

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME _____

MEDICATION Morphine Sulphate

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Opioid Agonist

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds to opiate receptors in the CNS. Alters the perception of and response to painful stimuli while producing generalized CNS depression.

Therapeutic Use

Severe pain.
Management of moderate to severe chronic pain in patients requiring use of a continuous around-the-clock opioid analgesic for an extended period of time (extended/sustained-release).
Pulmonary edema.
Pain associated with MI.

Complications

CNS: confusion, sedation, dizziness, dysphoria, euphoria, floating feeling, hallucinations, headache, unusual dreams.
EENT: blurred vision, diplopia, miosis.
Resp: RESPIRATORY DEPRESSION.
CV: hypotension, bradycardia.
GI: constipation, nausea, vomiting.
GU: urinary retention.
Derm: flushing, itching, sweating.
Misc: physical dependence, psychological dependence, tolerance.

Medication Administration

Per oral
Rectal
Intramuscular
Intravenous
Subcutaneous
Epidural

Contraindications/Precautions

Contraindicated in: Hypersensitivity; Some products contain tartrazine, bisulfites, or alcohol and should be avoided in patients with known hypersensitivity; Acute, mild, intermittent, or postoperative pain (extended/sustained-release); Significant respiratory depression (extended/sustained-release); Acute or severe bronchial asthma (extended/sustained-release); Paralytic ileus (extended/sustained-release).

Nursing Interventions

Assess type, location, and intensity of pain prior to and 1 hr following PO, subcut, IM, and 20 min (peak) following IV administration.
Patients on a continuous infusion should have additional bolus doses provided every 15–30 min, as needed, for breakthrough pain.
Patients taking sustained-release morphine may require additional short-acting opioid doses for breakthrough pain.
An equianalgesic chart should be used when changing routes or when changing from one opioid to another.

High Alert: Assess level of consciousness, BP, pulse, and respirations before and periodically during administration. If respiratory rate is <10/min, assess level of sedation. Physical stimulation may be sufficient to prevent significant hypoventilation.

Interactions

Use with extreme caution in patients receiving MAO inhibitors within 14 days prior (may result in unpredictable, severe reactions—reduce initial dose of morphine to 25% of usual dose).
Decreased CNS depression with alcohol, sedative/hypnotics, clomipramine, barbiturates, tricyclic antidepressants, and antihistamines.
Administration of partial-antagonist opioid analgesics may precipitate opioid withdrawal in physically dependent patients. Buprenorphine, nalbuphine, butorphanol, or pentazocine may reduce analgesia.
May increase the anticoagulant effect of warfarin. Cimetidine reduces metabolism and may increase effects.
Drug-Natural Products: Concomitant use of kava-kava, valerian, or chamomile canqCNS depression.

Client Education

Instruct on how and when to ask for pain medication.
May cause drowsiness or dizziness. Caution patient to call for assistance when ambulating or smoking and to avoid driving or other activities requiring alertness until response to medication is known.
Advise patient to change positions slowly to minimize orthostatic hypotension.
Caution patient to avoid concurrent use of alcohol or other CNS depressants with this medication.
Encourage patients who are immobilized or on prolonged bedrest to turn, cough, and breathe deeply every 2 hr to prevent atelectasis.
Home Care Issues: High Alert: Explain to patient and family how and when to administer morphine and how to care for infusion equipment properly.
Emphasize the importance of aggressive prevention of constipation with the use of morphine.

Evaluation of Medication Effectiveness

Decrease in severity of pain without a significant alteration in level of consciousness or respiratory status.

Decrease in symptoms of pulmonary edema.