



Beth Israel Deaconess
Medical Center



A teaching hospital of
Harvard Medical School

Cardiac Surgery Pre-operative Instructions

Before your heart surgery you will receive extensive education by the doctors, nurse practitioners, physician assistants, and nurses about how to prepare for surgery. You will be given written instructions from our nurses and receive verbal instructions from the cardiac surgery office.

If you have any questions or concerns please do not hesitate to call your surgeon's office at 617-632-8383.

GETTING READY FOR SURGERY

- 1) **Follow the instructions carefully.** If you are coming in from home on the day of your operation, there are some things you'll need to do to prepare. Please follow these instructions carefully. This will help make sure things go as smoothly as possible. If you are already in the hospital waiting for your surgery, your nurse will take care of all of this for you.
- 2) **Do not smoke.** Please do not smoke. If you smoke, make sure that your surgeon is aware. You will be asked to stop smoking permanently at least one week prior to surgery.
- 3) **Nurse Case Manager.** Some people find it helpful to talk with a nurse case manager before surgery. A case manager is someone who can help you think about what your needs might be following surgery, and talk with you about making appropriate plans for your discharge and recovery. Please call our office to find out more.

THE DAY BEFORE SURGERY

A nurse from our office will call you late in the day. Someone from our office will call you the evening before your surgery to let you know what time to arrive at the hospital in the morning. We often do not know the final operating room schedule until the evening before. Please be advised that your surgery may be postponed if an emergent patient needs to go first.

THE NIGHT BEFORE SURGERY

- 1) **Pre-operative scrub.** Before surgery you can play an important part in your health. Because skin is not sterile, we need to be sure that your skin is as free of germs as possible before surgery. You can reduce the number of germs on your skin by carefully washing before surgery. You will need to shower with the special antiseptic soap called **chlorhexadine gluconate (CHG)** given to you in pre-admission testing or by the nurse in the hospital.
 - a) Wash and rinse your hair first using your normal shampoo.
 - b) Make sure you completely rinse the shampoo from your hair and body.
 - c) Wet your entire body.
 - d) Turn the water off in the shower or move away from the water spray to avoid rinsing the antiseptic soap solution off.
 - e) Apply the antiseptic CHG soap solution to your body starting at the neck and lather your entire body from the neck down.
 - f) Never use the antiseptic solution near your eyes, ears or mouth.
 - g) Gently wash your body.
 - h) Scrub the areas where the incision(s) will be located for about 3 minutes.
 - i) Avoid scrubbing your skin too hard.
 - j) Once you have completed the scrub, rinse the CHG soap off your body completely using shower water.
 - k) **Do not** wash with regular soap after you have used the antiseptic CHG soap solution.
 - l) Do not shave any areas where surgery will be performed (chest, legs).
 - m) Pat yourself dry with a clean freshly washed towel.
 - n) **Do not** apply any powders, deodorants or lotions.
 - o) Dress with clean, freshly washed clothes.
- 2) **Do not eat or drink anything after midnight.**

THE DAY OF SURGERY

1) **Pre-operative scrub.** Shower again using the antiseptic CHG soap solution following “The Night Before Surgery” pre-operative scrub procedure above. Do not use regular soap.

2) Pre-Surgery Do's:

a. Keep your stomach empty. Do not eat any food, including mints, gum or candy, or drink any liquids. This is for your safety.

b. Brush your teeth. You may brush your teeth or use mouthwash without swallowing.

c. **Only take medications you were instructed to with a very small sip of water.** You should have been given instructions as to which medications to take in the morning prior to your surgery.

- **Please take your aspirin and beta-blocker if you have been prescribed one.** Beta-blockers include medications such as atenolol (Tenormin), labetalol, metoprolol (Toprol, Lopressor), nadolol.
- **Do not take any diuretics.** Diuretics include medications such as Lasix (Furosemide) and hydrochlorothiazide, and are also in combination medicines like Quinapril-HCT.
- **Do not take any ACE-Inhibitors.** ACE-Inhibitors include medications such as lisinopril, captopril and enalapril and are also in combination medicines like Captopril-HCT.
- **If you take coumadin or plavix, you should have received instructions** as to if and when to stop these medications. If you didn't please call.
- **If you are DIABETIC:**
 - If you take oral agents (pills for diabetes), DO NOT take them the day of surgery.
 - If you take Metformin, stop it 2 days prior to surgery.
 - If you take NPH insulin, take ½ of your normal dose the morning of surgery.
 - If you take Lantus/Glargine insulin, take your normal dose up until the time of surgery.
 - If on an insulin pump, do not change the basal rate.

- d. **Leave your personal belongings at home.** Your family may bring you a small suitcase the day after surgery. Please do not bring more than toilet articles (toothbrush, comb, etc.), your slippers and a robe. If you wear glasses, contact lenses, or dentures, you may wear them to the hospital, but please send them home with your family before you go to the preoperative area.
- e. **Leave jewelry and valuables at home.** Please leave all jewelry and valuables, including wedding rings, at home. Your hands and fingers will become swollen during and after surgery. When rings are left on, they can interfere with circulation and may have to be cut off.

