</table>

**Management Decisions**
Issues to be considered:
- Serum calcium refractory to treatment
- Rapid return (<1 week) of hypercalcaemia following treatment

**Treatment Options**

Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort
- Blood test only if bisphosphonates considered important for patient comfort
- Diligent mouth care may be sufficient to curtail thirst
- However if confusion and thirst are severe, SC hydration (occasionally IV eg. if cannula already in situ) may be necessary for patient comfort
- Sedation may be indicated in patient with distress not expected to respond to above or florid delirium (See SECTION 2: DELIRIUM and SECTION 3: CARE OF THE DYING PATIENT)
Prognosis measured in weeks to months prior to the onset of this problem

- If possible, treat the underlying cause
- Manage delirium (See SECTION 2: DELIRIUM)
- Hydration and bisphosphonates eg. pamidronate (90mg in 500ml 0.9% NaCl over 2 hours IVI) or zoledronic acid (4-8mg in 100ml 0.9% NaCl over 15 mins IVI). The choice of agents depends upon local availability
- The response to treatment takes 3 to 4 days, with the nadir at 4 to 7 days. Therefore re-check calcium within this time frame. Seek specialist advice re further management.
- *Malignant hypercalcaemia and particularly refractory hypercalcaemia carries a very poor prognosis*
MUCOSITIS

Mucositis is a general term that describes the inflammatory response of mucosal epithelial cells. All mucous membrane covered surfaces may be affected. This inflammation causes numerous symptoms including dysphagia, dyspepsia, malabsorption, diarrhoea and pain.

Diagnosis
Made from a combination of:
History
• Pain
• Bleeding
• Difficulty swallowing

Examination Findings
• Erythema
• Cracking
• Inflammation
• Bleeding
• Ulceration

Investigations
• Examination of mouth and oropharynx
• FBC, EUC and albumin
• Assess hydration and nutritional status
• Oral swabs – viral, fungal and bacteriology
• Consider endoscopy if symptoms persist for more than a week

Treatment Options
Prognosis measured in hours to days prior to the onset of this problem
• This is a clinical diagnosis
• No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
• Attention to symptom control and patient comfort
• Analgesia:
  o Parenteral opioids (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
• **Mouthcare:**
  o Frequent (eg. 2hrly) mouthwashes with water – either plain or with additive eg. 0.9% NaCl, sodium bicarbonate (1tsp in 500ml water) or lemon juice. Can be administered at room temperature or refrigerated. Patients should be instructed to take a tablespoon of the rinse, swish it in the oral cavity for at least 30 seconds and expectorate.
  o **Chlorhexidine mouthwash should not be used to treat established mucositis**
  o Moistening the oral cavity with frequent sips of fluid or plain water sprays or atomisers.
  o Brush tooth surfaces twice daily using a soft toothbrush.
  o Induce saliva flow by using sugar-free pineapple pieces, frozen lemon slices, frozen tonic water or chewing gum.
  o Apply lanoline-based preparations or lip balms thinly to lips to reduce lip dryness and cracking.
  o Use choline salicylate mouth gel or toothpaste.

**Prognosis measured in weeks to months prior to the onset of this problem**

• **Nutrition:**
  o Refer to dietitian.
  o To maximise nutritional intake and oral comfort, patients should be advised to cut food into small pieces and mix it with sauces and gravies. Coarse or dry foods, spicy and salty foods and citrus fruits should be avoided.
  o Early consideration of supplemental feeding in severe and prolonged cases.

• Ensure adequate hydration.

• Mouthcare as detailed above.

• Avoid tobacco and alcohol.

• Management of superimposed infections:
  o Treat **candidiasis** with antifungal eg. nystatin 100 000units/ml (1ml topically then swallowed qid) or amphoteracin lozenge (10mg PO qid). Severe candidiasis requires treatment with systemic antifungal eg. fluconazole (50-100mg PO daily).
  o For single lesion of **herpes simplex** aciclovir (5% topically 4hrly). More severe infection requires oral therapy eg. aciclovir (400mg PO tds).

• Pain management requires a combination of local and systemic interventions. Morphee is best administered by PCA if available.

• Patients require gastric protection eg. ranitidine (150mg orally bd or 50mg IV tds) or a PPI eg. omeprazole (20mg PO daily or 40mg IV daily) for epigastric pain. Radiation enteritis may improve with steroid or sucralfate enemas. Prednisolone (20mg PR noxte) or sucralfate (1g PR qid).

• Radiation induced proctitis – sucralfate enema.

• Management of diarrhoea (SEE SECTION 1: DIARRHOEA).
NEUROPATHIC PAIN

Neuropathic pain can be defined as pain that occurs secondary to a lesion of the peripheral nervous system, the central nervous system or both. It is complex pain that can rarely be attributed to a single lesion.

<table>
<thead>
<tr>
<th>Neuropathic Pain in Women with Gynaecological Malignancies</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral neuropathy:</td>
<td></td>
</tr>
<tr>
<td>• Chemotherapy induced</td>
<td>Sensory neuropathy which presents as paresthesia, numbness, and pain in the feet and hands. It usually starts in the toes and later, the fingers. Paresthesia occurs in a glove-and-stocking distribution, which is most severe on plantar surfaces Motor neuropathy is usually mild and presents as muscle weakness such as foot drop, difficulty in climbing stairs, difficulty buttoning a shirt or putting on earrings</td>
</tr>
<tr>
<td>• Paraneoplastic</td>
<td>Constant and paroxysmal dysaesthesia; exclude other causes</td>
</tr>
<tr>
<td>Plexopathy:</td>
<td></td>
</tr>
<tr>
<td>(direct extension, post radiotherapy, postsurgical, compression)</td>
<td></td>
</tr>
<tr>
<td>• Cervical plexopathy (C1-C4 infiltration / compression)</td>
<td></td>
</tr>
<tr>
<td>• Brachial plexopathy:</td>
<td></td>
</tr>
<tr>
<td>(infiltration / compression)</td>
<td>Pain may be experienced in the pre and post auricular regions and the anterior neck. Referred pain may be experienced in the face, neck and ipsilateral shoulder</td>
</tr>
<tr>
<td>o Upper plexopathy</td>
<td>Upper plexus (C5 – 6) leads to pain in shoulder girdle, lateral arm and hand The lower plexus (C8 – T1) leads to pain that radiates to elbow, medial forearm, ring and little fingers This will often progress to a complete lesion, associated with loss of function</td>
</tr>
<tr>
<td>o Lower plexopathy</td>
<td></td>
</tr>
<tr>
<td><strong>Lumbosacral plexopathy:</strong> (direct extension of pelvic tumours)</td>
<td>Lumbar plexopathy (L1-L4) presents with pain in back, lower abdomen, flank, iliac crest, anterolateral thigh. There may be sensory changes in the same distribution</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>o Lumbar plexus</td>
<td>Sacral plexopathy (L4 – 5 trunk, S1 – 3) presents with pain in the buttock, perineum, and the poster and lateral parts of affected leg. There may be associated sensory and motor changes</td>
</tr>
<tr>
<td>o Sacral plexus</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Mononeuropathy or mononeuropathy multiplex:</strong> (injury, direct infiltration, post-radiotherapy)</th>
<th>Cranial neuropathies may occur secondary to bone metastases, leptomeningeal disease or cerebral metastases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single nerve or group of nerves</td>
<td>Intercostal nerve damage secondary to fractured rib or post–thoracotomy presenting with sharp pain along the damaged nerve</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Radiculopathy:</strong> (injury, direct infiltration, post-radiotherapy, infections of the spinal nerve roots)</th>
<th>Pain in a dermatone distribution of the affected nerve root may predate the appearance of a vesicular rash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herpes zoster</td>
<td>Epidural metastases may cause pain in a dermatone distribution, either unilaterally or bilaterally. The pain is typically worsened by coughing, sneezing, lying flat</td>
</tr>
<tr>
<td>Epidural metastases</td>
<td>A radiculopathy may occur secondary to leptomeningeal metastases. Other typical features include multifocal neurological changes including cranial nerve lesions. It is often impossible to link the signs to a single site of pathology</td>
</tr>
<tr>
<td>Leptomeningeal metastases</td>
<td></td>
</tr>
</tbody>
</table>
Central:
- Myelopathy
- Cerebral metastases

Myelopathy is used to describe any neurological deficit related to the spinal cord itself. It is worth noting that although spinal cord compression is almost always painful, the pain tends to be related to associated bone destruction and compression of spinal nerve roots rather than central pain from the cord.

This is in contrast to radiation-induced myelopathy, which is often painful, but occurs as a late complication (months to years after treatment). Central pain is typically identified by site of the injury and at least three segments below with typical sensory disturbances (sharp, shooting, electric, burning, stabbing).

Central pain tends to occur as a later response to CNS damage, occurring months to years later. It is rarely described in association with cerebral metastases.

