

Procedures/Diagnostic tests: Interventional radiology

Thrombolytic Therapy

This information will inform you and your family about a clinical trial procedure called “thrombolytic therapy.” This procedure “de-clots” clotted parts in your veins. This procedure is done using a combination of fluoroscopy x ray and ultrasound.

What is thrombolytic therapy?

During the procedure, the radiologist threads small spaghetti-like wires and catheters into the clotted veins. The radiologist then places an “anti-clot” medication (“tPA” tissue plasminogen activator) directly into the clotted veins. tPA is commonly used to prevent acute damage from strokes and heart attacks. The tPA lyses (chews up) the clot and so that blood flows normally.

Why would I need thrombolytic therapy?

Thrombolytic therapy may be done when you have been recently diagnosed with deep vein thrombosis (DVT). You will usually get this therapy, within 14 days of diagnosis of DVT.

The interventional radiologist will discuss the risks and benefits of the procedure. Any procedure may involve some risks, but your health care team feels the potential benefits outweigh the risks.

Who will give me thrombolytic therapy?

An interventional radiologist will give you thrombolytic therapy along with a team including interventional radiology nurses and technologists.

What should I do before the procedure?

- You will have a history and physical (H & P) no more than 30 days before the procedure.
- Blood work (CBC, acute care panel, coagulation studies) will be needed before the procedure.
- *Please do not eat or drink after midnight. You may be able to take some regular medications with a sip of water (such as blood pressure, heart, or pain medicine).*
- Arrive in Interventional Radiology dressed in a hospital gown and without personal belongings.

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- If you are allergic to I.V. contrast you may be able to receive it safely if you get medications starting 13 hours before the procedure.
 - *Note: If you take a diabetes medication that contains Metformin, you should not take it for 48 hours after the procedure. A BUN/creatinine test should be evaluated BEFORE restarting this medication.*

Preparation

- The radiologist will discuss the procedure with you and answer your questions. When you understand what will happen, we will ask you to sign a consent form to do the procedure. Often our patients have thrombolytic therapy repeated once or twice.
- You will be positioned on the x ray table so that the interventional radiologist has access to the sites needed for access to your clotted veins.
- An I.V. line will be started (unless you already have one). Depending upon the location of your clot, an I.V. line may also be placed in your foot.
- A nurse or technologist will apply vital sign monitors (blood pressure cuff, EKG, oxygen saturation finger glove, nasal cannula, oxygen tubing).
- Any procedure where the skin is broken has a risk of infection or bleeding. To decrease the risk of infection we clean the access site(s), with antiseptic soap (povidone iodine or chlorhexidine). Please do not touch the cleansed areas of your skin. Your jugular neck vein, groin vein, arm vein, foot vein, or other veins may be accessed depending on the location of your clots.

Procedure

- You may receive either local anesthesia, I.V. sedation, or both.
- You may be awake and aware, or you may doze if you get sedation. Our goal is to make you comfortable.
- The procedure may last 4 hours or more. This will depend on how much clot you have. and how hard it is for the doctor to thread small catheters and wires into the clot and spray the area with tPA.
- Your vital signs are checked often throughout the procedure
- The radiologist uses ultrasound and fluoroscopy to help locate the clots. Contrast dye will help the radiologist see the network of your veins.

After the procedure

- You will be returned to your room.
- Usually, the I.V. fluid started by the staff in Interventional Radiology will continue.
- You will be given an anticoagulant (blood thinner). We often put intravenous heparin directly into the de-clotted vein. This reduces the risk of more clotting.

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- Drink plenty of fluids to rid your body of I.V. contrast dye.
 - You will rest in bed, typically for 2 hours after the procedure.. After 2 hours, we encourage you to walk.
 - While you are in the hospital, you will wear elastic stockings and sequential compression devices (special devices that deliver pressure) whenever you are not walking.
 - If you were sedated, you may feel drowsy or sleepy after the procedure.
 - Resume your regular diet, unless otherwise directed.

After the procedure:

- Wear specially fitted elastic hose.
- Walk up to 5 miles a day as directed by the interventional radiologist.
- You will receive an anticoagulant to take by mouth when you are home.
- You will need to have your blood drawn from time to time to track your coagulation levels.

If you have questions or concerns about the procedure, please contact us at 301-402-0256.

Special instructions

- You will need to return to the Clinical Center several times so that the interventional radiologist can follow your progress.
- For urgent concerns, please call your primary care doctor or contact the local emergency room.

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Questions about the Clinical Center?
<http://www.cc.nih.gov/comments.shtml>

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