3) Pre-Surgery Don'ts:

- a. **Do not eat food or drink liquids.** Do not eat any food, including mints, gum or candy, or drink any liquids.
- b. **Do not wear make-up or nail polish.** Do not wear any make-up, nail polish, or toenail polish.
- c. **Do not bring personal or valuable items.** Please leave your personal belongings and valuables at home. Please do not bring more than toilet articles (toothbrush, comb, etc.), your slippers, and a robe. If you wear glasses, contact lenses, or dentures, you may wear them to the hospital, but please send them home with your family before you go to the preoperative area.
- d. **Do not wear jewelry.** Please leave all jewelry, including wedding rings, at home. Your hands and fingers will become swollen during and after surgery. When rings are left on, they can interfere with circulation and may have to be cut off.

Going to the Hospital

- 1) **Parking.** The most convenient option for parking is the Pilgrim Road Garage. The garage is open 24 hours a day. The entrance is located on Crossover Street and can be accessed off of Pilgrim Road or Autumn Street.
- 2) **Report to the Reception Desk.** Please report to the reception desk in the West Campus Clinical Center (1 Deaconess Rd) lobby to check in.

Surgery

- 1) **Preoperative Area.** You will be taken to a preoperative area from the reception desk. One family member or friend may come with you.
- 2) **Preparation Area.** You will then be brought to another preparation area in the operating room suite. The nurse can show your family where to wait during your surgery or, if they prefer, they may wait at home. Either way,

the surgeon will call or speak with them when the surgery is over. In the preparation area, someone may clip the hair around the area of the surgery. Also, intravenous (IV) lines and other lines that are used during surgery will be inserted.

- 3) **Operating Room.** You will then be brought to the operating room, and the anesthesiologist will give you your anesthesia through the IV line. You will fall asleep quickly and will not be able to hear or feel anything during your surgery. After you are asleep, a breathing tube will be placed in your windpipe, and a catheter will be placed in your bladder. Your surgery will then begin. Surgery usually takes about four to six hours.
- 4) **Surgical Liaison Service.** While you are in surgery, your family can receive general information from the Surgical Liaison Service, Monday through Friday, 9 am to 8 pm. To reach someone from this service, please call 617-632-8593 and ask for beeper #92470. A nurse from the surgical team will also provide periodic updates to your family spokesperson.

Medications

- 1) **Only take medications you were instructed to with a very small sip of water.** You should have been given instructions as to which medications to take in the morning prior to your surgery.
- 2) **Please take your aspirin and beta-blocker if you have been prescribed one.** Beta-blockers include medications such as atenolol (Tenormin), labetalol, metoprolol (Toprol, Lopressor), nadolol.
- 3) **Do not take any diuretics.** Diuretics include medications such as Lasix (Furosemide) and hydrochlorothiazide, and are also in combination medicines like Quinapril-HCT.
- 4) **Do not take any ACE-Inhibitors.** ACE-Inhibitors include medications such as lisinopril, captopril and enalapril and are also in combination medicines like Captopril-HCT.
- 5) **If you take coumadin or plavix, you should have received instructions as to if and when to stop these medications.** If you didn't please call.
- 6) **If you are DIABETIC:**
 - If you take oral agents (pills for diabetes), DO NOT take them the day of surgery.
 - If you take Metformin, stop it 2 days prior to surgery.
 - If you take NPH insulin, take ½ of your normal dose the morning of surgery.
 - If you take Lantus/Glarginine insulin, take your normal dose up until the time of surgery.
 - If on an insulin pump, do not change the basal rate.

When To Call Your Doctor

- 1) **Feel ill or have a fever.** If you should feel ill or have a fever within 48 hours of surgery, please notify us immediately.
- 2) **Symptoms get worse.** Call your surgeon if any of your symptoms (such as chest pain or shortness of breath) get worse in the weeks before your surgery.
- 3) **Questions or concerns.** For any questions or concerns, please feel free to contact us at the Cardiac Surgery Office - 617-632-8383.



What to Expect After Cardiac Surgery

Carefully Watched

Several hours after your surgery, you will begin to wake up. You may see several people around your bed. This is routine. Many patients feel confused and anxious when they first wake up. Try to remember that you are never left alone in CVICU and you are being watched very carefully.

- 1) **Visiting hours.** Because of the special needs of patients who have had cardiac surgery, visiting hours must be restricted in the CVICU. In general, one or two close family members may visit between noon and 8 pm. Visits should last about five minutes. The nursing staff in the CSRU may alter these guidelines depending on your condition.
- 2) **Designated family spokesman.** We understand how important it is for your family to receive information about your condition. We do ask that families designate one person to be the main spokesperson for the family. The staff will be in close contact with this person, who can relay information as needed to the rest of your family and friends.

Connected to Equipment

- 1) **Breathing tube.** When you first wake up, the breathing tube that was put in during surgery will still be in your throat. Your lungs need help until all the anesthetic has worn off. You will not be able to speak while the tube is in place. However, the nurses are experts at communicating with patients who cannot speak. They are very skilled at finding out what you need. After the tube is taken out, you will be a little hoarse and you may have a sore throat for a short time. This is normal.
- 2) **Heart Monitor, IV Lines and Tubes:**
 - a. In the CVICU, you will be connected to a monitor that shows your heart rate and rhythm.
 - b. The IV lines put in before your surgery will still be in place.
 - c. A large IV line in your neck allows the nurses to give you medication and monitor your heart.