Diagnosis
Made from a combination of:

History
- Pain may be described as:
  o Continuous
  o Intermittent
  o Allodynia
  o Hyperalgesia

Examination Findings
- Abnormal skin colour
- Changes in temperature
- Changes in sweating
- Weakness
- Tremor
- Atrophy of skin, hair, soft tissue, muscle
- Loss of joint mobility

Investigations
- CT
- MRI
- Nerve conduction studies
Treatment options

Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- Attention to symptom control is the main priority
- Analgesia must be provided via the parenteral route:
  - Opioids (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
  - Paracetamol (1g PO qid or 500mg PR qid)
  - Dexamethasone (4mg SC daily) if nerve compression
  - Clonazepam (0.5mg SC daily / bd)
  - If pain remains refractory to treatment seek specialist advice

Prognosis measured in weeks to months prior to the onset of this problem
- Approaches that can provide benefit include exercise, massage and transcutaneous electric nerve stimulation (TENS)
- Analgesia:
  - Opioid analgesia (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
  - Paracetamol (1g PO qid)
- Antineuropathic agents
  - Tricyclic antidepressants (amitriptyline 25-50mg PO nocte)
  - Tramadol (50mg PO bd)
  - Anticonvulsants eg. sodium valproate (200mg PO bd), gabapentin (300mg PO tds) or carbamazepene (100mg PO tds)
  - Lignocaine patch 5% to local area
- If refractory to pharmacological management, consider early referral for anaesthetic intervention if locally available
- Radiotherapy is useful in palliating malignant neuropathic pain that is due to a compression by tumour
NUTRITION

Nutritional deficiencies are common in women with gynaecological malignancies. They are frequently unrecognised and often poorly addressed. Early intervention is important to maintaining good quality of life. The causes are multifactorial and may include:

- Decreased intake
- Anorexia-cachexia syndrome
- Recurrent obstructions
- Malabsorption or short bowel syndromes
- Recurrent ascites
- Poor symptom control reducing oral intake and function
- Social factors, such as lack of support and inability to prepare meals, lack of education about good nutrition

Diagnosis
Made from a combination of:

History
- Screening for nutrition
Malnutrition Screening Tool (Ferguson et al 1999)

1. Have you lost weight recently without trying?
   - No (go to question 3)
   - Unsure (go to question 3)
   - Yes (go to question 2)

2. How much weight (kg) have you lost?
   - 0.5 -5.0
   - >5.0 – 10.0
   - >10.0 – 15.0
   - >15.0
   - Unsure

3. Have you been eating poorly because of a decreased appetite?
   - No
   - Yes

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤1</td>
<td>- not at risk of malnutrition</td>
</tr>
<tr>
<td>≥2</td>
<td>- at risk of malnutrition</td>
</tr>
</tbody>
</table>
It is important to evaluate the cause of the malnutrition and its reversibility:

- Use a validated assessment tool eg. the Patient Generated Subjective Global Assessment of Nutritional Status (PG-SGA)
- Make a subjective assessment incorporating the following parameters:
  - Weight loss
  - Food intake
  - Presence of ascites
  - Symptoms that would reduce intake (eg. mouth sores, swallowing difficulties, vomiting, depression)
  - ECOG status
  - Disease stage
- Assess for clinical signs and symptoms of specific vitamin, mineral or protein deficiencies

**Examination Findings**

- **General appearance:**
  - Evidence of anaemia
  - Cachexia
  - Dehydration
  - Fever
  - Abdominal distention
  - Weakness
  - Confusion

- **Mouth:**
  - Evidence of vitamin / mineral deficiencies: evidence of tongue atrophy (suggestive of vitamin B12, folate or iron deficiency), angular stomatitis (iron deficiency), altered taste with zinc deficiency
  - Evidence of mouth changes which would reduce oral intake: eg. xerostomia, mucositis / stomatitis, infections (especially fungal)
  - Dry mouth secondary to dehydration

- **Skin:**
  - Evidence of pressure area
  - Poor wound healing
  - Rashes
  - Bruising
  - Itch

- Evidence of oedema secondary to hypoalbuminaemia, ascites

**Investigations**

- If appropriate according to specific clinical situation: blood tests including FBC, LFT, albumin, calcium, magnesium, phosphate, B12, Folate, Thyroid function, BSL, Serum lipids, Fe studies, Zn, Vit D
- Other investigations (See SECTION 2: BOWEL OBSTRUCTION)
Treatment Options

Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort

Prognosis measured in weeks to months prior to the onset of this problem
- Consultation with dietitian is imperative for dietary advice
- Interventions to improve nutritional status are justified in all patients. A variety of supplements are available which meet a range of different needs. Specialist advice is required from a dietitian to ensure the most appropriate supplement is prescribed.
- Consider vitamin and mineral supplements in a low burdensome form for reversible vitamin or mineral deficiencies eg. iron, folate and B12 deficiency
- Low residue diet for recurrent bowel obstruction
- Small frequent meals that are pleasing to the eye (small meals on large plates are more appetising than small meals on small plates which make portions look bigger)
- Favourite food
- Adjusting consistency of meals depending on need
- Adequate mouth care
- Exercise
- Dietary changes for managing anorexia-cachexia syndrome
- Impeccable symptom control, in particular nausea, vomiting, pain, mucositis, diarrhoea (See RELEVANT SECTIONS)
- Appetite stimulants (See SECTION 1: ANOREXIA and WEIGHT LOSS)
- Enteral artificial feeding if appropriate
- Parenteral feeding (TPN) rarely prescribed (requires specialist involvement in decision making)
- Hydration and electrolyte replacement
PERITONITIS

Peritonitis is defined as inflammation of the serosal membrane that lines the abdominal cavity and the organs contained therein. It is caused by introduction of an infection into the otherwise sterile peritoneal environment through:
• Perforation of the bowel
• Introduction of irritating material such as bile, gastric acid

When there is extensive contamination of the peritoneum, peritonitis occurs or if the contamination is localised, a peritoneal abscess may form.

Causes of peritonitis in gynaecological malignancies:
• Bowel obstruction
• Ischaemic bowel
• Incarcerated hernia
• Post-treatment (surgery, radiotherapy)
• Perforated peptic ulcer secondary to corticosteroids, NSAIDs
• Volvulus
• Pelvic abscess (ruptured cyst, post-surgical complication)
• Intraperitoneal ports

Diagnosis
Made from a combination of:

History
• Abdominal pain:
  o Initially dull (visceral peritoneum)
  o Later, more severe and constant (parietal peritoneum)
• Nausea, vomiting, fevers and confusion often accompany the pain

Examination Findings
• Often extremely unwell and distressed
• Febrile or if sepsis is severe, hypothermic
• Tachycardic and hypotensive
• Tender on abdominal palpation; this may be associated with guarding and rigidity, which will be most marked overlying site of pathology
• Often loath to move as this will exacerbate the pain of peritoneal irritation. It is however, possible for these signs to be masked if the patient has been on corticosteroids
• Bowel sounds are usually absent
• Rectal examination may be extremely painful

Investigations
• FBC and coagulation studies, EUC, LFT, amylase, lipase
• Blood cultures
• Erect and supine plain x-ray of the chest and abdomen
• CT scan of the chest, abdomen and pelvis
Treatment options

Prognosis measured in hours to days prior to the onset of this problem

- Pain control (via parenteral route of administration):
  - Opioids (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
  - Paracetamol (500mg PR qid)
  - NSAIDs eg. ketorolac (10mg SC tds) or dexamethasone (4-8mg SC daily) as inflammatory pain may be severe
  - Antispasmodics may be needed eg. hyoscine butylbromide (20mg SC qid)

- Nausea and vomiting:
  - Haloperidol (0.5-1mg SC bd)
  - Metoclopramide (10mg SC qid)

- Delirium (See SECTION 2: DELIRIUM)

Prognosis measured in weeks to months prior to the onset of this problem

- Fluid resuscitation
- IV antibiotics
  - Initially empiric therapy (gram negative anaerobes)
  - Later guided by blood cultures
- Surgery
- Nutrition:
  - Enteral
  - Total parenteral nutrition
- Pain control is imperative. Consult acute pain service for patient-controlled analgesia
PLEURAL EFFUSION

Diagnosis
Made from a combination of:

History
- Increasing dyspnoea often insidious
- May also be associated with cough and chest pain
- May be asymptomatic

Examination Findings
- On side of effusion: reduced chest expansion on inspiration, stony dullness to percussion, reduced breath sounds, reduced vocal and tactile resonance. Often bronchial breath sounds superiorly
- Large effusions may cause mediastinal shift

Investigations
- Chest x-ray with a water dense shadow with a concave upwards upper border
- Ultrasound or CT chest if required to distinguish effusion from solid tumour
- Cytological and biochemical confirmation of malignancy at initial presentation of the effusion is recommended (exudate protein > 30 g/l)

Treatment Options

Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations (See SECTION 3: CARE OF THE DYING PATIENT)
- Attention to symptom control and patient comfort

Prognosis measured in weeks to months prior to the onset of this problem
- Observation is recommended if the patient is asymptomatic
- Pleural aspiration or insertion of an indwelling chest drain and removal following lung re-expansion is recommended if it renders a patient non oxygen dependent, or felt to improve the level of dyspnoea despite ongoing oxygen requirements
- Large pleural effusions should be drained in a controlled fashion to reduce the risk of re-expansion pulmonary oedema. 1-1.5L in total should be considered or slowed to 500 ml / hour and aspiration discontinued if the patient experiences chest discomfort, persistent cough or vaso-vagal symptoms
- Small bore tubes (10 –14 F) should be considered initially for the drainage of malignant effusions
- Advice should be sought where possible from the thoracic malignancy multi-disciplinary team (MDT) if a pleurodesis is contemplated electively in the weeks following pleural aspiration as a small volume of residual effusion is required in order for this to be performed
- Repeated pleural aspirations should be avoided given the risk of iatrogenic pneumothorax, pleural fluid loculation or empyema
Pleurodesis

- Where possible, this should be performed or advised by the thoracic oncology MDT well in advance of the procedure. Video-assisted thoracic surgery (VATS) may allow treatment of loculated effusions. The most important requirement for a successful pleurodesis is satisfactory apposition of the parietal and visceral pleura, confirmed radiologically.

