

What is acute pain

How do we treat it

Acute pain is usually associated with an obvious cause or explanation. It is usually rapid in onset and variable in intensity from mild, moderate to severe. Examples of acute pain include post-operative pain, trauma, cholecystitis, renal colic, burns or labour pain. However, acute pain can be experienced without any physical disorder, for example headaches.

The International Association for the Study of Pain (1979) defines acute pain as:

“pain of recent onset and probable limited duration”

Many other factors will shape the experience of acute pain (Paige and Cioffi 1992). These include:

Fears, anxiety, sleep disruption, illness, age, previous experiences, the response of health care staff, personality, drugs and analgesia, culture.

Merskey and Bogduk (1994) state that the limit between acute developing into chronic pain is three months. However, more recently Carr and Goudas (1999) revealed that acute pain might rapidly evolve into chronic pain. They use the example of the pain intensity of herpes zoster pain developing into chronic post herpetic neuralgia pain. Another example states how heel lancing in new-born infants causes weeks of local sensitivity to touch. This study also discusses how biological and psychological foundation for long term persistent chronic pain is in place within hours of injury.

A point to remember, people may experience pain in different ways. Compare the acute labour pain experienced by some mothers who require strong opioids, and other women who can give birth with very little or any analgesia.

As professionals caring for such patients, we can provide an explanation, using terms and language that are familiar to the patient. The nurse can administer analgesic drugs and monitor their effectiveness. Documentation is vital to record progress and alert members of staff to any problems developing.

Effective pain control depends on the knowledge and skills and the values of health professionals who have to identify, prevent and treat the pain. Assessment of pain is essential to determine the site, severity and effectiveness of treatment. Verderhus, Eide, Natvig (2006)

As pain is a sensation and very difficult to quantify, accurate assessment needs to be practiced and recorded.

This is made simpler in the hospital setting by grading the pain as:

- None 0
- Mild 1
- Moderate 2
- Severe 3

and is found and documented on the observation chart.

Other scoring systems can be used but this is our standard at the Royal hospital NHS Trust. It is important to remember that severity score is just one element of pain assessment.

Time out

What other factors are required to complete an assessment of pain?

Where can you document pain assessment whilst caring for a patient on the ward?

Consider how do you describe pain – try the example of a “headache”?

How does the headache make you feel?

Can you visualise the pain, or state how intense the pain feels, using a numerical score between 0-3?

Open ended questioning needs to be used when asking patients about any pain – try using what when why how as a structure to guide your questions.

For example:

Where is the pain, what does it feel like, how long has it been painful?

What drugs have been given or omitted?

Is there anything else that has helped reduce the pain?

Other resources used – change of position, equipment, referral to Pain team?

Routes of analgesia

Many routes are available for analgesic medication:

- ❖ Oral
- ❖ Intravenous
- ❖ Subcutaneous
- ❖ Epidural
- ❖ Intrathecal
- ❖ Rectal
- ❖ Topical
- ❖ Inhalation

Time out

Consider and list the advantages and disadvantages of each route of analgesia

It is recognised that untreated acute pain, coupled with the physiological response, known as the stress response, can have a number of adverse consequences on the bodies other systems. Macintyre, Ready (1996).

Cardiovascular

Rises in heart rate, blood pressure, increased myocardial oxygen demands, altered blood flow (patients skin becomes pale), possible deep vein thrombosis

Respiratory

Decreased deep breathing and cough, sputum retention, infection, hypoxia. Pulmonary changes are most noticeable on the 1st or 2nd day after surgery and may take 2 weeks or more to return to normal.

Gastrointestinal

Pain will lead to delays in gastric emptying and bowel motility.

Urinary

Urinary retention may occur. Many drugs used in acute pain are excreted via the renal system. If a patient has reduced urine output, caution will be necessary when giving analgesic drugs especially opioids.

Musculoskeletal

Muscle spasm may reduce respiratory function and immobility will increase the possibility of deep vein thrombosis.

Endocrine/metabolic

Pain is believed to play a part in the activation of the “stress response”, resulting in the release of a number of hormones. These changes can lead to hyperglycaemia, increased coagulation, impairment of wound healing and immune function. Sodium and water retention may occur.

Effective analgesia can partially reverse some of the harmful effects shown above and will help early mobilisation and recovery of the patient.

Time out

Choose two of the body systems listed and describe how you could prevent pain becoming worse, using simple measures.

Guidelines produced by the Royal College of Surgeons and the Royal College of Anaesthetists (1990) clearly state:

- ❖ To assess and document pain routinely, at the same time as other observations – pulse, blood pressure, respiratory rate.
- ❖ Treat pain as early as possible.
- ❖ Select the treatment according to the patient’s clinical need and response – using a s/c route for analgesia when the patient may be able to take oral analgesia.

In summary, acute pain management is vital for patient’s recovery, and can significantly reduce the incidence of complications and shorten hospital stays.

References

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