



PATIENT & CAREGIVER EDUCATION

Regional Anesthesia to Your Breast, Armpit, or Chest Wall

This information explains the types of regional anesthesia that may be used to manage your pain after surgery to your breast, armpit, or chest wall.

Types of Anesthesia

Anesthesia is medication to keep you from feeling pain during your surgery, after your surgery, or both. There are 3 main types of anesthesia:

- **Local anesthesia** numbs a small part of your body, such as when you get a cavity filled at the dentist. Local anesthesia is given as an injection (shot) or a cream. You're awake and alert the entire time.
- **Regional anesthesia**, also known as a regional block or nerve block, numbs a larger part of your body. Regional blocks are given as an injection. You can have a regional block along with a sedative (medication that relaxes you), general anesthesia, or both.

- **General anesthesia** makes you sleep so you don't feel or remember anything. It can be given intravenously (through a vein), or you can inhale (breathe in) the medication.

About regional blocks

On the day of your surgery, your anesthesiologist (doctor who specializes in anesthesia) may recommend that you have a regional block. Depending on your needs, medical history, and the type of surgery you're having, they may recommend 1 or more of the regional blocks below:

- A **thoracic paravertebral nerve block (TPVB)** numbs the nerves in your chest area. It can help with pain after surgery in your breast or chest wall.
- A **pectoralis nerve block (PECS)** numbs the nerves in your chest and armpit area. It can help with pain after surgery in your breast, armpit, or chest wall.
- A **serratus plane block** numbs the nerves in your chest and armpit area. It can help with pain after surgery in your breast, armpit, or chest wall.

Having a regional block may help you need fewer pain medications and have less nausea (feeling like you're going to throw up) and vomiting (throwing up) after surgery.

You may not be able to have a regional block if you're taking blood thinners, have an infection at the site of the block, or if you're allergic to local anesthesia. You can have a regional block if you've had surgery on your spine, but tell your anesthesiologist that you had this surgery.

What to Expect During Your Regional Block Procedure

Your regional block procedure will be done in the pre-surgical center before your surgery. You'll be awake during the procedure.

You'll be attached to equipment to monitor your heart rate, breathing, and blood pressure. You'll also get oxygen through a thin tube that rests below your nose called a nasal cannula. Your anesthesiologist and nurse will ask you to state your name, date of birth, and the procedure you're having. This is for your safety. People with the same or a similar name may be having this procedure on the same day.

Positioning

You'll need to be in a certain position for your regional block procedure. This is so your anesthesiologist can inject the medication so it numbs the right area. The place where your anesthesiologist will inject the

medication is called the target area.

If you're getting a TPVB, your anesthesiologist will inject the medication into a target area in your back. If you're getting a PECS or serratus plane block, they'll inject the medication into a target area in the front of your chest, side of your chest, or both.

The target area will be on the side of your body where you're having surgery. Depending on exactly where it is, you may be:

- Lying on your stomach with one of your arms gently hanging off your bed.
- Sitting up with your head down and chin to your chest.
- Lying on your side with your arm draped across your body.
- Lying on your back.

Your healthcare team will help you get into the right position.

Injecting the medication

Once you're in the right position, your anesthesiologist will inject a sedative into your intravenous (IV) catheter. You may start to feel sleepy and fall asleep. Then, they'll

inject local anesthesia to numb the skin above the target area. This injection may burn or sting. This is normal.

Next, your anesthesiologist will put the needle for your regional block into the target area. They'll use an ultrasound scan to watch the needle and make sure it's in the right place. Once they're sure the needle is in the right place, they'll inject the regional block medication. You may feel some pressure in your back or chest during the injection. This is normal and will stop once the injection is done.

If your surgery will be on both sides of your chest or both of your armpits, your anesthesiologist will do the same thing on the other side of your back or chest.

This procedure takes about 30 minutes. The exact time depends on if you're having it on one or both sides of your body.

What to Expect After Your Regional Block Procedure

After your regional block procedure, you'll still get general anesthesia and will be asleep for your surgery.

A regional block can last for about 12 to 18 hours.

Risks of Regional Blocks to Your Breast, Armpit, or Chest Wall

There are some risks to having a regional block to the chest wall. These include:

- Bleeding from the injection site.
- Getting an infection.
- The block not working.
- The medication being injected into a blood vessel. If this happens, you may have symptoms such as low blood pressure, seizures (uncontrollable shaking), or abnormal heart rhythms.

Regional blocks also have other, more serious risks. These serious risks happen to very few people. They include:

- The medication being injected too close to your spinal cord. If this happens, you'll feel numb from the chest down. The numbness will go away with time.
- Your nerve(s) being irritated or injured.
- The needle going into your chest cavity. This may cause air to enter your chest. This is called a pneumothorax. If this happens, you may need to have a small chest tube placed to remove the air.

If any of these things happen, your anesthesiologist and healthcare team will manage and treat them.

Contact Information

If you have any questions or concerns about regional blocks, talk with a member of your healthcare team. You can reach them Monday through Friday from 8:30 a.m. to 4:30 p.m. at 646-888-7067. After 4:30 p.m. and on weekends, call 212-639-2000 and ask to speak to the anesthesia provider on call.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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