



Cardiothoracic Surgery Preoperative Information

You are scheduled to undergo an operation and the procedure has been explained to you, hopefully answering all of your questions. The following information is given to you so that you may review preoperative information and address several common topics in additional detail.

If, after your visits with your surgeon and anesthesiologist, and after reviewing this document, you still have questions, please contact us promptly. We understand that your upcoming surgery is a major step for you, and we want you to be as informed and comfortable as possible when you arrive on the day of surgery.

When to Arrive

The arrival time depends upon the scheduled time for your surgery. At the preoperative visit, you should have been informed about the time that you should arrive for your surgery. In general, you should arrive 3 hours before the scheduled surgery start time. If there is any question about when to arrive, please contact us promptly ahead of time.

Canceling or Postponing Surgery

If anything changes in your personal circumstances that may prevent you from having your surgery on the day scheduled, please contact us as soon as possible to reschedule your surgery. Space for surgery is limited and we want to offer the operating time you're unable to use to another patient.

Rarely an emergency will occur on our end that will force us to postpone your surgery date for a day or so. We will contact you immediately if this happens, but this is a very rare event. Also, an emergency will occasionally occur on the day of your surgery that will move back your surgery time until later that day. This also is an uncommon event.

Mouth Rinse and Nasal Ointment

Studies have proven that reducing the common germs that live in the mouth and nose can decrease your chance of infections in the hospital. This is easily accomplished by using a mouth rinse called Chlorhexidine and a similar nasal ointment three times per day starting 4 days prior to surgery. You will be given prescriptions for these medications. These medications are inexpensive but essential to decreasing your risk for infection.

Pre-Op Shower

You will be given some special soap (Hibiclens®) to use to take a shower the night before your surgery. This is the same soap your surgeon uses to scrub his hands for surgery and it reduces the overall amount of germs normally found on the skin.

When to Stop Eating

Unless told otherwise, you should have nothing to eat or drink after midnight the night prior to surgery. You will be given specific instructions about this matter during your preoperative visit. However, prior to that time, continue your normal activity and perhaps even go out for a nice dinner the evening prior to surgery.

Medications

It is extremely important that you let us know all of the medications you are taking, including doses and frequency. You must include any over-the-counter medicines, herbal products and supplements. Also verify that we know of any allergies to medicines or other substances that you may have.

Unless told otherwise, you should avoid taking aspirin, Ticlid®, Motrin®, Advil® (or ibuprofen), Aleve® or any other non-steroidal anti-inflammatory seven (7) days prior to surgery. These drugs interfere with normal blood clotting mechanism, and as you would expect, it is quite important for your blood to clot normally at surgery. However, many patients getting heart surgery will be asked to continue to take Aspirin up to the day of surgery. Your surgeon will give you specifics as to which medicines you should take. Be sure we know if you are taking the blood thinner Coumadin® (warfarin) or Plavix® for any reason, since we will need to make special arrangements for you prior to surgery.

Other over-the-counter medicines, supplements, and herbs to avoid (primarily because of their effects on blood clotting) for seven (7) days prior to surgery include: any aspirin or ibuprofen-containing medicine, vitamin E and herbs such as St. John's Wort, Echinacea, ginkgo biloba, valerian root, kava-kava, golden seal, ginseng, feverfew, etc. In general, you should avoid all herbs and special non-prescription supplements for seven (7) days prior to surgery since we are often not even sure of their effects on blood clotting or any potential adverse interactions with the anesthesia medications.

Prescription medications generally should be stopped at midnight the night before surgery. The only exceptions may be heart medicines such as heart rhythm medicines, calcium channel blockers, beta-blockers,

and nitroglycerin-containing medicines. If you are taking any medicines for your heart or blood pressure, be sure to specifically ask your surgeon and anesthesiologist for detailed guidance about these medicines.

Colds, Flu and Bronchitis

If you should develop symptoms of a cold, flu or bronchitis (cough with or without phlegm, fever, runny nose, etc.) prior to your surgery date, immediately call the office. Depending upon your symptoms, we may wish to put you on medication. Generally, we do not perform surgery on someone who has an acute respiratory illness since it will substantially increase the chances of pneumonia post-op. In this setting, we will usually need to postpone surgery to allow your recovery. Call us if you are concerned or unsure of your symptoms, even if it is over the weekend.

