Special Populations:
The Elderly patient in the Waiting Room

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Learning outcomes

• On completion of this module the participants will be better able to:
  – Define elderly patients
  – Describe the physiology of ageing
  – Discuss the importance of early assessment of the elderly waiting patient
  – Identify indicators of urgency for elderly patients
  – Outline the importance of teams in caring for the elderly
  – Discuss the common types of elder presentations to the ED
Overview

- Emergency Departments are difficult and stressful places for vulnerable elderly patients
- Hospitals are not designed for complex elderly patients
- Elderly patients regularly present to EDs, with about one third of all hospital presentations being associated with this age group
- Elderly patients offer a challenge to emergency nurses as they are at significant risk of deterioration due to the following:
  - physiological changes
  - polypharmacy
  - nutritional complications
  - age related disease
Older people

- In the 12 months to 30 June 2009
  - the number of people aged 65 years and over in Australia increased by 86,800 people representing a 3.0% increase
  - the number of people aged 85 years and over increased by 21,000 people (5.8%) to reach 383,400.
  - Over the past two decades, the number of elderly people increased by 167.8%, compared with a total population growth of 30.1%

*Reference: Australian Bureau of Statistics*
Ageing

- It is characterised by the progressive loss of bodily and organ function.
- It produces decreased functional reserve in times of physical or metabolic stress.
- People may be chronologically old but remain physically fit, mentally alert and productive in society.
- People may also be chronologically young, but physically or functionally old.
Know the differences

- Ageing may produce the following changes:
  - Physical
  - Physiological
  - Psychosocial

- Consider the impact of these changes on the assessment and examination of the elderly patient waiting in ED
Age related changes: Airway & breathing

• Changes
  – Progressive decrease in lung function producing reduced vital capacity, lung compliance and resistance leading to impaired gas exchange
  – Atrophy & rigidity of respiratory muscles
  – Diminished gag & cough reflex

Clinical Significance
  – Early intervention by allied health teams e.g. physiotherapy and Occupational Therapy
  – Consider adequate early pain management for any chest wall/thoracic injury
  – Potential for acquiring pneumonia especially aspiration pneumonia
Age related changes: Circulation

- Changes
  - Diminished cardiac output
  - Fibrosis of blood vessel lumen, calcification of arteries and thickening of vessel membranes
  - Decrease in cardiac contractility
  - Delayed sympathetic response to stress
  - Complications of medications

- Clinical significance
  - B/P & heart rate may not be accurate indicators of cardiac status
  - Beware of atypical presentations i.e. AMI may present as weakness, vomiting, SOB without chest pain
  - Close monitoring need to identify trends
  - Possibility of dual diagnosis such as syncope, myocardial infarction, stroke
## Age related changes: Disability

**Changes**

- Brain atrophies with age
- Pattern of injury for subdural haematoma is most typically a fall
- 45% elderly patient suffer from confusion prior to a subdural
- Dura is attached to the skull
- Less awareness of position increases the likelihood of falls
- Challenge to differentiate between delirium, dementia or depression

**Clinical significance**

- Elderly patients are more likely to fall
- Ascertaining the cause of the fall is paramount
- A fall in association with anti-coagulant/anti-thrombolytic medication may be life threatening
- Consider all causes of confusion (pain, metabolic imbalance, medication)
- Regular neurological assessment is imperative
- Patients > 65 years with a mild head injury (GCS14) is considered high risk
Age related changes: Exposure

• Changes
  – Dermal thinning
  – Subcutaneous fat loss
  – Body temperature becomes difficult to regulate
  – Sweat gland atrophy resulting in less efficient thermoregulation of heat
  – Impaired sensitivity to temperature
  – 50% decline in cell replacement leading to thinning of all three layers of the skin
  – Less intense/decreased shivering

• Clinical significance
  – Elderly patients are more susceptible to pressure care problems, skin tears and hypothermia
  – It is important that the patient is kept warm while waiting
  – Elderly patients are at high risk of sepsis but may only display subtle or non-specific signs of sepsis
  – It is important that the integrity of the skin is assessed on initial assessment
  – Skin is extremely fragile hence take measures to reduce potential for skin tears e.g. automatic blood pressure cuffs
Age related changes: Head to toe

- Patient may have hearing and/or visual defects
- Decreased kidney function resulting in an inability to concentrate/dilute urine
- Decrease in capacity and urinary flow and increase in urgency and amount of residual urine
- Impaired intestinal and oesophageal motility with incidence of diverticulosis increasing with age

Clinical significance
- Diminished function of the sensory organs may impact on their ability to carry out ADL’s
- Particularly vulnerable to dehydration
- Urinary changes increases the potential for nocturia and urinary tract infections
- Constipation is common
- Elderly patients presenting with abdominal pain are at significant risk of serious abdominal pathology but initially may manifest subtle signs
Age related changes: Head to toe con’t

