# Preparing for your Transthoracic Hiatal Hernia Repair

Pre and Post-Operative Information

**Department of Thoracic Surgery** 



# **Table of Contents:**

| What is a transthoracic hiatal hernia repair?3 |
|------------------------------------------------|
| Website3                                       |
| Planning/preparation 3                         |
| Where will the surgery be performed?4          |
| Tube/Catherater5-6                             |
| Care after surgery8-10                         |
| Removing sutures9                              |
| Activity and restriction10                     |
| Diet10                                         |
| Important phone numbers11                      |
| Frequently asked questions                     |

# What is a transthoracic hiatal hernia?

This surgery is generally done for patients with a paraesophageal herniameaning your stomach has come thru your diaphragm and into your chest and is now next to your esophagus. In this surgery we place the stomach back into your abdominal area, thru an incision on your left chest. Please feel free to access our Thoracic Surgery Website. Please share this information with your family, and view the video below to help with any questions you may have. If you do not have access to a computer, please let us know so we can help you to get this information.

# **Thoracic Surgery Website**

- To learn about Hiatal Hernia surgery at Michigan Medicine visit: http://www.uofmhealth.org/conditions-treatments/surgery/thoracic
- To view a video on Hiatal Hernia repair visit:
   <a href="http://careguides.med.umich.edu/thoracic-surgery">http://careguides.med.umich.edu/thoracic-surgery</a>

   In the Search Box type Hiatal Hernia and select the video from the list.

# Planning for Your Transthoracic Hiatal Hernia Repair

- **Do not** take any nonsteroidal anti-inflammatory medication (e.g., Motrin Ibuprofen, Aleve) or aspirin products for 1 week prior to your surgery date.
- Do not take Plavix at least 1 week before your surgery date
- **Do not** smoke cigarettes for at least 4 weeks prior to your operation; you may be tested the day of your operation to make sure you have not been smoking; if you have been smoking, your operation will be cancelled.
- **Do** walk up to 2-3 miles a day prior to surgery to get yourself in the best shape possible.
- **Do** use your incentive spirometer at least 30 times a day (10 slow breaths 3 times a day), and **DO** bring your incentive spirometer with you the day of your operation. You can leave it in the car or with your family

Thoracic Surgery
Transthoracic Hiatal Hernia Repair

- member or friend until after surgery. Your friend/family member can then bring it to you after surgery.
- **Do** bring your blue blood sheet with you the day of surgery; you will get this sheet at the time you get your pre-operative labs drawn, which will be done within a few weeks prior to your surgery.

# **Preparation for your Surgery**

# Bowel Prep

- Generally, a bowel prep is not necessary for this type of surgery. We will let you know if this needs to be done at the time of your consultation or history and physical.
- Medications-Which medication you will need to take, or stop prior to surgery will be discussed at your pre-operative/history and physical appointment. As noted previously, you will need to hold any blood thinners (examples Coumadin, Plavix). If you need to transition over to a different type of blood thinner, like Lovenox we will let you know when your last dose of this medication will be.

# Where the Hiatal Hernia Surgery will be performed

Your surgery will be performed at the cardiovascular center. You will need to park in parking lot P5, and then go to the 4 th floor and check in at the surgery family waiting room. The waiting room is the location that your family will also remain while you are in surgery. Generally, the surgeon will come out and speak with your family, once the surgery is done.

# What can I expect during the procedure?

You will be escorted to the pre-operative area, after you check into the surgery family waiting room. You will remain in the pre-operative area for one and a half hours to two hours prior to surgery. This is where you will meet with the

anesthesiologist. Pain control will be discussed at this time. General anesthesia is used for surgery.

The length of the operation will depend on a multiple issues-however, generally surgery will take about 4 hours.

**After surgery**, when you awake from the general anesthesia **you will have a few tubes and catheters** which are described below. All of these are important and will allow us to monitor you while you are in the hospital.

# Nasogastric Tube (NG Tube)-

Is a tube placed in the operating room through your nose and into your stomach to help evacuate fluid. Normally there are coordinated movements of the muscles of your esophagus through to your rectum that keep food/liquids moving forward. After abdominal surgery, the manipulation of your bowels causes this coordinated muscle movement to slow down or even stop (ileus). In addition, everyone produces and swallows up to 1.5 L of saliva a day. Due to these reasons this tube will remain for about 3 days. The goal is to prevent fluid from backing up in your stomach, causing nausea and vomiting, which can lead to complications in a surgical setting.