What to Expect: Pain Control after Surgery

One of our most important jobs after surgery is to control and prevent pain caused by your incision. There are two reasons to minimize your pain: (a) As physicians, we are dedicated to preventing or relieving pain from an ethical and humanistic standpoint. (b) However, from a practical viewpoint, pain relief is imperative since your chances of postoperative complications such as pneumonia, blood clots in the legs, etc., rise dramatically if pain is not controlled. We want you to cough, deep breath, and walk...and you won't do so if you have significant pain. Therefore, we work closely with the anesthesiologists to control post-op pain.

Some of our patients will have placement of an epidural catheter for pain control. This consists of a tiny tube similar to an intravenous catheter inserted by the anesthesiologist into the epidural space by your spine just prior to putting you to sleep. This highly effective pain relief method is not a "spinal". Epidural anesthesia has been used for decades and was first used to provide pain relief for childbirth. It has since been adapted over the last decade for pain control for surgery higher up in the abdomen and chest. The epidural is used along with intravenous drugs and inhaled gases to put you to sleep for your surgery. Then the epidural catheter is left in place for 2-5 days post-op for pain control. A small amount of pain medicine trickles continuously into the epidural space to numb the sensation nerves supplying the area of your incision. You are also given a button to press to give yourself an extra dose of the pain medicine when needed. There is no significant muscle weakness and you can walk around normally while the epidural is functioning. The anesthesiologist at your preoperative visit will discuss this pain control option with you and answer questions about it.

In some people, when an epidural is inadvisable or the epidural does not give enough relief (even though placed in the proper location), we use intravenous patient-controlled analgesia (PCA pump) in which you receive a continuous small amount of basal narcotic pain medicine running into your vein. You also have a button to push to give yourself an extra dose of pain medicine periodically, as needed, to control your pain. Using the PCA pump method, we control the maximum total amount of drug that you can receive each hour so that you can't inadvertently overdose yourself. When using the PCA pump, you should push the button whenever you have pain (don't keep an eye on the clock to tell you when) since the machine keeps track of the number of times you push the button. This gives us an objective measure of how well we are controlling your pain and this may indicate whether we need to increase your dosage of pain medicine.

Using either of these two pain control methods, we should be able to keep you quite comfortable post-op. But please tell us how you are doing and whether your pain is well controlled.

Cortisone (Corticosteroids)

For some patients, especially those with emphysema, we may give you an intravenous dose of a type of cortisone (corticosteroids) just prior to surgery, and then give you several doses in the first 24 hours post-op. This is done to prevent some of the possible postoperative lung complications. As a side effect, cortisone, when given to some patients, may cause the blood sugar to rise in the first 24 hours, such that we need to check your blood sugar and may give you several doses of insulin. This does not mean that you have diabetes or “pre-diabetes”. This temporary blood sugar rise is a common side effect of cortisone. It occurs in many otherwise normal people and the blood sugar returns to normal when we stop the cortisone.

Preventing Blood Clots

Without using any preventive measure, a significant number of patients will develop blood clots in their legs after an operation, which potentially could lead to blood clots traveling up to the lungs. We can almost always prevent these serious complications by giving very small periodic (every 12 hours), subcutaneous doses of blood thinner heparin by injection into the fatty tissue on the abdomen, starting immediately pre-op and continuing until hospital discharge. The heparin shots cause only a momentary sting but are highly effective in preventing blood clots. You might have a tiny bruise at the injection site, which will rapidly fade and go away after you leave the hospital.

In addition, when you wake up after surgery you will have a thigh-length, white support-type stockings and intermittent pneumatic compression stockings. This pneumatic stocking device is similar to a very soft blood pressure cuff which gently inflates every 30 seconds and serves to “milk” the blood in the leg veins back to the heart. These stockings are used primarily the first few days until you are up and walking in the halls. The blood thinner and stockings act together to greatly minimize your risk of dangerous blood clots.