- The most common and successful sclerosants are talc or bleomycin. Large bore intercostal drains are recommended for talc slurry while smaller bore tubes may be used with bleomycin. The person inserting the bleomycin must be familiar with cytotoxic administration and handling.

- Pleurodesis is an uncomfortable procedure commonly associated with anxiety. The patient should receive premedication with lignocaine administered intrapleurally just prior to the sclerosant. Adequate strong analgesia must be administered. An anxiolytic agent should also be available.

- Continuous pulse oximetry monitoring should be performed

- Resuscitation equipment should be available

- The tube should be clamped for 1 hour to prevent back drainage of the sclerosant. Patient rotation is required with talc slurry. Provided the subsequent pleural drainage < 250ml / day the drain may be removed after 12 - 72 hours. Common side effects post pleurodesis include pain and fever (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)

- A pleurodesis is deemed successful if no further pleural effusions develop on the ipsilateral side

- Complicated loculated effusions or failed pleurodeses require further discussion with the thoracic oncology service
PSOAS MUSCLE SYNDROME

Psoas muscle syndrome has been reported in a variety of solid cancers and haematological malignancies, with the majority of reports arising from patients with gynaecological and colonic cancers.

It occurs when there is malignant infiltration of the psoas muscle, either due to a metastatic deposit or local extension from para-aortic lymph nodes. This in turn may lead to a complex pain state that includes:

- Neuropathic pain as the lumbosacral plexus is embedded in the psoas muscle
- Somatic pain
- Painful fixed flexion of the same hip, probably due to muscle spasm

**Diagnosis**

Made from a combination of:

**History**
- Patients will present with unilateral neuropathic pain of the:
  - Lower back
  - Anterolateral thigh
  - Hip
  - Pelvis
- This often radiates to the lower abdomen and groin
- Fixed flexion deformity of the hip

**Examination Findings**
- A sensory deficit may develop over the lateral aspect of the affected thigh
- The psoas test will be positive where attempted extension of the affected hip will lead to severe pain

**Investigations**
- CT or MRI scanning

**Treatment options**

**Prognosis measured in hours to days prior to the onset of this problem**
- This is a clinical diagnosis
- No investigations are indicated
- Analgesia, which at this stage of life should be administered via the parenteral route:
  - Opioids (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
  - Anti-neuropathic agents eg. clonazepam (0.5mg SC / SL bd)
  - Muscle relaxants eg. clonazepam (0.5mg SC / SL bd)
  - Anti-inflammatory agents eg. dexamethasone (4mg SC daily) or ketorolac (10mg SC tds)

IF PAIN INADEQUATELY CONTROLLED SEEK SPECIALIST ADVICE
**Prognosis measured in weeks to months prior to the onset of this problem**

- Where a tumour is likely to respond to chemotherapy or radiotherapy, immediate treatment should be offered
- Less sensitive tumours require a surgical opinion
- Analgesia via the oral route:
  - Opioids (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
  - Paracetamol (1gm PO qid)
  - Neuropathic agents – commence amitriptyline (25 mg PO nocte), sodium valproate (200mg PO bd) or gabapentin (300mg PO tds)
  - It is often necessary to add an anti-inflammatory eg. naproxen (1g PO daily) simultaneously. A gastro-protective agent should be prescribed eg. ranitidine (150mg PO bd) or a PPI eg. omeprazole (20mg PO daily)
  - Muscle relaxants – consider diazepam (2mg PO bd)

**IF PAIN INADEQUATELY CONTROLLED SEEK SPECIALIST ADVICE**
SPINAL CORD COMPRESSION

Gynaecological malignancies associated with spinal cord compressions include ovarian, cervical and uterine tumours.

Although spinal cord compressions are relatively uncommon complications of these tumours, undiagnosed and untreated cord compressions have profound negative impacts on patients’ lives. Spinal cord compressions must therefore be treated as medical emergencies.

Causes may be related to epidural metastases, bone metastases and/or direct invasion of a retroperitoneal tumour.

Diagnosis
Made from a combination of:

History
- Back pain is the most common presenting symptom
- Pain is likely to have been present for a median of 8 weeks
- Pain is often worse after lying down due to engorgement of the epidural venous plexus
- Initially pain may be localised but often becomes radicular with time
- The next most common problems experienced by patients are neurological deficits, either motor, sensory or autonomic

Examination Findings
- Tenderness along the bony spine
- A sensory level which should be sought
- Lesions occurring above L1:
  - Initially present with a flaccid paralysis but with an upgoing plantar reflex
  - Later, this will usually become a spastic paralysis (increased tone, clonus and increased reflexes) consistent with an upper motor neurone lesion below and at the level of the cord lesion
  - Assessment of bladder and bowel function (percuss for a bladder level, PR for anal tone)
- A cauda equina lesion:
  - Lower motor neurone signs
  - Flaccid leg weakness
  - Reflexes are diminished or absent
  - Examine for a loss of saddle sensation, decreased anal tone and percuss for a bladder level
- Malignant cord compressions may be multilevel in which case the physical examination may display mixed signs
**Investigations**
- MRI scan
- Bone scan or CT scan for patients who cannot tolerate MRI, which may provide a clue as to the level of bone disease

**Treatment options**

**Prognosis measured in hours to days prior to the onset of this problem**
- This is a clinical diagnosis
- No further investigations are indicated
- Analgesia:
  - Dexamethasone (4mg SC bd-qid)
  - Opioids (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT)
  - Paracetamol (500mg PR qid)
  - Neuropathic agents may be necessary (See SECTION 2: NEUROPATHIC PAIN)
- Pressure area care
- Preservation of continence:
  - IDC
  - Bowel regime

**Prognosis measured in weeks to months prior to the onset of this problem**
This is a palliative care emergency which requires prompt response to ensure preservation of function. Simultaneous attention to the following is imperative

<table>
<thead>
<tr>
<th>Action</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservation of function:</td>
<td>The optimal doses of dexamethasone are still not clear, although higher rather than lower doses seem to be optimal Prompt treatment is optimal to provide the best chance of preserving function. If locally available, a simultaneous review by surgery and radiotherapy is indicated</td>
</tr>
<tr>
<td>Dexamethasone (16mg PO stat followed by 16 mg daily in divided doses)</td>
<td></td>
</tr>
<tr>
<td>Urgent radiotherapy and neurosurgical consult</td>
<td></td>
</tr>
</tbody>
</table>

Analgesia:
See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT

Continence:
- IDC
- Bowel routine

Depending upon the level of obstruction, continence may be impaired. A bowel regime and IDC may be needed. It is important not to neglect this issue
THROMBOEMBOLIC EVENT

- Deep venous thrombosis (DVT) can produce painful swelling of lower limbs and less commonly, an upper limb
- Venous thrombosis is commonly seen in patients with disseminated malignancies
- Extension and subsequent pulmonary embolisation of these clots can occur if the clotting is present above the popliteal vein
- Acute pulmonary embolus (PE) is associated with high mortality with the majority of PE diagnosed at post-mortem
- Approximately 10% of PE are fatal within one hour of onset, with a 15% overall three month mortality
- Shocked patients have an increased mortality
- Chronic risk factors:
  - Genetic factors (eg. Factor V Leiden, Protein C Deficiency, Protein S Deficiency)
  - Acquired or inherited factors (High plasma homocysteine, high plasma coagulation factor VIII, IX, XI)
  - Acquired factors (age, obesity, cancer, leg paralysis, oestrogen therapy, major medical illness, previous venous thromboembolism)
- Acute risk factors:
  - Hospitalisation
  - Lower limb or pelvic fractures
  - Immobilisation
  - Travel
  - Oestrogen therapy
  - Intravascular device (eg. venous catheter)

Diagnosis
Made from a combination of:

