MORPHINE SULFATE (MS)
(MOR-feen SUL-fayt)

PHARMACOLOGIC CLASSIFICATION:
>   -morphine is the prototype for opiate analgesics

THERAPEUTIC CLASSIFICATION:
>   -narcotic analgesic

INDICATIONS:
>   -severe pain
>   -control of pain associated with MI
>   -treatment to acute pulmonary edema (drug of choice in this category of drugs)
>   -premedication for cardioversion/pacing

MECHANISM OF ACTION:
>   -CNS depressant with analgesic and hemodynamic properties
>   -binds to opioid receptors in the brain
>   -alleviates pain and the perception of pain; causes a euphoria
>   -peripheral vasodilation/venous pooling (increases venous capacity—opens up veins)
>   -decreases peripheral vascular resistance (relieving pulmonary congestion)
>   -causes a reduction in myocardial oxygen requirement
>   -increases smooth muscle tone in GI and decreases peristalsis
>   -decreases sensation of full bladder and desire to void
>   -decreases cardiac work; decreases afterload

EFFECT:
>   -decreases pain, perception of pain, and pain anxiety – analgesic effect
>   -decreases systemic vascular resistance (pools blood) – hemodynamic effect
>   -decreases preload and afterload (takes load off the heart) – hemodynamic effect
>   -decreases myocardial oxygen consumption – hemodynamic effect

CONTRAINDICATIONS:
>   -head injury
>   -altered LOC
>   -hypotension
>   -asthma
>   -COPD
>   -respiratory depression **NOT** caused by pulmonary edema
>   -abdominal pain of unknown origin

INTERACTIONS:
>   -other analgesics and narcotics (potentiates respiratory and CNS depression of other
>   agents)
>   -cimetidine (Tagamet) prolongs the effects of morphine
>   -antidepressants
>   -phenothiazines
>   -Dilantin
>   -sedatives

SIDE EFFECTS:
  -respiratory depression
  -hypotension
  -urinary retention
  -CNS depression—dizziness, fainting
  -bradycardia
  -nausea/vomiting
  -bronchospasm
  -tolerance/dependence

DOSAGE:
  -2-4 mg IV push over 1-5 minutes – may repeat in 5 minutes

SPECIAL INFORMATION:
  -effects reversible with Narcan
  -Benedryl may reverse opioid-induced hypotension refractory to Narcan
  -drug of choice in relieving