- **Chest tube** This is a tube that is used to drain fluids that often form in the chest after an operation. It is also used to remove any air that may be in the chest after surgery.
- **Epidural**-Is a small catheter that is put in the space around your spine. It is used for pain control; we do encourage use of an epidural catheter. The anesthesiologist will discuss pain control with you on the day/morning of your surgery. The epidural catheter is placed just prior to your surgery due to the special positioning needed to put it in. It is then used after surgery to help control your pain. The catheter is small enough that you can still lie on your back after surgery. The catheter delivers pain medication in response to a button you control when you need pain relief.

- Paraspinous Catheter- is a catheter placed during surgery in the location of your incision. This catheter will be used to administer a direct local "numbing" medicine. This medicine is administered by an infusing device, and this catheter is removed prior to you going home.
- **Patient Controlled Analgesia(PCA)**-This is pain medicine that is infused into your IV and you control with a push button. If you are uncomfortable with the idea of an epidural, or the epidural does not work for you, an alternative is a PCA.
  - **Foley catheter-** This is a tube placed into your bladder during surgery and used to monitor your urine output. It typically remains in place for up to 3 days after surgery. Epidural anesthesia interferes with emptying of the bladder, so the Foley catheter is not removed until the epidural is no longer needed.

Once your bowels have 'woken up', normally by post-operative day #3, we then remove your pain control "device" and change it to oral pain medicine. Six hours after the pain control is removed, your Foley catheter would be removed.

Generally the decision for which type of pain medicine we give you the first 3 days after surgery is determined by the surgeon, who will include any prior surgery, and/or medical history.

- Sequential Compression Devices(SCDs)- These are wraps that are placed around your legs and used to keep the blood from pooling in the calves. If the blood remains there for a period of time without movement, it can cause a blood clot. Other ways to prevent blood clots after surgery include leg exercises such as ankle circles and pointing your toes to the ceiling then to the wall, you should do each of these 10 times every hour you are awake after surgery. Most importantly you must walk in the hallways after surgery (you may need some help getting up and out of bed the first few times).
- **Intravenous Catheter(IV)-** This is catheter placed into your IV to help give fluids into your veins during surgery and after as needed.

- Heart Monitor-is a small box that is connected to leads that are place (by tape) on your chest. All thoracic surgery patients are placed on a heart monitor. This is done to watch irregular heartbeats, about 25% of patients after major chest surgery can develop a specific irregular heart rate calledatrial fibrillation. Should post-operative atrial fibrillation occur, it can usually be corrected with medication and resolves within several hours. Regards of any irregular heartbeats you may or may not have, most thoracic surgery patients will go home on some type of heart medication. This is used to continue to protect your heart following surgery. Most patients are able to come off of it, or go back to their regular medications, after a period of time. We do ask for help in regulating this medication by your primary care physician, it is a good idea to have some follow up with your primary care physician, 3-4 weeks after your surgery date.
- **Incentive spirometer (IS)** This is a breathing exercise device. Along with coughing and walking, it helps to prevent collapse of the lungs and pneumonia.

We realize that there is pain involved with surgery, and the pain may interfere with deep breathing and walking. Please let us know if your pain is not well controlled with your epidural, PCA or other pain medicine. There are other medications we can try to make sure you are as comfortable as possible.

# Caring for Yourself After an Transthoracic Hiatal Hernia Repair: Pain Management

- You will be given a prescription for pain medication Do Not Take the Medicine on an Empty Stomach.
- After your chest incision (thoracotomy) it is very common to have pain, and/or a burning sensation below your breast and the front of the rib cage on the same side as the surgery. This discomfort is caused from irritation of the nerve endings near your incision. Often the best way to help relieve this pain is to take a nonsteroidal anti-inflammatory medication (also known as NSAIDS) such as Motrin or Advil. Please note if you are on Prednisone, you should not take any NSAIDS. Also if you have ever been told to avoid these medications please do not take them. If you take an NSAID, you must take this medication with food. We recommend Motrin or Ibuprofen 400mgs (an over-the-counter NSAID is 200 mg, so take 2 tablets) 2-3 times a day. You can take this in addition to your narcotic pain medication (Norco, Tylenol #3). You may also have been given a prescription for Ibuprofen. If so, you should not take additional over-the-counter Motrin/ibuprofen products.
- Gradually you will be able to decrease the amount of medication you require. If you find that you are almost out of pain medication and think you may need a refill, call the office. Be sure to call before you are completely out of pills. Some medication may require a written prescription to be renewed; these medications cannot be telephoned to your local pharmacy.
- You can also use a heating pad (not directly on your skin) and warm showers to help with some of the discomfort. Many patients also find it difficult to sleep in their own bed after surgery and make their way to a couch or Lazy Boy chair. This is not uncommon, and gets better with time.

