



# pain relief

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## **PERIOPERATIVE PAIN RELIEF**

### Optimal management :

- ✓ Planning - patient and staff education
- ✓ tailoring of the regimen (surgery -individual patient)
- ❖ Tachycardia – Hypertension - vasoconstriction
- ❖ Painful abdominal and thoracic wounds restrict inspiration:
  - tachypnoea
  - small tidal volumes
  - inhibition of effective coughing and mobilisation.
  - chest infection
  - delayed mobilisation → DVT , muscle wasting and pressure sores.

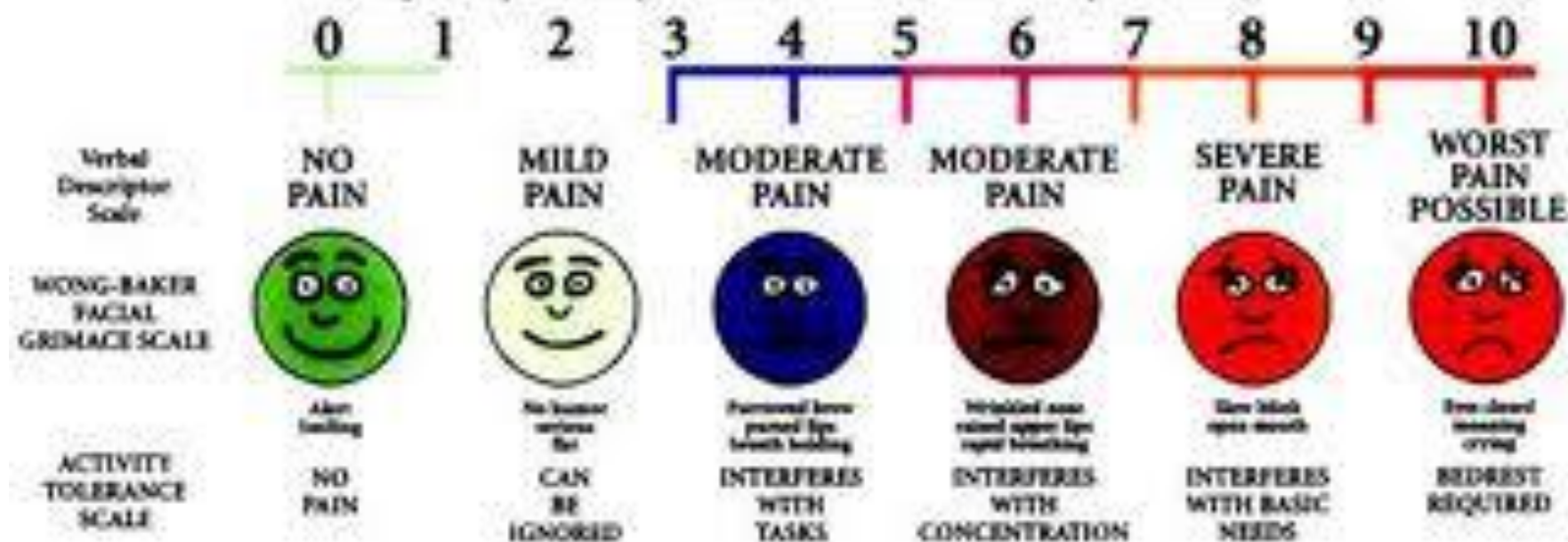
### However, too much analgesic drug :

- nausea - vomiting - somnolence and dizziness
- depressed consciousness and respiration.

**This can be avoided by sensible initial dosing, followed by titration until the patient is comfortable.**

# UNIVERSAL PAIN ASSESSMENT TOOL

This pain assessment tool is intended to help patient care providers assess pain according to individual patient needs. Explain and use 0-10 Scale for patient self-assessment. Use the faces or behavioral observations to interpret expressed pain when patient cannot communicate his/her pain intensity.



