

## What is a venous thrombosis?

A venous thrombosis is a blood clot that forms in one of the large veins of the body. It is also known as a deep vein thrombosis (DVT).

- Veins carry blood in the body back to the heart.
- When blood turns from a liquid to a solid, it forms a blood clot. Blood clots are meant to stop bleeding. They can happen in many areas of the body including your skin and blood vessels.
- Sometimes, blood clots form in places they are not supposed to form. This is called a thrombosis.
- DVTs most often happen in large veins in the arms or legs. They can also happen in veins in the head, neck and lungs, or even in small veins.

## What causes a venous thrombosis?

Common causes and risk factors for blood clots include:

- Burns
- Cancer
- Central venous access device, also called a CVAD or central line. It is a special type of I.V. with the end laying near the heart in one of the body's large veins.
- Chemotherapy (chemo) medicines
- Dehydration
- Diabetic ketoacidosis (DKA)
- Heart disease
- Genetic conditions
- Lack of movement, such as from a broken bone or complete bed rest
- Infections, such as MRSA and MSSA (methicillin-resistant staphylococcus aureus and methicillin-sensitive staphylococcus aureus)
- Inflammation (a reaction in the body caused by infection or diseases, such as lupus or Crohn's disease)
- Kidney problems
- Obesity (being very overweight)
- Pregnancy or oral birth control use
- Being born early or premature – the risk is from birth and up to about 1 year of age.
- Sickle cell disease
- Smoking
- Trauma, such as spinal cord injuries

**In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.**

# Venous thrombosis, continued

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## What are symptoms of a venous thrombosis?

Your child may not have any symptoms. If they do, symptoms most often happen in the affected arm or leg and may include:

- Swelling
- Pain
- Tenderness
- Increased warmth
- Redness or discolored skin
- A hard area or knot
- Headache (if the blood clot is in the brain)
- Seizures (if the blood clot is in the brain)

## What tests could my child have?

The doctor will check your child and decide what tests they need. Tests may include:

- A physical exam.
- Blood tests.
- Doppler ultrasound. Ultrasound uses sound waves to make special pictures of the arteries and veins. It checks blood flow and helps to find blood clots.
- Magnetic resonance imaging (MRI). MRI is a test that uses a large magnet, radio waves and a computer to make pictures of the inside of your child's body.
- Magnetic resonance with venogram (MRV). MRV is a type of MRI that uses magnets and radio waves to make pictures of blood vessels.
- Computed tomography (CT scan). CT is a test that uses X-rays to make a set of pictures that show the inside of your child's body.
- Venogram. A venogram is a type of X-ray. Contrast (dye) is put into your child's vein to show how the blood is flowing in the vein.

## What is the treatment for a venous thrombosis?

There are 2 types of medicines used to treat a venous thrombosis: blood thinners and thrombolytics. Bleeding is the main side effect of these medicines. The doctor will talk with you about how long your child will need to take this medicine.

**Blood thinners** are medicines that keep clots from growing and spreading. They do not dissolve clots that are already there. With this medicine:

- Your child's body will try to naturally dissolve the blood clot over several weeks to months.
- There is a chance the blood clot may not dissolve, even with taking the blood thinners.
- The body might also form a new path for blood to move through.

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# Venous thrombosis, continued

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**Thrombolytics** are medicines that break up the blood clot. A common thrombolytic medicine is called tPA. Thrombolytics are:

- Used for clots that may threaten your child's life.
- Used for clots that may cause the loss of a part of your child's body.
- Only used for very severe forms of blood clots that are life, limb or organ threatening because of increased risk of bleeding while getting this medicine.

## When should I call the doctor?

Call your child's doctor if your child has any of these:

- New chest pain or trouble breathing
- Swelling of an arm or leg
- Increased pain in the arm or leg with the blood clot
- Bleeding that does not stop
- More bruising than normal

Also call if you have any questions or concerns about how your child looks or feels.

## When should I call 911?

Call 911 or go to the closest emergency department (ED) **right away** if your child has any of these:

- Shortness of breath
- Chest pain
- Difficulty breathing
- Not acting like their usual self
- Severe headache
- Seizures

## Does my child need follow-up care?

Talk with your child's doctor about specific care for your child. The doctor may advise that your child follow up with our Thrombosis team. For more details, visit [choa.org/Childrens-Hospital-Services/Cancer-and-Blood-Disorders/Programs/Bleeding-and-Clotting-Disorders](http://choa.org/Childrens-Hospital-Services/Cancer-and-Blood-Disorders/Programs/Bleeding-and-Clotting-Disorders).

**At time of discharge to home, you will be given details about which doctor/clinic will follow your child for the treatment of the blood clot. Talk with your child's care team if you have questions.**

**This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.**

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