- d. A small tube in your wrist or groin allows nurses and doctors to monitor your blood pressure and take blood samples.
 - e. Tubes in your chest help remove excess air and fluid from around your heart and lungs.
 - f. The chest tubes are connected to a suction machine which will make a bubbling sound.
- 3) **Equipment removed a few days after surgery.** While you are connected to this equipment, you will not be able to move around much. The chest tubes, and most of the other equipment, usually are removed a few days after surgery.
- 4) **Blood transfusions.** Some patients need transfusions of blood products during or after surgery. If you have any questions about blood transfusions, please discuss them with your surgeon.

Recover From Surgery

Most patients leave the CVICU the day after surgery. The nurses in the CVICU will help you out of bed and into a special chair. A nurse will bring you to the postoperative unit in this chair.

- 1) **Stay until discharged from hospital.** You will stay on the postoperative unit until you are discharged from the hospital. For most patients, this is three to five days after surgery. The nurses on the postoperative unit are specially trained to care for patients who have had cardiac surgery.
- 2) **Getting back on your feet.** On the postoperative unit, you will recover from surgery and get back on your feet. Every day, you will be able to do a little more. Many people are surprised to hear that they will be out of bed as early as the day after surgery. But starting to move around again is probably the most important part of your recovery. Most everyone also walks up a flight of stairs with a physical therapist before leaving the hospital.
- 3) **Healthcare providers.** In addition to nurses and doctors, you will see other healthcare providers on the postoperative unit. You may see some or all of these providers, depending on your needs.
- a. **Cardiac Surgical Fellows and Residents.** Cardiac surgical fellows and residents are doctors who receive specialized training in caring for cardiac surgical patients. They work closely with your surgeon to provide the highest level of care during your admission.
 - b. **Nurse Practitioners and Physician Assistants.** Nurse practitioners and physician assistants are health providers with specialized training who work with your doctors to provide your care.

- c. **Rehabilitation Services Staff.** Staff from the department of rehabilitation services, which includes physical therapy and occupational therapy, works with you and your family to make sure that, as you recover, you are as active and as healthy as you can possibly be.
- d. **Social Workers and Case Managers.** Members of the social work and case management departments are available to help you and your family cope with the stress of having surgery, and also to help you plan for your needs after discharge.
- e. **Respiratory Therapists.** Staff from respiratory therapy may be involved in your care postoperatively if needed.
- f. **Dietitian.** If you have special dietary needs, you may want to see someone from nutrition services during or after your stay. Ask your nurse or doctor for more information.

Comfortable Recovery

- 1) **Pain management.** As you recover, members of your care team will be working with you to make sure that any pain related to your surgery is well controlled. Patients usually receive pain medicine by the intravenous (IV) route early in their recovery, but switch to oral medicine soon after. Our goal is to make sure that you are comfortable enough to participate in the important activities that are part of your recovery, such as coughing, deep breathing, sitting up in a chair, walking, or undergoing physical therapy.
- 2) **Individualized routine.** Because every patient's tolerance to pain is different, the nurses will work with you on an individualized pain management routine. Sometimes, patients who feel comfortable at rest decide not to take much pain medicine. However, such patients may also tend to avoid activities that are an important part of recovery. Talk with your nurses about a pain management plan that you are comfortable with and that allows you to fully participate in your recovery.
- 3) **Usual stay between four and five days.** Although the amount of time spent in the hospital after cardiac surgery is different for everyone, the usual stay is between four and five days.
- 4) **Healing process.** If you have clips (metal staples in your chest), they will be removed at a follow-up appointment two to three weeks after surgery. You can expect to have healing pains for a few weeks, but they will be less and less as your wound heals. You will receive detailed information about the healing process before you go home.

Taking Care of Yourself

- 1) **Instructions from nurses and doctors.** Your nurses and doctors will give you detailed instructions about how to take care of yourself during your recovery. For example, you'll be asked not to lift anything heavier than 10 pounds for 10 weeks and not to drive for about 4 weeks. You will be asked to record your body temperature and body weight each day and to bring this information with you to your follow-up appointments. If you are working, ask your surgeon how much time off you should plan. Most people are out of work for one to two months following surgery.
- 2) **Healthy lifestyle.** You will also receive information about things you can do to ensure a "healthy lifestyle" after surgery - things that will help your heart stay as healthy as possible. This includes quitting smoking, getting into a regular routine of exercise that is right for you and eating right.
- 3) **Pace yourself.** During your recovery, there may be days when you feel tired or frustrated. You may feel like you should be getting better faster than you are. Gauge your progress in terms of weeks, not days. That is, look week to week for signs of improvement. Try to remember that the long-term outlook for most heart surgery patients is excellent. Pace yourself according to your own body's signals, and discuss any concerns you have with your doctor.