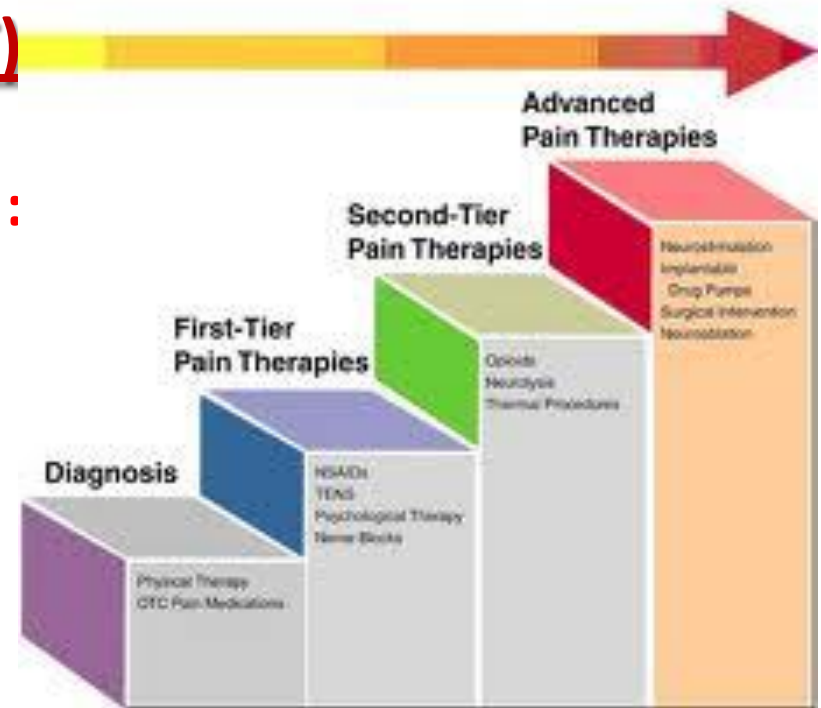
# (ACUTE PAIN MANAGEMENT)

**combined 'multimodal' analgesia :**

- ✓ local anaesthesia
- ✓ simple analgesics
- ✓ opioid drugs

## Acute postoperative pain relief

- Requires an expert team approach
- Pain levels must be measured regularly
- Analgesia is best given before pain breaks through
- A combination of analgesics gives best results
- Opioids should not be withheld
- The dose of analgesia used must be adequate to control the pain



## Simple analgesic agents :

In minor surgery and when the patient is able to eat after surgery,

➤ NSAIDs and paracetamol may be sufficient.

➤ Codeine phosphate :

intracranial surgery ( intermediate respiratory depressant )

❖ Profound hypotension intravenously.

❖ Constipation

➤ **NSAIDs** : are useful as the main analgesic :

✓ moderate pain

✓ severe pain with opioids

❖ loss of : - gastric cytoprotection

- renal homeostasis

- platelet function.