History
- DVT:
  - Initially, discomfort, tightness and redness in lower extremities
  - Unilateral swelling
- PE:
  - Acute onset of dyspnoea
  - Pleuritic-type chest pain
  - Cough
  - Haemoptysis
  - Palpitations
  - Diaphoresis
  - Syncope
  - Shock or sudden unexplained death
Examination Findings

- **DVT:**
  - Tenderness
  - Redness
  - Vascular compromise
  - Venous gangrene
- **PE:**
  - Distressed
  - Breathless
  - Hypoxic
  - Tachycardic
  - Audible pleural rub
  - Pleural effusion

Investigations

- Lower or upper limb venous doppler
- Chest x-ray
- Pulse oximetry
- Arterial blood gases
- ECG
- V/Q scan
- CT pulmonary angiography
- FBC and coagulation studies (including D-dimer)

Treatment Options

**Prognosis measured in hours to days prior to the onset of this problem**

- This is a symptom control problem
- Further investigations are not indicated
- Suspected DVT:
  - Analgesia
  - Elevation of the leg
  - Support stocking
- Suspected PE:
  - All patients should receive oxygen (increased alveolar oxygen may help to promote pulmonary vascular dilatation)
  - Morphine SC is useful for pain and dyspnoea
  - Anti-inflammatory if there is pleuritic pain eg. ketorolac (10mg SC tds)
  - If distressed, ensure ready access to sedation (midazolam 2.5 to 5mg SC PRN)
Prognosis measured in weeks to months prior to the onset of this problem

- Symptom control
- Investigations
- Treatment:

<table>
<thead>
<tr>
<th>Treatments</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anticoagulation:</strong></td>
<td></td>
</tr>
<tr>
<td>• Low molecular weight heparin (eg. enoxaparin (1mg/kg SC bd or 1.5mg/kg daily)</td>
<td></td>
</tr>
<tr>
<td>• Warfarin</td>
<td></td>
</tr>
<tr>
<td>Inferior vena caval filter</td>
<td>Check renal function before commencing; if GFR impaired seek specialist haematology advice</td>
</tr>
<tr>
<td></td>
<td>The duration of treatment is not clear</td>
</tr>
<tr>
<td></td>
<td>Warfarin is probably contraindicated in people with progressive disease or if at risk of bleeding</td>
</tr>
<tr>
<td></td>
<td>Contraindications to anticoagulation in the presence of thromboembolism may prompt consideration of a filter</td>
</tr>
</tbody>
</table>
URETERIC OBSTRUCTION

Pelvic malignancy represents the second most common cause of extrinsic obstructive uropathy in women. Squamous cancer of the cervix most frequently involves the urinary tract and ureteric obstruction is the most common cause of death amongst these women, accounting for at least 50% of cases. Ureteric obstruction usually occurs at the vesico-ureteric junction due to external compression from tumour bulk or nodal metastases.

Diagnosis
Made from a combination of:

History
Patients may present with:
- No symptoms but dilated kidney and ureter found on imaging
- Unilateral / bilateral flank and lower abdominal pain
- Nausea associated with uraemia
- Oliguria (low urine output) or anuria (no urinary output)
- Decreased consciousness due to kidney failure

Examination findings
- Commonly renal angle tenderness

Investigations
- Electrolyte imbalance, elevated urea and creatinine (beware pre-existing renal impairment and acute renal impairment due to poor fluid intake or other causes)
- Renal ultrasound will demonstrate dilated calyces and proximal ureter, thinning of the renal cortex may indicate long-standing obstruction (or another process such as diabetic nephropathy)
- Non-contrast CT scan may show the approximate level of the obstruction but definition is limited (contrast is usually best avoided due to the risk of worsening kidney failure)
- A retrograde pyelogram (passing radio-opaque dye from the bladder towards the kidney via a cystoscope in the operating theatre). This is a relatively simple procedure which also may allow the insertion of a stent to relieve the obstruction

Treatment Options
Prognosis measured in hours to days prior to the onset of this problem
- This is a clinical diagnosis
- No further investigations
- Attention to symptom control and patient comfort (See SECTION 3: CARE OF THE DYING PATIENT)
- Watch for:
  - Seizures
  - Myoclonic jerks
Prognosis measured in weeks to months prior to the onset of this problem

Decisions regarding whether the obstruction should be reversed in recurrent or treatment refractory disease are complex and should be made in consultation with the treating gynaecological oncology team

- Hyperkalaemia should be managed until interventions to reverse the obstruction occur
- Cystoscopy with retrograde ureteric stenting requires:
  - Expert general anaesthetic support
  - Expert urological input and allows the performance of a retrograde pyelogram to delineate the site of ureteric obstruction (e.g., entry to the bladder vs pelvic sidewall)
  - Severe obstructions may preclude passage of a stent
- Antegrade Stenting:
  - Performed by an interventional radiologist usually some days after placement of a percutaneous nephrostomy (to allow resolution of the ureteric dilatation)
- Percutaneous Nephrostomy:
  - Performed by an interventional radiologist in a major centre, using ultrasound guidance +/- x-ray fluoroscopy
  - Catheter is placed through the skin into the kidney’s collecting system via a needle and introducer, with collection of urine into a bag
  - Allows rapid correction of the kidney outflow obstruction
  - May be used as temporary measure, pending placement of an internalised stent or urgent palliative radiotherapy
  - Risk of trauma, introduction of infection, pain at insertion site from the tube, difficulties for patients lying on their side
  - Requires care not to dislodge the stent after insertion, this does cause difficulties with nursing care
- Acute tubular necrosis / high output renal failure:
  - Renal tubular damage may result in unregulated loss of water and electrolytes which necessitates close monitoring and correction until normal kidney function returns
- Ureretic stent replacement:
  - Stents should be replaced every 3 months, depending on the clinical circumstances
- Analgesia only:
  - A completely obstructed kidney will undergo hypertrophy and involution, with resolution of pain
  - Bilateral ureteric obstruction results in rapidly progressive uraemia (typically over 3-10 days) with reduction of consciousness and death
  - Can cause rapid accumulation of morphine, oxycodone and hydromorphone parent drug and metabolites, leading to encephalopathy and agitation, so doses need to be carefully titrated or given less frequently
- Dexamethasone
  - Ureteric obstruction may be caused by tumour oedema, and dexamethasone (4mg PO daily) can partially reduce the obstruction. This effect may last several months
UROLOGICAL INFECTION

Urinary tract infections may occur at any point along the urinary tract. Symptoms sometimes provide a clue to the location. There are three main causes of UTIs:
- Ascending infections
- Haematogenous spread
- Urogenital spread of infection

Diagnosis
Made from a combination of:

History
- Patients with urethritis may have dysuria, frequency and hesitancy. Some patients may have a fever
- Patients with cystitis may also have dysuria, haematuria, suprapubic or lower back pain. It is uncommon for cystitis to be accompanied by fevers
- Patients with pyelonephritis tend to have fevers, flank pain, and nausea. Haematuria may occur, but is more likely if there is a problem such as nephrolithiasis, renal infarction or papillary infarct

Examination Findings
- On examination, patients with cystitis may have mild suprapubic tenderness
- Patients with pyelonephritis may be very unwell with fevers and renal angle tenderness. A palpable mass may suggest a perinephric abscess

Investigations
- Urine dipstick for nitrates, leukocytes, pH
- Mid stream urine for microscopy and culture if possible
- Consider urinary catheterisation (to remain in situ for limited time if severe symptoms) to obtain catheter urine for microscopy and culture
- Serum electrolytes and blood culture if systemically unwell

Treatment Options
Prognosis measured in hours to days prior to the onset of this problem
- Despite short life expectancy, it is still very important to manage symptoms appropriately
- This includes ensuring acute urinary retention has not complicated an infection
- Analgesia needs to be prescribed according to the pain severity
- A urine dipstick is non-invasive and may support the diagnosis of an infection
- Intramuscular administration of antibiotics may help control fevers and discomfort
Prognosis measured in weeks to months prior to the onset of this problem

- Attention must be paid to symptom control (pain, nausea, vomiting, fevers)
- An MSU must be collected and if febrile, blood cultures
- Assess hydration and commence antibiotics
- Treat urinary tract infection – initially with trimethoprim (300mg PO nocte) or cephalexin (250mg PO bd) pending results of urine culture
VISCERAL PAIN

Visceral pain occurs when nociceptors are activated:

- By inflammation of the mucosa of hollow organs
- Stretching of organs due to obstruction or direct invasion
- Ischaemia of the hollow organs

It is a common problem for patients with abdominal and pelvic cancers. It may occur early or late in the disease. Visceral pain is typically diffuse and may be poorly localised. Referred pain follows more typical patterns.

