

## Post- Operative Pain- Relief

- Pain is often the patient's presenting symptom. It can provide useful clinical information and it is your responsibility to use this information to help the patient and alleviate suffering.
- Manage pain wherever you see patients (emergency, operating room and on the ward) and anticipate their needs for pain management after surgery and discharge.
- Do not unnecessarily delay the treatment of pain; for example, do not transport a patient without analgesia simply so that the next practitioner can appreciate how much pain the person is experiencing.
- ***Pain management is our job.***

### Pain Management and Techniques

- Effective analgesia is an essential part of postoperative management.
- Important injectable drugs for pain are the opiate analgesics. Nonsteroidal anti-inflammatory drugs (NSAIDs), such as diclofenac (1 mg/kg) and ibuprofen can also be given orally and rectally, as can paracetamol (15 mg/kg).
- There are three situations where an opiate might be given: pre-operatively, intra-operatively, post-operatively.
- Opiate premedication is rarely indicated, although an injured patient in pain may have been given an opiate before coming to the operating room.
- Opiates given pre- or intraoperatively have important effects in the postoperative period since there may be delayed recovery and respiratory depression, even necessitating mechanical ventilation.

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## Post- Operative Pain- Relief (continued)

- Short acting opiate fentanyl is used intra-operatively to avoid this prolonged effect.
- Naloxone antagonizes (reverses) all opiates, but its effect quickly wears off.
- Commonly available inexpensive opiates are pethidine and morphine.
- Morphine has about ten times the potency and a longer duration of action than pethidine. (continued next page)
- Ideal way to give analgesia postoperatively is to:
  - Give a small intravenous bolus of about a quarter or a third of the maximum dose (e.g. 25 mg pethidine or 2.5 mg morphine for an average adult)
  - Wait for 5–10 minutes to observe the effect: the desired effect is analgesia, but retained consciousness
  - Estimate the correct total dose (e.g. 75 mg pethidine or 7.5 mg morphine) and give the balance intramuscularly.
  - With this method, the patient receives analgesia quickly and the correct dose is given.
- If opiate analgesia is needed on the ward, it is most usual to give an intramuscular regimen:
  - Morphine:
    - Age 1 year to adult: 0.1–0.2 mg/kg
    - Age 3 months to 1 year: 0.05–0.1 mg/kg
  - Pethidine: give 7–10 times the above doses if using pethidine.
- ***Opiate analgesics should be given cautiously if the age is less than 1 year. They are not recommended for babies aged less than 3 months unless very close monitoring in a neonatal intensive care unit is available.***

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## Post- Operative Pain Relief (continued)

### Anaesthesia & Pain Control in Children

- Ketamine anaesthesia is widely used for children in rural centres (see pages 14–14 to 14–21), but is also good for pain control.
- Children suffer from pain as much as adults, but may show it in different ways.
- Make surgical procedures as painless as possible:
  - Oral paracetamol can be given several hours prior to operation
  - Local anaesthetics (bupivacaine 0.25%, not to exceed 1 ml/kg) administered in the operating room can decrease incisional pain
  - Paracetamol (10–15 mg/kg every 4–6 hours) administered by mouth or rectally is a safe and effective method for controlling postoperative pain
  - For more severe pain, use intravenous narcotics (morphine sulfate 0.05–0.1 mg/kg IV) every 2–4 hours
  - Ibuprofen 10 mg/kg can be administered by mouth every 6–8 hours
  - Codeine suspension 0.5–1 mg/kg can be administered by mouth every 6 hours, as needed.