**Diclofenac** : Rectal and intravenous

**Ketorolac** : Intravenous

## **Stronger analgesic agents**

**Morphine** : regular intramuscular injection

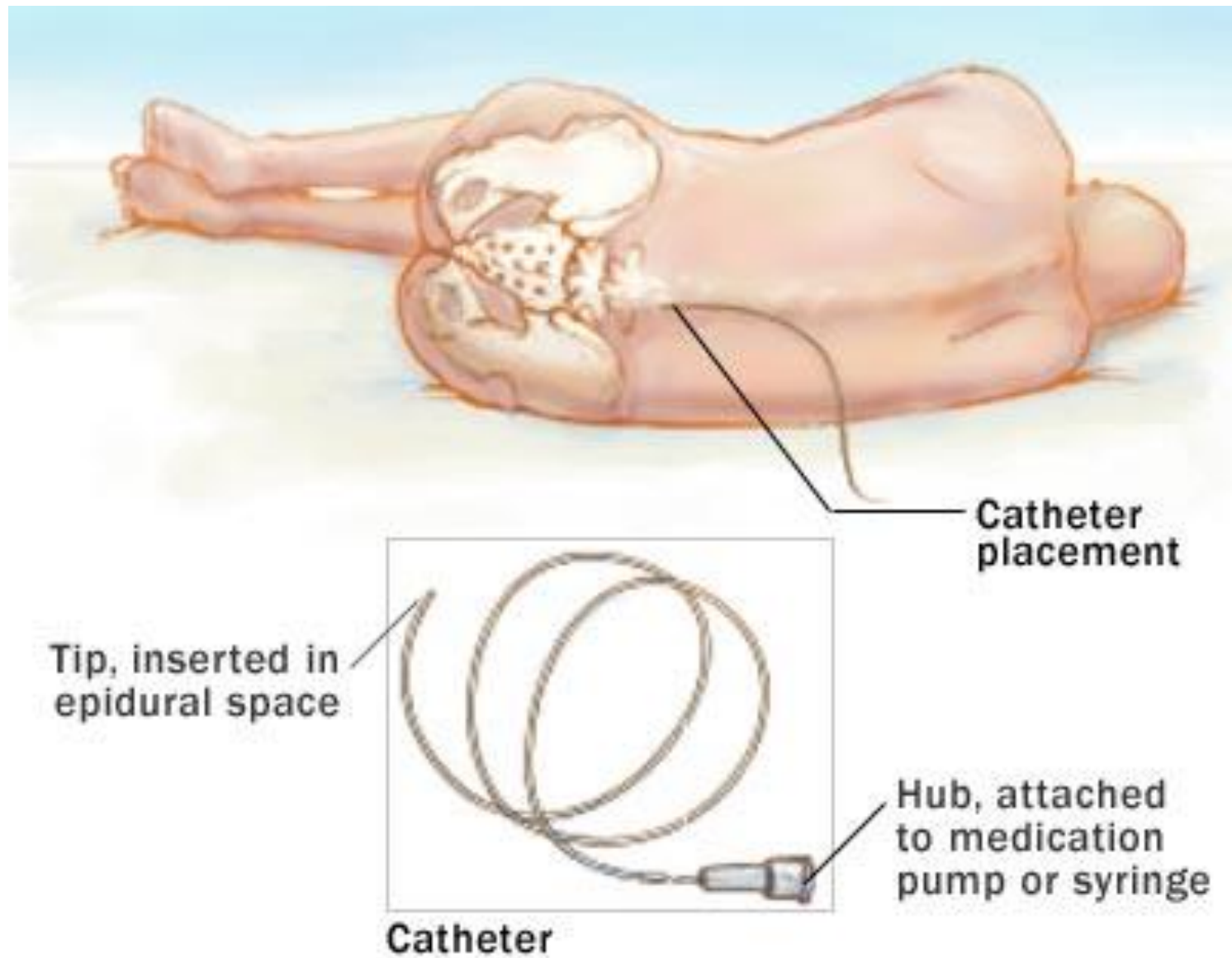
there are more sophisticated methods of pain management:

- Patient-controlled analgesia (PCA).
  - Local anaesthetic blocks.
  - continuous epidural anaesthesia
  - spinal opioids
- Effective postoperative pain relief encourages early mobilisation and hospital discharge.
- The methods described above can also be used for managing the pain of acute trauma





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## Chronic pain management

- ✓ pancreatitis
- ✓ concomitant pathology.
- ✓ Surgery : acute pain may progress to chronic pain.

Malignant or nonmalignant origin and of several types:

- Nociceptive pain.
- Neuropathic (or neurogenic) pain.
- Psychogenic pain.

The treatment of pain of malignant origin differs from that of pain of a benign cause, which may be the more difficult to overcome.

Drugs should preferably be taken by mouth, but the patient must be regularly reassessed to ensure that analgesia remains adequate as the disease process changes .



## Chronic pain

- Inadequate control of acute pain may lead to chronic pain
- Chronic stimulation of nociceptors appears to produce sensitisation
- Dysfunction in nerves produces neuropathic pain
- Psychogenic pain – depression causes and is caused by chronic pain



## **Pain control in malignant disease :**

Three levels of treatment – the ‘pain stepladder’:

- first rung: simple analgesics – aspirin, paracetamol, NSAIDs, tricyclic drugs or anticonvulsant drugs
- second rung: intermediate strength opioids – codeine, tramadol or dextropropoxyphene
- third rung: strong opioids – morphine : addiction

○ Oral morphine : Nausea - constipation

○ The infusion of subcutaneous, intravenous, intrathecal or epidural opiate drugs is necessary if a patient is unable to take oral drugs.

## Neurolytic techniques in cancer pain :

should only be used if the life expectancy is limited and the diagnosis is certain.

➤ The useful procedures are:

- subcostal phenol injection for a rib metastasis
- coeliac plexus neurolytic block with alcohol
- intrathecal neurolytic injection of hyperbaric phenol

➤ Alternative strategies include:

- the use of anti-pituitary hormone drugs such as tamoxifen
- palliative radiotherapy
- adjuvant drugs such as corticosteroids, tricyclic antidepressants, anticonvulsants are used to reduce the pain of nerve injury

## Techniques for managing chronic pain :

- Oral opioids – initial nausea, long-term constipation
- Opioid infusions – useful if the patient cannot take drugs orally
- Neurolysis – only in limited life expectancy