**Diagnosis**
Made from a combination of:

**History**

- Visceral pain:
  - Dull
  - Squeezing
  - Colicky
  - Sharp
  - Intermittent or continuous
- Onset of pain:
  - Poorly localised
  - Most often experienced in the upper abdomen
- Later:
  - Pain becomes referred
  - Experienced at sites of the body wall whose innervations enter the spinal cord at the same level as the innervation of the visceral organ involved
- Some patients may describe extremely intense visceral pain when exposed to situations that may usually only be expected to cause some discomfort e.g. normal bladder distention when the bladder is inflamed due to radiotherapy. This may indicate visceral hyperalgesia
- It is important to remember that women with a past history of chronic pelvic pain may describe significantly more pain during investigations or management of pelvic gynaecological malignancies. This is due to the phenomenon of viscerovisceral hyperalgesia
- Regardless of whether this is primary visceral or referred visceral pain, these patients often have associated nausea, vomiting, fatigue and diaphoresis

**Examination Findings**

- May be unremarkable or generalised abdominal tenderness
- Examine for organomegaly

**Investigations**

- Abdominal / pelvic ultrasound
- CT scan
Treatment options

Prognosis measured in hours to days prior to the onset of this problem
- No investigations are indicated
- The goal of management is pain control and adherence to the WHO ladder (See SECTION 1: PRINCIPLES OF PAIN MANAGEMENT) is recommended:
  - Parenteral opioids
  - Paracetamol (500mg PR qid PR or 1g IV qid)
  - Corticosteroids for capsule stretching, inflammation eg. dexamethasone (4-8mg SC daily)
  - Anticholinergics for colicky gut pain, bladder spasm eg. hyoscine butylbromide (20mg SC qid)
  - Octreotide to decrease gastric secretions, reducing abdominal distention and colicky pain (100mcg SC bd)
  - NSAIDS for liver capsule pain, renal colic (indomethacin 100mg PR daily), ketorolac 10mg SC tds)

Prognosis measured in weeks to months prior to the onset of this problem
- Attention must be paid to symptom control
- If bowel ischaemia is the likely cause of pain, resection of the affected segment should be considered
- Bowel obstruction should prompt consideration of resection, de-functioning colostomy or stenting
- Severe visceral pain may require anaesthetic block of the sympathetic ganglia eg. coeliac plexus block
SECTION 3

CARE OF THE DYING PATIENT
DIAGNOSING DYING

Although it is often difficult to accurately articulate prognosis, in general the following signs are associated with impending death suggesting time to death is measured in days to hours. The patient:

- Becomes fully bed bound
- Has fluctuating level of consciousness
- Has reduced oral intake of food, medicines and drink often with increased difficulty swallowing
- There are no obvious reversible causes (urinary tract infection, metabolic abnormalities, side-effects of medications) OR decision made in consultation with patient’s family that it is no longer appropriate to investigate for or treat potentially reversible contributing factors to the person’s deterioration in clinical condition (eg. because burden of treatments / investigations outweighs potential benefits)

Changes suggesting death is imminent include:

- Noisy respirations or a change in respiratory movements; increased bronchial secretions
- Changes in peripheral circulation
- Decreased urine output
- Delirium in some cases; sometimes associated with agitation

During this time comfort and dignity for the patient and attention to communication with family or carers becomes the focus of care:

- Care should be taken to understand the family’s wishes and cultural setting. Frequently decision making is family centred rather than focusing on individual autonomy and attention to communication can help avoid conflict during this emotionally demanding time
- Often the dying phase is predictable due to progressive onset of weakness, social withdrawal and physical deterioration. Less frequently death may occur as a result of sudden event or deterioration (pulmonary embolism, haemorrhage, bowel perforation). Discussion of anticipated acute event demands careful attention to communication to avoid creating unnecessary fear
- Death is not always accompanied by an increase in physical pain and or other symptoms and patients may be appropriately reassured that most physical symptoms can be adequately managed to ensure comfort as death approaches
- Emotional suffering is common as a patient and family prepare to say their goodbyes; social work, psychology and pastoral care may provide added support where available
CARE OF THE DYING PATIENT

Ideally, communication between patient, caregivers and the treating team will have been maintained throughout the disease trajectory. As it becomes clear that the goals of care are comfort and dignity rather than cure or long term disease control, it is important for the team to initiate discussions with patient and caregivers about the expectations of the final stages of life. Such discussions should incorporate information about the likely progression of the disease, symptom management and patient and family preferences about ongoing care arrangements, including the preferred place of death. The practicalities involved in putting in place complex support services to optimally manage patient and family, requires time and advance planning. Early consideration of end of life planning is essential. If the patient is unconscious or confused / delirious in the later stages, family members are likely to feel clearer in their decision-making if these difficult conversations have already been addressed.

CARE IN THE LAST 24-72 HRS

- Ensure all health professionals and family understand the goals of care
- Ensure care orders and limits of therapy (eg. not for CPR but for intravenous antibiotics) are accurately documented and communicated to team and family
- Ensure appropriate communication of prognosis and limits of therapy with family and patient
- Discuss preferred location of care and possibility of death at home. Most medical care at the end of life can equally be provided at home, however carers and families vary enormously in resources (largely physical resources for “hands on” care) and patients / caregivers vary in their preferences for place of death
- If a patient is dying unavoidably in an acute area eg. Emergency Department or ICU, attempt to maximise patient comfort by refraining from unnecessary monitoring, investigation or treatments
- Regardless of setting, aim for integrated care across the following domains:
  - Physical
  - Psychological
  - Social and Cultural
  - Spiritual / Religious / Existential

Physical Domain End of Life Care

- The woman’s comfort is paramount. Care should focus on pain and symptom assessment, pressure care, mouth care
- Vital signs and investigations (eg. blood tests) and monitoring of vital signs should be ceased unless the result will affect the patient’s management
- Relax bowel care, enemas are usually avoidable unless low faecal impaction is causing distress
Assess continence and consider pads or indwelling catheter (IDC)

Cease medications that are not contributing to comfort (eg. statins, iron tablets, warfarin), or are not possible to administer safely if swallow impaired (consider ceasing all oral meds in that case)

Convert pain and symptom medication to subcutaneous route

Ensure orders for medications to manage specific symptoms

Ensure medications written up for anticipated symptoms (See table: Therapeutics for Symptom Management in Last 24-72 Hours)

Cease IV therapies / hydration if not contributing to comfort (discuss rationale with family, explain in terms of patient comfort rather than futility)

Explain decreased oral intake is expected and decreased nutritional requirement (check if family feel patient is hungry; discuss as appropriate)

**Psychological Domain**

- Patient and her family / carers are appropriate focus of care
- Identify issues and refer for assistance, eg. transport, childcare, child welfare, financial, funeral
- Emotional support - listening helps the patient to verbalise, and family to address anticipatory grief and loss of assumed future
- Orientate family toward caring activities and away from tests and monitoring – eg. involve them in managing thirst with mouth moistening, explain that bedside assessment is more effective measure of comfort than monitoring and observation. Validate their observations of pain or discomfort
- Encourage verbal and tactile communication
- Avoid over-stimulation (excessive noise or visitors), as this can contribute to delirium
- Explain comfort focus
- Be culturally sensitive

**Spiritual / Existential Care**

- Assess coping, identify supports, provide care, refer to specialist service
- Listening is important, refrain from providing solutions - just listen
- Normalise and encourage expression of strong emotion
- Consider asking about beliefs, hopes, fears. Use general open questions, eg:
  - Is there anything you’d like to ask me?
  - What are you proud of in your life?
  - Are you afraid of anything?
- Answers may provide useful insights for team
- The search for meaning is personal; the focus is not on content but process
- Make referral to the patient’s religious / spiritual support person if desired by the patient
Therapeutics for Symptom Management in Last 24-72 Hours

Symptoms that occur at the end of life most commonly include pain, dyspnoea, noisy respirations, agitation and delirium. Delirium may present as restlessness, agitation or confusion. Although death is usually anticipated and quiet, sometimes acute and catastrophic events may precipitate death. Both these scenarios need to be planned for when people are entering the final days to hours of life. Although pharmacological interventions may not be necessary, the following table offers a guide for clinicians when prescribing in the terminal phase.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Opioid naïve:</th>
<th>Already on an opioid:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>• Morphine 1-2.5mg SC 4&lt;sup&gt;th&lt;/sup&gt; hourly</td>
<td>• Convert to parenteral route of administration</td>
</tr>
<tr>
<td></td>
<td>• Morphine 2.5mg SC 4&lt;sup&gt;th&lt;/sup&gt; hourly</td>
<td>• Convert to parenteral route of administration</td>
</tr>
<tr>
<td></td>
<td>• If very anxious, add lorazepam (0.5 to 2 mg SL) or clonazepam (0.5mg bd SL or SC) or midazolam (2.5 to 5.0mg SC prn)</td>
<td></td>
</tr>
<tr>
<td>Breathlessness</td>
<td>• Morphine 2.5mg SC 4&lt;sup&gt;th&lt;/sup&gt; hourly</td>
<td>• Increase dose by 30% and titrate to effect</td>
</tr>
<tr>
<td>Delirium / Terminal Restlessness</td>
<td>• Haloperidol 0.5-1.0mg SC every 2 hours until settled. Continue low regular dose</td>
<td>• Olanzepine wafer 5.0mg nocte with 5.0mg SL PRN</td>
</tr>
<tr>
<td></td>
<td>• Chlorpromazine 25-50mg IMI stat; this may be repeated in 8-12 hours.</td>
<td>• If very agitated, at risk of harm to self or others, or withdrawing from a substance, add a benzodiazepine</td>
</tr>
<tr>
<td></td>
<td>• At the end of life, consider midazolam 2.5-5.0mg SC PRN</td>
<td></td>
</tr>
<tr>
<td>Terminal Secretions</td>
<td>• Hyoscine hydrobromide 0.4mg SC and repeat as necessary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Glycopyrollate 0.4mg SC and repeat as necessary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Atropine 0.4mg SC and repeat as necessary</td>
<td></td>
</tr>
<tr>
<td>Nausea and Vomiting</td>
<td>• Metoclopramide 10mg SC 6&lt;sup&gt;th&lt;/sup&gt; hourly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Haloperidol 0.5-1.0mg SC 12&lt;sup&gt;th&lt;/sup&gt; hourly</td>
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<tr>
<td></td>
<td>• Dexamethasone 4mg SC daily</td>
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</tr>
</tbody>
</table>
END OF LIFE CONVERSATIONS

