

OXYTOCIN
(ox-eh-TOE-sin)
Pitocin

PHARMACOLOGICAL CLASSIFICATION:

-exogenous hormone

THERAPEUTIC CLASSIFICATION:

-lactation stimulant

-oxytocic agent

MECHANISM OF ACTION:

-synthetic compound identical to the natural hormone isolated from the posterior pituitary

-has uterine stimulant, vasopressor, and weak anti-diuretic properties

-stimulates contraction of uterine smooth muscle

-facilitates lactation by stimulating smooth muscle

ONSET OF ACTION:

-IV: immediate

DURATION OF ACTION:

-IV: effects cease 20 minutes after infusion is stopped

INDICATIONS:

-reduction of postpartum bleeding after expulsion of placenta

CONTRAINDICATIONS:

-fetal distress where delivery is not imminent

-prolapsed cord

-placenta previa

-abruptio placentae

-administration prior to delivery of the infant(s)

SIDE EFFECTS:

-arrhythmias (PVC's)

-tachycardia

-hypertension (leading to possible subarachnoid hemorrhage)

-seizures or coma (from water intoxication)

-excessive dosage may cause uterine spasm, tetanic contractions (constant muscle contraction), or uterine rupture

INTERACTIONS:

-concomitant use of sympathomimetics may increase pressor effects, possibly resulting in postpartum HTN and CVA

DOSAGE:

-dilute 10-20 units in 500 or 1000 mL normal saline or D₅W titrated to effect

SPECIAL CONSIDERATIONS:

-never give oxytocin IV undiluted or in high concentrations

-administer by IV infusion **NOT** by IV bolus injection

-have magnesium sulfate available to relax uterus in case of tetanic uterine contractions