

HEPARIN (HEP-ah-rin)

PHARMACOLOGIC CLASSIFICATION:

-anticoagulant

THERAPEUTIC CLASSIFICATION:

-anticoagulant

MECHANISM OF ACTION:

- potentiates the inhibitory action of antithrombin III on various coagulation factors
- increases the rate of formation of antithrombin III-thrombin complex causing inactivation of thrombin and preventing the conversion of fibrinogen to fibrin
- therapeutic doses of heparin prolong thrombin time, whole blood clotting time, activated clotting time, and PTT (partial thromboplastin time)

ONSET OF ACTION:

-IV: immediate

INDICATIONS:

- pulmonary embolism
- deep vein thrombosis
- disseminated intravascular coagulation
- to maintain IV patency (Heparin lock)
- AMI

CONTRAINDICATIONS:

- active bleeding
- blood dyscrasias
- bleeding tendencies (hemophilia, thrombocytopenia—decrease in number of blood platelets)
- intracranial hemorrhages

PRECAUTIONS:

- use with caution in postpartum patients, women during menses, alcoholism, asthma, ulcers
- check patient frequently for bleeding gums, bruises on arms or legs, petechiae, nosebleeds, tarry stools, hematuria or hematemesis

INTERACTIONS:

- use with platelet inhibitors or oral anticoagulants increases anticoagulant effect
- digitalis, tetracyclines, nicotine, or antihistamines may counteract the anticoagulant action of heparin

SIDE EFFECTS:

- hemorrhage (with excessive dosage)
- irritation
- mild pain
- hematoma
- ulceration

DOSAGE:

- general heparin dosage: 10000-20000 Units IV push
- maintenance dose: 8000-10000 units q 8 hours