- Prognostication is difficult:
  - Patients and carers often expect accurate prediction
  - Physicians tend to overestimate survival
- Waiting for certainty about prognosis before discussing care planning may forestall the opportunity of preparing for death and bereavement for a patient and her family
- Ongoing discussions around care planning over the course of an illness from diagnosis towards death will help a patient to make appropriate decisions and make their wishes known regarding treatments and location of care:
  - Communication about the possibility of death may prompt a patient to obtain the information they require about what to expect over time

Initiate discussions about the range of issues to be discussed as the end of life approaches; involve caregivers where possible.

Ensure all caregivers, including children are given opportunities to participate in end of life conversations and caregiving tasks, appropriate to their age and relationship with the dying patient. Family / caregivers’ needs for information may differ from the patient especially as the person’s illness progresses. Separate, as well as joint discussions with the patient and their family, may be helpful in order to meet these differing information needs (provided the patient gives consent if competent).

Issues to be considered:
- Enduring Power of Attorney
- Guardianship if required (where the patient is cognitively impaired or has no next of kin)
- Making of will
- Provision for dependant children / adults (eg. adult child with developmental delay)
- Discussion about access to and use of lump sums of money; from employment termination, superannuation, insurance policies, compensation
- Planning of funeral; burial / cremation, location, music, eulogies
- Creation of “memories” for surviving family; photos, cards, letters, recorded messages (audio and/or video)
- Ask about spiritual or religious concerns and make appropriate referral (eg. to pastoral care) where necessary
- If in home setting ensure family has after hours contact details of GP who will be available even over a weekend to certify death

When discussing end of life issues with patients and/or their family / caregivers consider the recommendations conveyed by the acronym PREPARED*:
<table>
<thead>
<tr>
<th>Prepare for the discussion, where possible:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Confirm pathological diagnosis and investigation results before initiating discussion.</td>
</tr>
<tr>
<td>• Try to ensure privacy and uninterrupted time for discussion.</td>
</tr>
<tr>
<td>• Negotiate who should be present during the discussion.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relate to the person:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Develop rapport.</td>
</tr>
<tr>
<td>• Show empathy, care and compassion during the entire consultation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elicit patient and caregiver preferences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify the reason for this consultation and elicit the patient's expectations.</td>
</tr>
<tr>
<td>• Clarify the patient's or caregiver's understanding of their situation, and establish how much detail and what they want to know.</td>
</tr>
<tr>
<td>• Consider cultural and contextual factors influencing information preferences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provide information tailored to the individual needs of both patients and their families:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offer to discuss what to expect, in a sensitive manner, giving the patient the option not to discuss it.</td>
</tr>
<tr>
<td>• Pace information to the patient's information preferences, understanding and circumstances.</td>
</tr>
<tr>
<td>• Use clear, jargon-free, understandable language.</td>
</tr>
<tr>
<td>• Explain the uncertainty, limitations and unreliability of prognostic and end-of-life information.</td>
</tr>
<tr>
<td>• Avoid being too exact with timeframes unless in the last few days.</td>
</tr>
<tr>
<td>• Consider the caregiver's distinct information needs, which may require a separate meeting with the caregiver (provided the patient, if mentally competent, gives consent).</td>
</tr>
<tr>
<td>• Try to ensure consistency of information and approach provided to different family members and the patient and from different clinical team members.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acknowledge emotions &amp; concerns:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Explore and acknowledge the patient's and caregiver's fears and concerns and their emotional reaction to the discussion.</td>
</tr>
<tr>
<td>• Respond to the patient's or caregiver's distress regarding the discussion, where applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(foster) Realistic hope (e.g. peaceful death, support):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Be honest without being blunt or giving more detailed information than desired by the patient.</td>
</tr>
<tr>
<td>• Do not give misleading or false information to try to positively influence a patient's hope.</td>
</tr>
<tr>
<td>• Reassure that support, treatments and resources are available to control pain and other symptoms, but avoid premature reassurance.</td>
</tr>
<tr>
<td>• Explore and facilitate realistic goals and wishes, and ways of coping on a day-to-day basis, where appropriate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Encourage questions and further discussions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encourage questions and information clarification; be prepared to repeat explanations.</td>
</tr>
<tr>
<td>• Check understanding of what has been discussed and if the information provided meets the patient's and caregiver's needs.</td>
</tr>
<tr>
<td>• Leave the door open for topics to be discussed again in the future.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Document:</th>
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</thead>
<tbody>
<tr>
<td>• Write a summary of what has been discussed in the medical record.</td>
</tr>
<tr>
<td>• Speak or write to other key health care providers involved in the patient's care. As a minimum, this should include the patient's general practitioner.</td>
</tr>
</tbody>
</table>

AFTER DEATH

Home Death
- Any doctor can pronounce that death has occurred and sign for release of the body.
  Certification of the death must be completed by a doctor
- GP should be contacted to certify
- If not available, is there a locum service?
- In some areas, non-medical staff can certify ‘life extinct’ – refer to local policy

Death Certificate
- Once GP has signed death certificate, Funeral Director is contacted
- Registration of the death certificate is organised by the Funeral Director
- Certified copies will be needed to deal with changes to some business affairs

Coroner
- If certification is not made after 48 hours, the matter becomes Coroner’s case
- Death which is regarded as suspicious, violent or sudden where the cause is unknown, or death where the person has not been attended by a medical practitioner in the previous three months are considered Coroner cases and an inquest concerning the death is investigated
- When a MO is not available to certify ‘life extinct’ and complete a death certificate, often community nurses / ambulance officers call the police. Once the police have been called, the body will be moved to the coroner’s morgue

Legal Matters
- Probate (proving that the will is valid) is not required where assets are modest
- Contact the Law Society for the latest requirements
- Once probate is settled, administration of the will (selling of assets and paying debts) follows
- Executor can then distribute remaining assets / monies according to the will

Banks and Financial Arrangements
- Monies from the deceased person’s personal account may be released for payment of funeral and related expenses
- Joint accounts (either to sign) may continue to be operated up to half the balance
- All other organisations (eg. Medicare, Centrelink, councils) and other accounts will need to be notified
BEREAVEMENT SUPPORT

The moment of death marks the transition from anticipatory grief to bereavement. Ongoing assessment and care of the surviving family members of a deceased woman is an essential component of psychosocial care. The primary sources of support for the bereaved are their family and friends, church, community networks and other social group memberships. Prior to the death of the woman it is important to ascertain the quality and strength of supports for the survivors. With the passage of time and adequate social support, most people will adjust to the death without the need for specialist psychosocial intervention; many will even be able to articulate positive life lessons that have emerged from the experience.

Take into account gender differences in dealing with grief; men are usually more stoic in their responses and are often less able to overtly express their grief. Respect cultural differences in grief and mourning; for example, indigenous people consider it disrespectful to mention the name of the deceased and to show images (photos, recordings) of them. Never make any assumptions about the cultural “rules or rituals” associated with death and grieving for a family from a particular cultural group, rather ask family members about their practices / preferences.

Acknowledgement of the death by the treating team is desirable; either by condolence letter or telephone call from the appropriate member of the team who has been identified by the family as the primary contact person or care coordinator. This may be the Social Worker, Psychologist, Clinical Nurse Consultant, Psycho-oncology Counsellor, Pastoral Care Worker, community Generalist or Palliative Care Nurse, Care Coordinator, Palliative Care Physician, GP or Oncologist. Such follow up, whether by phone or letter, should give the family information on how to access additional bereavement support should they be concerned about the adjustment of any of the survivors. Inform families about local services for bereavement counselling.

It is common for family members to return to the care facility (hospital ward, hospice or cancer care centre) to meet personally with those who supported their family member throughout the cancer illness. This is usually a helpful strategy in processing grief responses and facilitating adjustment. Opportunities which allow and normalise the overt expression of grief can be important in the recovery from bereavement.

