

What is Embolization?

Embolization is a way to control blood flow through a blood vessel. It is done by putting a special substance called an embolic into the blood vessel. The embolic can be made of coils, particles, special glue or ethanol medicine. The substance is put in through a tiny tube called a catheter.

Why is it done?

Embolization is used to control bleeding and to treat vascular malformations, like Arteriovenous Malformations (AVM's). It can also be used to treat aneurysms, which are weakened areas of the blood vessel or blood clots.

How is it done?

1. An IV will be started. Your child will get anesthesia to make them sleepy.
2. It is important that your child has an empty stomach on the morning of surgery. If the stomach is not empty, food or drink can get into the lungs when anesthesia is given. This is called aspiration and could be very dangerous. The imaging nurse will let you know when your child should stop eating and drinking, or getting tube feedings. Your child's procedure may be cancelled if these instructions are not followed.
3. The Interventional Radiologist puts a small needle into an artery or vein.
4. The needle is removed and a catheter is left behind. The catheter is a small tube which is put into the blood vessel to be controlled.
5. A solution called contrast is put into the catheter. This is used to see the blood vessels clearly on a special x-ray called fluoroscopy.
6. The embolic material is injected through the catheter to control the blood vessel.
7. The doctor will look at the x-ray again to check that the blood vessel is controlled.
8. The catheter is removed and a dressing is put on the area.

How long does it take?

The procedure may take four hours or more. After it is over, your child is taken to the recovery room. They will get fluids in their IV and pain medicine, if needed. The Interventional Radiologist will talk with you during the recovery period to explain the findings and results. Your child may need to stay overnight to be watched.

What care is needed after the procedure?

Days 1 and 2:

- Do not let your child do any physical activities. They should not child do any sports, running or lift heavy objects.
- Give your child medicine as ordered for pain and swelling. Ice can also be used to help with swelling.
- If possible, raise the treated area above the level of the heart.
- Look at the groin dressing daily. If it is dry leave it on for 2 days. If it is wet, change the dressing. Put antibiotic ointment on any puncture sites.
- Check the site daily to make sure there is no bleeding, swelling, redness or pain.

Day 3:

- Take off the dressing. Your child may shower daily, but **do not** let the procedure sites go under water or get soaked. They may not go in a bath or pool for 1 week after the procedure

Days 4 and 5:

- Watch the skin for other changes like more redness, skin breakdown or drainage. The treated area may look bruised.
- Give anti-inflammatory medicines, like ibuprofen, for pain and swelling. Give it with food every 6 hours, while your child is awake. Let your doctor or nurse know if the pain is not helped by this medicine.

Other teaching sheets that may be helpful

- #1018 Nothing by Mouth

ALERT: Call your child's doctor, nurse, or clinic if you have any concerns or if your child:

- Has a fever.
- Has changes at the site. The site is red, warm, swollen, tender, or has drainage.
- Starts to vomit or cannot keep fluids down.
- Is too sleep and you have trouble waking them.
- Has special health care needs not covered by this information.

This sheet was created to help you care for your child or family member. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment and follow-up.