# Coronary Artery Bypass Graft Surgery (CABG)

## What is coronary artery bypass graft surgery?

Coronary artery bypass graft surgery (CABG) is surgery to improve blood flow when one or more of the arteries that supplies blood to the heart muscle (called coronary arteries) are narrowed or blocked. A blood vessel from another part of your body, called a graft, will be used to make a detour for blood to flow through. One end of the graft will be stitched above the blockage in the heart artery. The other end will be stitched below the blockage. This will allow blood to bypass the blockage and get to where it is needed to provide oxygen-rich blood to the heart muscle.

The most common graft is done using an internal mammary artery, a blood vessel found in the chest wall. This artery is close to the bypass site and has a good blood supply, so it only needs to be sewn to the blocked coronary artery below the blockage. Other graft vessels include the radial artery in the arm or the saphenous vein in the leg.

## How is a coronary artery bypass graft done?

#### Before the procedure:

- Your healthcare provider will ask you to sign a consent form for CABG. The consent form will state the reason you are having the CABG, what happens during the CABG, and what you may expect afterward.
- Tell your healthcare provider if you are allergic to any medicines.
- Tell your healthcare provider if you are taking any medicines, including nonprescription drugs, herbal remedies, or illegal drugs (if any).
- You will have a small tube (IV catheter) inserted into a vein in your hand or arm. This will allow for medicine to be given directly into your blood and to give you fluids, if needed.

#### During the procedure:

- You will be given a sedative, which will help you to relax. This is usually given in your vein (IV).
- You will be given medicines to prevent pain during your surgery. These will
  include general anesthesia, which relaxes your muscles and puts you to sleep.
  A breathing tube is usually put in your throat when you have general
  anesthesia.
- You will have a small tube (catheter) placed into your bladder through the urethra (the opening from the bladder to the outside of the body) to drain and measure urine from the bladder.
- Your surgeon will make a cut in your chest and separate your sternum, or breastbone.
- A heart-lung machine will take over the work of moving oxygen-rich blood to your body during the operation.
- For the graft:

- If the graft blood vessel is an internal mammary artery from the chest, your provider will cut the lower end of the artery and sew it into the coronary artery below the blockage.
- · If the graft blood vessel is the radial artery or saphenous vein:
  - Your provider will make a cut in the skin of the arm or leg and remove a
    part of the vessel that will be used as the graft. The cut will be closed
    with stitches.
  - The graft blood vessel ends are sewn into the areas above and below the blockage.
- The cut in your chest will be closed by wiring together your sternum or breastbone and then closing the skin with stitches.
- Temporary drains or tubes will be put in the chest so blood and fluid can drain and to help your lungs expand.

#### After the procedure:

- You will be checked often by nursing staff.
- There will be a dressing on your chest where the cut was made and where there are any drainage tubes. The dressing will be checked and changed by your provider or the nursing staff as needed.
- · Your provider may prescribe medicine to:
  - · Treat pain
  - Treat or prevent an infection
  - · Prevent side effects, such as nausea or constipation, from other treatments
  - · Relax and widen blood vessels and allow blood to flow through them easier
  - · Help prevent blood clots
  - · Slow the heart rate and reduce the workload of the heart
  - Control cholesterol levels
  - · Reduce fluid build-up and swelling in the body
- Your blood oxygen level will be monitored by a sensor that is attached to your finger or earlobe.
- · A cardiac (heart) monitor will be used to keep track of your heartbeat.
- · Drains will be checked and emptied regularly.

## What can I do to help?

- · You will need to tell your healthcare team if you have new or worsening:
  - · Chest discomfort (pressure, fullness, squeezing or pain) that lasts more than a few minutes or goes away and comes back, or chest discomfort that goes to your arms, neck, jaw or back
  - Dizziness
  - Unusual bruising or bleeding
  - · Increased pain at the site of surgery
  - · Irregular, fast, or slow heartbeat

- · Signs of infection around your surgical wound. These include:
  - The area around your wound is more red or painful
  - The wound area is very warm to touch
  - · You have blood, pus, or other fluid coming from your wound area
  - · You have chills or muscle aches
- · Swelling of your legs, ankles, or feet
- · Trouble breathing
- Ask questions about any medicine, treatment, or information that you do not understand.

### How long will I be in the hospital?

How long you stay in the hospital depends on many factors. The average amount of time to stay in the hospital after CABG is 7 to 9 days.

You may need to go to a rehab facility to continue your cardiac rehab program before going home.

Developed by RelayHealth.

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