The long-term impact of unresolved grief may have consequences for the ongoing psychological well-being of survivors for many years. A small, but significant, number of bereaved people will experience “complicated grief”, requiring referral for specialist bereavement counselling to optimise their recovery.
Complicated grief is characterised by intense distress which fails to resolve in a reasonable timeframe (6-12 months). Factors which are associated with persistent elevated grief responses, and may make the person at risk of complicated grief include:

- Social or geographic isolation
- Unemployment
- Sudden or unexpected death
- A sense of blame or guilt about the circumstances of the death
- Pre-existing history of depression or other psychological disorder
- History of past losses / deaths
- Illness, physical disability or frailty

The provision of specialist bereavement counselling for those experiencing complicated grief is usually beyond the ambit and responsibility of the psychosocial team members who are part of the gynaecological oncology multidisciplinary team. Similarly, the constant turnover of referrals to hospital and community-based palliative care teams mitigates against long-term contact with survivors who are struggling with complicated grief.

Bereavement counselling for this high need group of survivors should be provided by specialist services. The responsibility of the treating team is to monitor the progress and recovery of surviving family members, and to initiate timely referrals for at risk individuals. (See SECTION 4: RESOURCES)
SECTION 4

RESOURCES
FURTHER READING

GENERAL
The following texts contain many comprehensive chapters on many aspects of this resource and would be useful for further reading.


SECTION 1

PSYCHOSOCIAL DISTRESS


www.nccn/professionals/physician_gls/PDF/distress.pdf

MANAGING PSYCHOSOCIAL DISTRESS

American Psychosocial Oncology Society (APOS), www.apos-society.org

Association for Death Education and Counselling, www.adec.org

International Psycho-Oncology Society (IPOS), www.ipos-society.org


**PAIN**


**RESPIRATORY**

**Dyspnoea**


**Cough**


**GASTROINTESTINAL**

**Anorexia and Weight Loss**


**Nausea and Vomiting**


**Constipation**


**UROLOGICAL**

**Anuria / Oliguria**

Dysuria

OEDEMA

www.nbocc.org/bestpractice/resources/MSLG_reviewofresearchevid.pdf

FATIGUE

www.nccn.org/professionals/physician_gls/PDF/fatigue.pdf

SECTION 2
ANXIETY


ASCITES


BLEEDING

BONE PAIN


BOWEL OBSTRUCTION


DELIRIUM


DEPRESSION


FUNGATING WOUNDS

HYPERCALCAEMIA

NEUROPATHIC PAIN


NUTRITION


PLEURAL EFFUSION


PSOAS MUSCLE SYNDROME

SPINAL CORD COMPRESSION


THROMBOEMBOLIC EVENTS


URETERIC OBSTRUCTION


VISCERAL PAIN


SECTION 3

DIAGNOSING DYING


END OF LIFE CONVERSATIONS


**BEREAVEMENT SUPPORT**


Resources for Patients


Resources for Caregivers
Commonwealth Carer Resource Centre, phone 1800 242 636. Caring for the carer

Commonwealth Carelink Centres, phone 1800 052 222. Information about services to optimise independent living

Commonwealth Carer Respite Centres, phone 1800 059 059. Giving carers a break
WEBSITES

For Health Professionals

www.pallcare.org.au  Palliative Care Australia


www.hospicecare.com  International Association for Hospice & Palliative Care, an American website promoting hospice and palliative care worldwide

www.biomedcentral.com/bmpalliatcare/  BMC Palliative Care journal regarding all aspects of hospice and palliative care

www.cancer.gov/cancertopics/support  The National Cancer Institute’s (USA) website contains general support information and organisations

www.cancer.gov/cancertopics/paincontrol  The National Cancer Institute’s (USA) website contains information on the management of pain

www.nccn.org  American website of the National Comprehensive Cancer Network providing evidence-based guidelines on a variety of topics including the management of specific cancers, viz. ovarian and more general topics, viz. cancer-related fatigue and distress

www.capc.org  The Centre to Advance Palliative Care (USA) offering palliative care tools, training and technical assistance

www.cancerinstitute.org.au  The Cancer Institute NSW, website offering information for patients and carers, clinicians and researchers as well as epidemiological information on cancer

www.caresearch.com.au  The website of Care Search, an online resource of palliative care information and evidence

www.gynaecancersupport.org.au  Greater Metropolitan Clinical Taskforce Psychosocial Support website

www.cancer.org  Website of the American Cancer Society

www.ons.org/outcomes/  The Oncology Nursing Society (USA) provides information for nurses providing direct patient care or looking for research evidence regarding outcomes

www.cancerbackup.org  Macmillan Cancer Support (UK) website providing cancer information, practical advice and support

www.cancercare.org  Cancer Care is a national (USA) non profit organisation providing professional support services
www.bereavementcare.com.au Bereavement Care Centre, includes information about the National Centre for Childhood Grief, “A Friend’s Place”

www.palliativecarensw.org.au Palliative Care NSW

www.thewellnesscommunity.org Cancer support, education and hope (USA) website

www.apos-society.org American Psychosocial Oncology Society website

www.ipos-society.org International Psycho-Oncology Society (USA)

www.nature.com/ejcn/index.html European Journal of Clinical Nutrition
For Patients and Caregivers

www.capo.ca Canadian Association of Psychosocial Oncology. The emotional facts of life with cancer, 2003

www.cancer.gov The website of the National Cancer Institute (USA). Contains information on sexuality, spirituality, talking to children and living with advanced disease

www.carersnsw.asn.au The website of Carers NSW. Has information on carer support services, and matters such as wills, guardianship, power of attorney

www.grieflink.asn.au A South Australian website of the National Association of Loss and Grief and the Discipline of General Practice from the University of South Australia. Has patient information sheets on grief issues

www.gynaecancersupport.org.au The website of the GMCT Psychosocial Support Project. Includes PDF downloads on psychosocial issues

www.hospicenet.org An American website that contains information on issues around advanced cancer, palliative care and bereavement, living with advanced disease and communicating with children

www.myparentscancer.com.au An Australian website supported by the National Breast and Ovarian Cancer Centre and CanTeen, with information specifically for children whose parent has cancer

http://www.cancer.gov/cancertopics/eatinghints The National Cancer Institute’s (USA) website contains Eating Hints for cancer patients before, during and after treatment

www.livingcaringworking.com Information for patients, carers, employers and work colleagues. Also includes a section for health professionals

www.workingcarers.org.au Provides stories, fact sheets, newsletters, chat room


www.apra.gov.au For information about superannuation payments

www.adec.org Association for Death Education and Counselling

www.bereavementcare.com.au Bereavement Care Centre, includes information about the National Centre for Childhood Grief, “A Friend’s Place”

www.cancersa.org.au A booklet for children can be downloaded, What About Me?

www.canteen.org.au CanTeen, phone 1800 639 614. Includes the Offspring program for adolescents whose parent has cancer

www.childhoodbereavementnetwork.org.uk Childhood Bereavement Network

www.childhoodgrief.org.au Centre for Childhood Grief

www.palliativecarensw.org.au Palliative Care NSW

www.pallcare.org.au Palliative Care Australia
PATIENT ASSESSMENT

Effective symptom management is based on a thorough assessment of symptoms and an understanding of the multiple dimensions of cancer-related, treatment-related and non-cancer-related symptoms. A comprehensive palliative assessment requires participation of the multidisciplinary team and includes assessment of the following domains:

- Clinical summary
- Physical symptoms and functioning
- Physical examination
- Medications
- Laboratory
- Psychological and spiritual functioning
- Goals of care and advance care planning
- Social support and care giver needs
- Anticipatory concerns

When a symptom is present, a more detailed history permits the clinician to elicit its likely cause and thus ensure the most appropriate management. Symptoms are subjective in nature and patient self-report is the most accurate approach for symptom assessment:

- **Checklist** – patients indicate ‘yes’ or ‘no’ response to whether they are experiencing a specific symptom. Intensity or distress then assessed using 0-10 numeric scale or visual analogue scale where 0 indicates no symptom presence and 10 represents the worst possible symptom experience

- **PQRST** – symptoms assessed by describing provoking factors (P), quality (Q), region or site (R), severity or intensity (S) and timing (T) of onset or cause, peak and duration

- **Specific symptom assessment tools:**
  - Pain – Brief Pain Inventory
  - Fatigue – Piper Fatigue Scale, Brief Fatigue Inventory
  - Psychological distress – DASS, HADS
  - Nutrition – PG-SGA

- **Multi-symptom assessment tools** – the symptoms most commonly assessed include pain, fatigue, nausea, depression, anorexia and dyspnoea. Such tools have strong validity and reliability and are reported to take no longer than 10 minutes to complete:
  - Symptom Distress Thermometer (NCI)
  - Edmonton Symptom Assessment Scale
  - Memorial Symptom Assessment Scale