- Changes
  - Decrease blood flow to the liver and reduced liver enzyme activity
  - Insulin secretion decreases and insulin resistance increases with aging
  - Loss of bone density at the rate of 3-9% per decade, muscle wastage and joint stiffness
  - Loss of muscle mass, strength and endurance

- Clinical significance
  - Liver dysfunction may adversely affect metabolism and/or increase toxic effects of drugs
  - Compromised LFT’s may increase risk of coagulation
  - Musculoskeletal system is the most frequently injured bodily system
  - These changes in the musculoskeletal system lead to significant problems with mobility
Common Presentations

- Confusion
- Falls
- Hypothermia
- Elder Abuse
Confusion/Delirium: Clinical features

• Onset:
  – Abrupt/ It is a medical emergency

• Daily course:
  – Fluctuating level of consciousness
  – Worse at night

• Length of course:
  – Hours to weeks

• Consciousness
  – Reduces

• Alertness
  – Increased/decreased

• Activity
  – Increased/decreased/ variable motor activity

• Attention
  – Decline in attention-focus, perception and cognition

• Behaviour
  – Associated with extremes of behaviour, aggression and delusions

• Orientation
  – Out of touch with surroundings
Confusion/ Delirium

• Monitor vital signs
  – Observe for signs of infection
  – UTI, chest infection.

• Assess for dehydration
  – Moist mucous membranes, skin turgor & vital signs.

• Assess for other causes (organic) that may manifest as acute confusion
  – Hypoxia, hypothermia, CVA & metabolic disorders (diabetes)

• May indicate acute psychosis, drug & alcohol withdrawal, intracranial pathology or may be early signs of shock/sepsis
Falls

- More than one-third of persons 65 years or older fall each year, and in half of such cases the falls are recurrent.
- Approximately 1 in 10 fall results in a serious soft tissue injury or head injury.
- Mechanism can be simple (e.g. mechanical fall) but the fall related injury may be a major cause of morbidity and mortality
  - Acute subdural haematoma >65 years has a 75% mortality
  - Chronic subdural haematoma 75 years has a 31% mortality @ 6 months
  - # NOF increases mortality due to co-morbidities, respiratory complications and others e.g. fluid imbalances, UTI
- Falls account for approximately 10% of visits to the ED.
Falls

• Most common injuries –
  – NOF, Wrist #’s, shoulder dislocations, lacerations & head injuries.

• Contributing factors
  – Cardiac disease, diabetes, poor vision & medications (diuretics, anticoagulants).
Musculoskeletal injuries following falls
Hypothermia

- Patients aged over 70 yrs, who have a chronic condition are at **HIGH RISK** for sepsis, with or without a fever.

- Patients may present with a temperature < 35.5 Celcius and if there is a possible focus of infection and one other SIRS criteria the patient may have severe sepsis. SIRS criteria include:
  - Respirations / min: < 10 or > 25,  SpO2: < 95%
  - Pulse / min: < 50 OR > 120,  (SBP): < 100
  - Altered mental state or drowsiness

- The elderly do not realise how cold they are & fail to act to increase body temperature.

- Peripheral vasoconstriction in response to hypothermia is limited

- Shivering reflex is gradually decreased < 34°C
Elder Abuse

• The added stress placed on the family when caring for an older person can lead to maltreatment

• There are 5 Major categories
  – Physical
  – Psychological
  – Financial/material
  – Sexual
  – Intentional / unintentional neglect
Abuse

**Indicators**
- Unexplained bruises and welts.
- Unexplained burns
- Unexplained fractures
- Unexplained lacerations or abrasions
- Sexual abuse
- Intimidation
- Poor hygiene
- Dehydration

**Management**
- Don’t query in presence of possible abuser
- If concerned about abuse consult with a senior colleague or clinician
- Reporting may be required
- Contact
  - Commonwealth Carelink Centre 1800 052 222
  - Aged Care Information Line 1800 500 853
- Pitfalls: Failure to recognise / report
Key points for the CIN role

- Treat with the patient with dignity.
- Keep patients safe while waiting in the waiting room.
- Don’t be fooled by stoicism
- Identify the risks associated with the patients presenting problem and the potential problems they may experience in the waiting room.
- Communicate with the patient.
- Being in a different environment can be very frightening.
  - Orientate the patient to the immediate area
  - Instruct them on how to obtain assistance.
Key points for the CIN role

- Monitor for signs of deterioration by performing vital signs specific to the presenting problem.
- Supervise and assist the patient as required.
- Manage medications in the waiting room (Diabetes is common)
- Consider food/fluids/body temperature.
- Confusion may be a symptom of more sinister things – do not treat without considering the causes.
  - Do not dismiss as “normal for them”
  - Remember the simple causes such as UTI, BSL abnormality, medication side effect or withdrawal eg of chronic benzodiazepine use
  - Confused elderly may respond better to familiar people and find comfort from them in an unusual environment
  - Encourage a relative to sit and talk with them.
QUESTIONS ?
References & Acknowledgement

References

- Images downloaded from Google Images

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