Fibrinolytic Therapy (Clot Busting)

Fibrinolytic therapy is medication that is used to break up blood clots. Blood clots in the body can cause serious problems. It is usually necessary to try and break up (*dissolve*) these clots before serious damage occurs such as:

- Heart attack (*myocardial infarction*).
- Stroke.
- Blood clots in the lungs (*pulmonary embolism*).
- Blood clots in the legs (*deep vein thrombosis* or *DVT*).

CAUSES

- Blood clots can form due to different reasons such as:
  - Fat deposits in the arteries or veins (*atherosclerosis*).
  - Diabetes.
  - Disease states that cause blood clots.
  - Smoking.
  - Trauma/Burns

DIAGNOSIS

Many different tests can be used to diagnose a blockage in an artery or vein. Some of these may include:

- Ultrasonography: This test diagnoses clots in a vessel by bouncing sound waves off the problem area.
- Arteriography: This test studies arteries by taking x-rays after putting a dye into the problem vessel. The blood clot or blocked area then shows up on the x-ray.
- Venography: This test studies veins by taking x-rays after putting a dye into problem vessels. The blood clot or blocked area then shows up on the x-ray.

TREATMENT

The decision to give fibrinolytic therapy is based upon:

- Symptoms the patient is having.
- Diagnostic test results.
- Patient history.
- Physical exam.

The sooner clot busting medication is given, the better the outcome will be and the less damage will be done. This window of opportunity is a very short amount of time. By dissolving the clot, the blood is able to start flowing again to the damaged or blocked area. For example:

- For heart attacks, thrombolytic therapy should be started within 30 minutes or less of heart attack symptoms.
- For strokes that are caused by a clot, thrombolytic therapy should be started as soon as tests reveal that the stroke is caused by a clot.

FIBRINOLYTIC THERAPY CANNOT BE USED IF:

- A person has had prior bleeding into the brain.
- A known stroke has occurred within the past 3 months.
- The patient has active bleeding.
- The patient has a possible aortic dissection.
- A closed head injury has occurred within the past 3 months.

FIBRINOLYTIC THERAPY IS USED WITH CAUTION FOR THE FOLLOWING:

- A patient has very high blood pressure.
- Recent internal bleeding (within 2-4 weeks).
- Active stomach ulcers.
- Pregnancy.

- A patient is on blood thinner medication such as coumadin or heparin.

COMPLICATIONS OF FIBRINOLYTIC THERAPY

- Bleeding (*hemorrhage*) is the most common risk associated with clot-busting medications.
- Allergic reactions.
- Bleeding into the brain (*Intracerebral hemorrhage*).

SEEK IMMEDIATE MEDICAL CARE IF:

- You throw up or cough up blood.
- You have blood in bowel movements or your bowel movements have a coffee ground appearance.
- You have blood in your urine or your urine is pink colored.
- You have large amounts of bruising on your skin.
- You have a severe headache that does not go away.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

Document Released: 03/09/2005 Document Re-Released: 03/16/2010
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