

Clinical Assessment of Pain

Key Points

- Initial evaluation of a patient's pain must be as thorough as possible – for effective treatment and to prevent chronic pain.
- Many patients with pain due to cancer or other serious illnesses experience pain from multiple mechanisms, locations and causes.
- Treatment plans must be reviewed regularly.
- Assessment should include: general medical history (including pain history), physical examination (neurological and musculoskeletal), psychosocial assessment, and diagnostic testing (if applicable).
- Individualised pain treatment plans must be developed and regularly reviewed.

How important is the initial assessment of pain?

The initial evaluation of a patient's pain forms the foundation for a treatment plan – therefore it must be as thorough as possible.

Pain must be assessed systematically and classified according to its likely origin as well as its temporal pattern, aggravating factors, ameliorating factors, perpetuating factors and comorbidities.

In all forms of pain, there is a risk of patients progressing from acute to chronic pain – particularly if pain is severe and lasts for longer than the time expected for healing – therefore, a sound diagnosis and early intervention is essential.

Importantly, if there is no obvious source of pain,

it is possible the patient is suffering from the chronic disease of chronic pain. (See Painaustralia Fact Sheet 1)

How often should pain treatment plans be reviewed?

A patient's pain should be reviewed and documented at regular intervals, in conjunction with the patient, especially where the patient is taking medication.

Even after the initial pain treatment plan is put in place, the source and severity of pain, and the effectiveness of treatment, may fluctuate.

Reviews are particularly important for patients who continue to present with untreated pain.

It may be helpful for patients to keep a pain diary, which tracks their pain levels in relation to factors such as external stressors, sleep patterns, diet, and other health conditions.

What are the key points of a medical history?

A patient's medical history should include the following:

- ✓ pain site(s);
- ✓ history of illness or pain experience;
- ✓ past and concurrent medical and surgical interventions;
- ✓ imaging and other investigations;
- ✓ other treatments used and healthcare professionals consulted;
- ✓ investigations conducted (eg. medical imaging);
- ✓ family history (focusing on chronic pain conditions);
- ✓ medication (past and present);
- ✓ substance use; and
- ✓ a detailed pain history – circumstances associated with pain onset; primary site of pain; radiation of pain; character of pain (eg throbbing, aching, stabbing); intensity of pain (at rest, on movement, at present, during the past week, highest level); factors altering pain level (what makes it worse or better); associated symptoms; temporal factors (continuous or otherwise).

What are the key points of the neurological examination?

The neurological assessment should evaluate:

- ✓ mental status – level of alertness; degree of orientation (with respect to time, place and person); general appearance; behaviour and mood; intellectual function (comprehension, attentiveness, insight, memory);
- ✓ motor system – appearance of muscles, their tone and strength;
- ✓ sensory perception – evaluated with different types of stimuli, such as light touch, painful squeeze or pinprick;
- ✓ deep tendon reflex testing – alterations in reflexes can suggest neurological dysfunction; and
- ✓ cranial nerve function – evaluation of the fifth cranial nerve (which is affected in trigeminal neuralgia) requires assessment of facial sensation, jaw strength and movement, and corneal reflexes.

What are the key points of the musculoskeletal examination?

Musculoskeletal examination is important to determine secondary pain, even in patients whose primary source of pain is musculoskeletal. It should include:

- ✓ observation of posture;
- ✓ bilateral knee raise;
- ✓ squat and rise;
- ✓ areas of muscle spasm or trigger points;
- ✓ all major joints, and areas of limited movement and local pain on palpation;
- ✓ shoulders, to check for deconditioning and pain radiating down the arm into the hand;
- ✓ elbows, to check for inflammation;
- ✓ wrists, for signs of carpal or ulnar tunnel syndrome;
- ✓ knees, for signs of abnormal patellar tracking;
- ✓ hips, for signs of trochanteric bursitis;
- ✓ ankles and feet;
- ✓ detailed spinal examination; and
- ✓ routine checks of blood pressure, pulse, respiratory rate and temperature.

What are the key points of the psychosocial assessment?

Pain can influence, and be influenced by, psychosocial factors, therefore it is important to examine the following:

- ✓ ways in which the patient describes or shows pain;
- ✓ patient's coping skills in response to stress or pain;
- ✓ patient's family support structure;
- ✓ effect of pain on sleep;
- ✓ effect of pain on social and recreational activities;
- ✓ effect of pain on mood;
- ✓ reduction in pain required to resume reasonable activities; and
- ✓ patient's expectations regarding the outcome of pain treatment.

What about diagnostic testing?

Diagnostic testing can help confirm or rule out diagnoses suggested by the medical history or physical examination. Testing can include:

- ✓ radiographs or x-rays for details of bone structure;
- ✓ bone scans to identify small fractures or inflammatory processes; and
- ✓ CT or MRI to differentiate between tumour, infection or fracture, or to define a possible anatomic cause for nerve impairment.

However, there is no 1:1 relationship between imaging findings and pain. Severe degenerative changes may be present with no accompanying pain, and vice versa. As a result, there is no substitute for a thorough assessment of the patient.

References

- 1/ Cousins MJ & Gallagher RM (2011) *Fast Facts: Chronic and Cancer Pain*
- 2/ Nicholas M and Molloy A (2011) *Manage Your Pain*
- 3/ Siddall PJ & Cousins MJ (2004) Persistent pain as a disease entity: implications for clinical management. *Anesth Analg* 2004; 99:510-520