Post-Op Discussion with your surgeon

Immediately after your surgery, your surgeon will speak with your family. Depending on the level of anesthesia and medications in your system, you may be quite alert and talking or completely asleep. Your surgeon will repeat this information to you frequently over the next few days to be sure you remember things. We recommend you and family members make a list of questions throughout your stay which can be addressed by the doctor and team during morning rounds.

Intensive Care Unit (ICU)

Immediately after cardiothoracic surgery, most patients go directly to the intensive care unit where you will remain for at least the first night. When you awaken from surgery, you will have numerous tubes and monitoring devices. These typically include chest tubes, a urinary catheter, a blood pressure monitor in your wrist artery, various intravenous (IV) catheters in your arm and/or neck veins, and possibly an epidural catheter in your back for pain control. These devices are usually removed within 1 to 5 days following surgery.

Patients will remain in the ICU setting until they are in stable condition and can be moved to a step down unit. Here you will remain until you are stable to be discharged from the hospital.

Eating after surgery

A common question after surgery is “when can I eat?”. Following major surgery and the use of strong pain medications most patients will experience slowing of the stomach and intestine. This is only temporary, but commonly takes several days for your stomach to regain normal function. During this time, you will not be able to eat or drink. Your stomach and intestine show signs of regaining normal function when you start passing gas from your bottom. Most gas is just swallowed air. When your stomach starts emptying well, the swallowed air will pass through and it is then safe to begin eating. We have found that nausea and vomiting will be prevented if you start eating and drinking either when you pass gas or it is the 3rd day after surgery, whichever comes first.

In the meantime while you are waiting to begin eating, you may have ice chips to help satisfy thirst. During this time you will be receiving enough intravenous fluids to keep your body well hydrated and to prevent most thirst.

Constipation

One of the most common nuisances in the hospital after surgery is constipation. The initial lack of physical activity plus the marked constipating side effect of the narcotic pain medicine causes most patients to be constipated, even if you normally have no problems with your bowels.

Therefore, we feel that it is important that you have at least one bowel movement before discharge home. If you don't have a bowel movement by approximately the third day after surgery, we will prescribe either a laxative or an enema to get you started. We then strongly recommend that you use a stool softener such as Metamucil® at home three times a day after you leave the hospital for as long as you are taking narcotic medication for pain.

Discharge Day

In general after cardiothoracic surgery, you will need to remain in the hospital for 4-7 days. Each patient will be assessed on an individual basis, and your discharge plan will be dependent on your postoperative progress. Our usual criteria for discharge home are: (1) your chest tubes have been removed; (2) you are eating a regular diet; (3) you are walking regularly in the halls; (4) you have had at least one bowel movement; (5) you are comfortable on pain medicine by mouth; and (6) you do not have fever or other sign of infection. Occasionally, it may take a few extra days to meet these criteria. Several days prior to surgery we will review common do's and don'ts at home.

Some patients, who live alone and may be somewhat weak or frail, will have a home health agency arranged to see you daily at home or monitor your progress as needed. These issues will be addressed by a licensed social worker, but do remember, depending on your insurance company, HMO, Medicare, etc., you may be

financially obligated for some of the home health care costs. You will be advised about the details of this process by our staff.

Rarely, some patients will be quite weak or frail after surgery and will need additional rehabilitation after discharge prior to returning to home. You may want to investigate or visit a few rehabilitation centers in your local area before surgery if you think this will be a likely option for you.

While you are in the hospital, your insurance company, HMO, etc. will closely be monitoring your progress after surgery. Once you reach the recovery point with the criteria described above, you may anticipate being discharged from the hospital. If, for some personal reason, you do not wish to be discharged from the hospital when your condition would otherwise safely allow discharge, your continued stay may not be paid for by your insurance carrier and you may be obligated to pay for that extra time.

Transportation Home

PLEASE PLAN AHEAD for a ride home from the hospital and make any other arrangements you need after discharge, well in advance of your surgery.

Pre-op testing & anesthesia visit prior to surgery:

The pre-op department will contact you to let you know the time and date for your pre-op visit.

Where to go for your Pre-op Appointment:

Date of Surgery:

Where to Park: