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PATIENT & CAREGIVER EDUCATION

# About Your Ophthalmic Artery Chemosurgery for Pediatric Patients

This information describes what to expect during and after your child's ophthalmic (op-thal-mik) artery chemosurgery (OAC).

The retinoblastoma team at Memorial Sloan Kettering (MSK) has recommended ophthalmic artery chemosurgery (OAC) to treat your child's retinoblastoma (cancer of the eye). OAC is a procedure used to treat tumors in the eye(s). For this procedure, chemotherapy is injected directly into your child's ophthalmic artery (a blood vessel in the eye). This is done in an outpatient setting, which means that your child won't have to be admitted to the hospital.

This procedure will be done at New York-Presbyterian Weill Cornell Hospital. The procedure will be performed by an interventional radiologist (a doctor who specializes in image-guided procedures).

Your child will need to stop eating and drinking before their procedure. The Weill-Cornell staff will give you information on

when your child should stop eating and drinking.

## **About Your Child's Procedure**

Your child will be given general anesthesia (medication to make them sleep). Once they're asleep, they may have an intravenous (IV) line inserted. A tiny catheter (a small, flexible tube thinner than angel hair pasta) will be inserted into 1 of your child's femoral arteries (blood vessels in your upper leg). It will be threaded through the arteries in their body to their ophthalmic artery (see Figure 1).

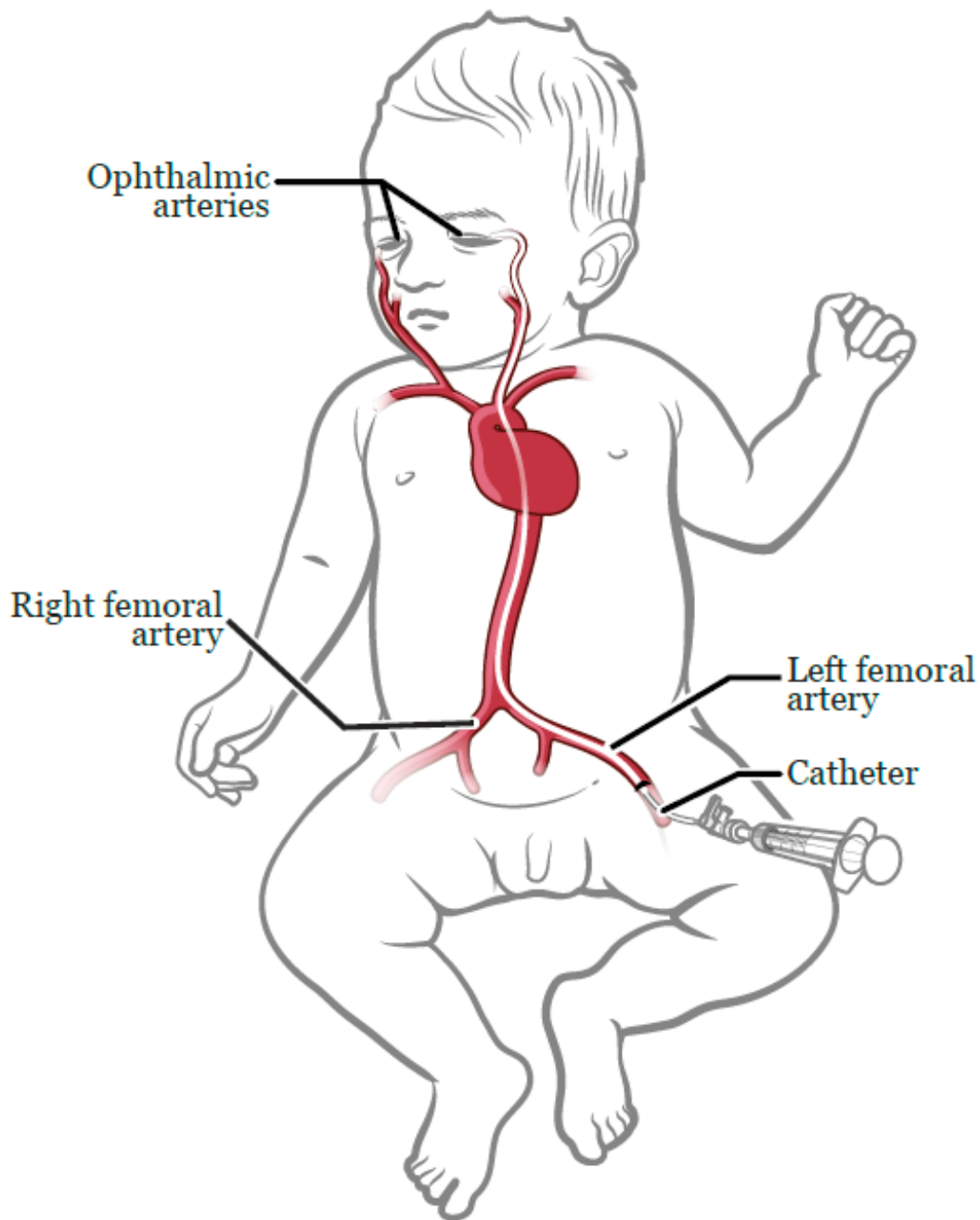


Figure 1. Inserting the catheter through the femoral artery into the ophthalmic artery

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Tiny drops (about  $\frac{1}{5}$  of a teaspoon) of chemotherapy will be placed into the catheter and will go into the eye(s) that needs to be treated. Depending on the size and features of your child's retinoblastoma, they may get 1 to 3 of the following chemotherapy medications:

- Melphalan (Alkeran<sup>®</sup>, Evomela<sup>®</sup>)
- Topotecan (Hycamtin<sup>®</sup>)
- Carboplatin (Paraplatin)

After the chemotherapy is injected, the catheter will be taken out, and a large bandage will be placed on the insertion site on your child's upper leg. The nurse will also put a knee brace on your child to keep their leg straight. This will help them avoid bleeding.

This procedure takes about 60 to 90 minutes.

## **After Your Child's Procedure**

- When your child wakes up, they will be in the Post Anesthesia Care Unit (PACU). This is the recovery room. They will spend at least 5 hours in the PACU.
- While your child is in the PACU, their nurse will check their upper leg and take their pulse on their foot.
- The nurse will let you know when your child can start drinking and eating again.
- The knee brace will be taken off once your child is ready to be discharged (leave the hospital).
- Make sure your child's bandage stays on for 24 hours (1 day). Don't get the bandage wet.

## Medications

- The doctor or nurse practitioner may prescribe your child a steroid to take by mouth called Dexamethasone Intensol. It will help reduce the swelling and irritation in their treated eye(s). Have your child take this medication with food to prevent stomach discomfort, as instructed by their doctor or nurse.
- Your child may be prescribed ondansetron (Zofran<sup>®</sup>, Zuplenz<sup>®</sup>) for nausea (feeling like you might throw up) or vomiting (throwing up). Have your child take this medication as instructed by their doctor or nurse.
- Your child may also be prescribed tobramycin and dexamethasone (TobraDex<sup>®</sup>) eye ointment. This medication is a combination of an antibiotic and steroid. It's used to reduce swelling and prevent infection in their treated eye(s). Give this medication to your child as instructed by their doctor or nurse.

## Side effects

Your child may have some side effects after their procedure.

These include:

- Nausea
- Vomiting
- Redness, swelling, or bruising in their upper leg

- Swelling in their treated eye(s). This can make it hard for your child to open their eye(s).
- Mild discomfort in their treated eye(s)

These side effects will improve 2 to 3 days after your child's procedure. Some swelling can last for up to 2 weeks.

Your child may also have some side effects that start 1 to 2 weeks after their procedure. These can include:

- Loss of eyelashes in their treated eye(s).
- A decrease in their white blood cell count, also called neutropenia. This can increase your child's risk for infection.
  - For more information on neutropenia, read the resource *Neutropenia (Low White Blood Cell Count)* ([www.mskcc.org/pe/neutropenia](http://www.mskcc.org/pe/neutropenia)).
- Redness above the eyebrow and forehead of their treated eye(s) that may last many weeks.

## Follow-Up

Your child will need to have their blood drawn 10 days after their procedure. You or your healthcare provider will need to fax these results to Weill-Cornell at 212-746-6653 and MSK at 646-227-7275.

## Call Your Child's Healthcare Provider if They

## Have:

- Redness or swelling in their treated eye(s) that lasts more than 2 weeks
- Increased redness, swelling, or pain in their upper leg
- Nausea or vomiting that lasts longer than 2 to 3 days
- Trouble keeping down their prescribed medications because of vomiting
- A fever of 100.4° F (38° C) or higher
- Pain in their treated eye(s) that lasts more than a few days

## Contact Information

If you have any questions or concerns about your child's prescriptions or their procedure, call Weill Cornell. You can reach them Monday through Friday from 9:00 AM to 5:00 PM at 212-746-4998. After 5:00 PM, during the weekend and on holidays, call the office and ask to speak with the doctor on call.

For all other questions, call the MSK Retinoblastoma Clinic. You can reach them Monday through Friday from 9:00 AM to 5:00 PM at 212-639-7232. After 5:00 PM, during the weekend and on holidays, call 212-639-2000 and ask to speak with the ophthalmologist (eye doctor) or pediatric fellow on call.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

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