A wide range of tools are available @
References


<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ac</td>
<td>Before meals (ante cibum)</td>
</tr>
<tr>
<td>bd</td>
<td>Twice daily</td>
</tr>
<tr>
<td>BSL</td>
<td>Blood sugar level</td>
</tr>
<tr>
<td>BP</td>
<td>Blood pressure</td>
</tr>
<tr>
<td>BSL</td>
<td>Blood sugar level</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive behavioural therapy</td>
</tr>
<tr>
<td>CCP</td>
<td>Congestive cardiac failure</td>
</tr>
<tr>
<td>CNS</td>
<td>Central nervous system</td>
</tr>
<tr>
<td>COPD</td>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>CPR</td>
<td>Cardiopulmonary resuscitation</td>
</tr>
<tr>
<td>CT</td>
<td>Computed tomography</td>
</tr>
<tr>
<td>DASS</td>
<td>Depression Anxiety Stress Scales</td>
</tr>
<tr>
<td>DIC</td>
<td>Disseminated intravascular coagulopathy</td>
</tr>
<tr>
<td>DVT</td>
<td>Deep vein thrombosis</td>
</tr>
<tr>
<td>ECG</td>
<td>Electrocardiogram</td>
</tr>
<tr>
<td>ECOG</td>
<td>(A measure of performance status devised by) Eastern Cooperative Oncology Group</td>
</tr>
<tr>
<td>ERCP</td>
<td>Endoscopic retrograde cholangiopancreatography</td>
</tr>
<tr>
<td>EUC</td>
<td>Electrolytes urea creatinine</td>
</tr>
<tr>
<td>FBC</td>
<td>Full blood count</td>
</tr>
<tr>
<td>GI</td>
<td>Gastrointestinal</td>
</tr>
<tr>
<td>GP</td>
<td>General practitioner</td>
</tr>
<tr>
<td>HADS</td>
<td>Hospital Anxiety (and) Depression Scale</td>
</tr>
<tr>
<td>ICD</td>
<td>Indwelling catheter</td>
</tr>
<tr>
<td>IM</td>
<td>Intramuscular</td>
</tr>
<tr>
<td>IMI</td>
<td>Intramuscular injection</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenous</td>
</tr>
<tr>
<td>IVC</td>
<td>Inferior vena cava</td>
</tr>
<tr>
<td>IVP</td>
<td>Intravenous pyelogram</td>
</tr>
<tr>
<td>LFT</td>
<td>Liver function test</td>
</tr>
<tr>
<td>mane</td>
<td>Morning</td>
</tr>
<tr>
<td>MAOI</td>
<td>Monoamine oxidase inhibitor</td>
</tr>
<tr>
<td>mcg</td>
<td>Micrograms</td>
</tr>
<tr>
<td>MDT</td>
<td>Multidisciplinary team</td>
</tr>
<tr>
<td>mg</td>
<td>Milligram</td>
</tr>
<tr>
<td>mid</td>
<td>Midday</td>
</tr>
<tr>
<td>MRI</td>
<td>Magnetic resonance imaging</td>
</tr>
<tr>
<td>NBM</td>
<td>Nil by mouth</td>
</tr>
<tr>
<td>nebs</td>
<td>Nebuliser</td>
</tr>
<tr>
<td>NFR</td>
<td>Not for resuscitation</td>
</tr>
<tr>
<td>NG</td>
<td>Nasogastric</td>
</tr>
<tr>
<td>nocte</td>
<td>At night</td>
</tr>
<tr>
<td>NSAIDs</td>
<td>Non-steroidal anti-inflammatory drugs</td>
</tr>
<tr>
<td>OT</td>
<td>Occupational therapy</td>
</tr>
<tr>
<td>PCA</td>
<td>Patient controlled analgesia</td>
</tr>
<tr>
<td>PE</td>
<td>Pulmonary embolus</td>
</tr>
<tr>
<td>PEG</td>
<td>Percutaneous enteral gastrostomy</td>
</tr>
<tr>
<td>PG-GSGA</td>
<td>Patient Generated Subjective Global Assessment of Nutritional Status</td>
</tr>
<tr>
<td>PO</td>
<td>By mouth (per oral route)</td>
</tr>
<tr>
<td>PPI</td>
<td>Proton pump inhibitor</td>
</tr>
<tr>
<td>PR</td>
<td>Per rectum</td>
</tr>
<tr>
<td>PRN</td>
<td>Per required need</td>
</tr>
<tr>
<td>PV</td>
<td>Per vagina</td>
</tr>
<tr>
<td>qd</td>
<td>Four times a day</td>
</tr>
<tr>
<td>SAAG</td>
<td>Serum to ascites albumin gradient</td>
</tr>
<tr>
<td>SC</td>
<td>Subcutaneous</td>
</tr>
<tr>
<td>SL</td>
<td>Sublingual</td>
</tr>
<tr>
<td>SNRI</td>
<td>Specific noradrenaline reuptake inhibitor</td>
</tr>
<tr>
<td>SR</td>
<td>Slow release</td>
</tr>
<tr>
<td>SSRI</td>
<td>Specific serotonin reuptake inhibitor</td>
</tr>
<tr>
<td>tds</td>
<td>Three times daily</td>
</tr>
<tr>
<td>TENS</td>
<td>Transcutaneous electric nerve stimulation</td>
</tr>
<tr>
<td>TFT</td>
<td>Thyroid function test</td>
</tr>
<tr>
<td>TIPSS</td>
<td>Transjugular intrahepatic portosystemic shunts</td>
</tr>
<tr>
<td>TPN</td>
<td>Parenteral feeding</td>
</tr>
<tr>
<td>U&amp;E</td>
<td>Urea &amp; electrolytes</td>
</tr>
<tr>
<td>UTI</td>
<td>Urinary tract infection</td>
</tr>
<tr>
<td>VATS</td>
<td>Video-assisted thoracic surgery</td>
</tr>
<tr>
<td>V/Q</td>
<td>Ventilation perfusion</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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</table>
The Minister for Health established the Greater Metropolitan Clinical Taskforce in June 2004 to carry forward the strong engagement and commitment of clinicians and consumers fostered since 2000 by the Greater Metropolitan Services Implementation Group (GMSIG) and subsequently, the Greater Metropolitan Transition Taskforce (GMTT). The GMCT reports to the NSW Minister for Health and to the Director General.

Our ongoing commitment is to improving health care in NSW based upon the principles of clinical governance with a focus on:
- Developing services based on clinical need
- Quality of care and safety for patients
- Equity of access and equity of outcome within the hospital system
- Clinician / Consumer driven planning

Through the twenty clinical networks chaired by clinicians and involving doctors, nurses, allied health professionals, scientists, managers, and consumers, we identify how and where improvements can be made in the particular specialty and implement these changes in association with NSW Health and the Area Health Services.

A number of the clinical networks have now been operating for six years. Their achievements are numerous and significant. They have taken a broad perspective and:
- Brought together clinicians from facilities across the greater metropolitan region and across rural NSW to identify the key issues in that specialty
- Established working groups to develop consensus documents to guide next steps
- Developed collaborative approaches – eg. standardised assessment and treatment protocols, models of care, benchmarks for services
- Shared staffing and resources across facilities to improve patient access
- Utilised consumers to keep thinking patient-focussed
- Provided staff training in various forms – conferences, seminars, webcasts, study groups and courses in conjunction with tertiary education institutions, opportunities to work in other facilities etc.
- Introduced uniform data collection systems to provide clinicians with data to guide changes in practice
- Facilitated clinical research and the dissemination of results
- Developed patient resources such as booklets, websites, directories, fact sheets, DVDs etc. to ensure that patients and their carers have a good understanding of the issues they face at diagnosis, during treatment and afterwards

For more information on Greater Metropolitan Clinical Taskforce programs and initiatives, please visit the website www.health.nsw.gov.au/gmct
The Cancer Institute NSW was established in 2003 and is funded by the NSW State Government. It is a statutory body governed by the Cancer Institute NSW Board appointed by the Minister for Health and the Minister assisting the Minister for Health (Cancer).

In June 2003, the NSW Parliament unanimously passed the *Cancer Institute NSW Act 2003* in recognition of the importance of accelerating improvements in cancer control in NSW. The Act defines "cancer control" as:

"any cancer related activity in the field of human health such as research, the practical application of research, innovation, treatment and care (including palliative care, supportive care and complementary health therapies), prevention, screening, diagnosis, provision of information, training and education."

The objectives of the Cancer Institute NSW are:

- To increase cancer survival rates for cancer patients
- To reduce the incidence of cancer in the community
- To improve the quality of life of cancer patients and their carers
- To operate as a source of expertise on cancer control for the government, health service providers, medical researchers and the general community

The Cancer Institute NSW is dedicated to supporting programs and initiatives that help meet these objectives.

The Cancer Institute NSW is expanding its work and involvement in cancer control. For more information on the Cancer Institute NSW programs and initiatives, please visit the website [www.cancerinstitute.org.au](http://www.cancerinstitute.org.au)