# Constipation

 Pain medication can make you constipated. Please eat a high fiber diet, and take in plenty of fluids. If you have problems with your bowels while at home, you can try an over-the-counter laxative (Milk of Magnesia, Ducolax, Fleets enema) to help move your bowels. Please feel free to contact the office if you are having any concerns.

# Taking care of the Incisions

- Please gently wash your incisions with soap and water daily in the shower; no tub baths/swimming pools, hot tubs.
- You will generally have one incision on your side about 6-8 inches in length. If you notice signs of infection or inflammation- redness, drainage, swelling or run a fever greater than 101.0 F, you need to contact us. If your incision is in a place that you can't see, you may want to have someone look at your surgery site for you. The best way to keep it clean is to wash it in the shower with soap and warm water. The incision does not have to be covered unless you notice any drainage.
- You will also have 1-2 chest tube sites; these can also be kept clean with soap and warm water.

# Removing sutures:

- You may have a suture where the chest tube (drainage tube) was. This suture is not dissolvable and should be removed 5-7 days after your chest tube is removed. Your family member or primary care doctor can remove it. Otherwise you can come back to clinic to have this suture removed. The suture is pulled very tight. To remove it, pick up both ends, slip the scissors underneath the knot, cut, and pull.
- You may also have a blue suture loop at each end of your incision, this suture also has a "loop" in the middle of your wound that is the same

be cut first. After this is cut, you can then just pull the blue loops, and the suture will be removed. If you are concerned or unsure at all, please wait until you talk with one of the nurses/physician assistants. Should you be thinking about removing a stitch on a weekend or in the evening, it is something that can wait until business hours, so we can be called if needed.

#### **Activity and Restrictions:**

- You will fatigue easily at first, but you will build up strength and energy buy being persistent. Walking is an excellent activity for increasing stamina.

  Begin slowly and increase your activity over time. Walk every day-during inclement weather walk in a shopping mall or inside your home.
- We recommend that you continue to use your spirometer at least four times
  a day until you are back to your normal activity pattern. The deep breathing
  improves lung function and helps prevent postoperative complications with
  lung congestion.
- If you are driving a long distance to your home, we recommend that you get out of the car and walk around every 2-3 hours to help prevent blood clots from forming in your legs.
- You are unable to lift/push/pull anything greater than 20 lbs., for 3 months after surgery

#### Diet:

• You will meet with a dietitian prior to your discharge. You will be given written information about your diet, which is sometimes the hardest part of adjustment after your surgery. We highly recommend keeping a food diary to help figure out what may be working for you, how much you can eat at a time, etc.

# **Important Contact Numbers:**

Thoracic Surgery Nurses/Clinic Number (734) 936 - 8857

For all medical questions, it is best to call the nurse/clinic first. If there is an urgent issue, call your physician's office number and state the problem.

Our office hours are Monday thru Friday from 8am-5pm

After hours or on weekends and holidays call the paging operator at (734) 936 – 6267 and ask for the General Thoracic Surgery Resident on call.

# Frequently Asked Questions about Hiatal Hernia

# How long will I have discomfort?

The severity of post-operative pain gradually diminishes. By ten to twelve weeks after surgery, most patients experience only minimal discomfort.

# Why do I hurt in front when my incision is in the back?

In order to enter the chest, the surgeon must spread your ribs apart. The nerve that runs under this rib is stretched, and this nerve gives feeling in the front of the chest. The pain you feel in front of your chest is from your incision and is called incisional (or referred) pain.

# What about healing of the incisions?

Complete healing takes time. When you are discharged, the area around the incision may be quite swollen. The swelling will gradually decrease. Sensation (feeling) directly along the incision is often decreased, but will return.

# Why do I feel full after eating?

The operation prevents reflux and also makes it difficult (if not impossible) to belch. The reason you experience "fullness" after eating is that swallowed air is trapped in your stomach. This air will eventually pass through the intestines as gas.

#### Is fever common?

A temperature of about 99 degrees is not uncommon after chest surgery. Patients notice that their temperature tends to be slightly higher in the late afternoon or evening. Doing deep breathing and coughing exercises will help

# Frequently Asked Questions (continued)

control your temperature. If you have a fever of 101 degrees or above, call the doctor's office.

# What can be done to speed recovery?

Continue your deep breathing and coughing exercises at home, and steadily increase your activity.

# What about weakness and fatigue?

You have had a major operation and fatigue is to be expected. Young or old, it takes time to recover from surgery of this kind. Although you may think that your weakness is a result of your surgery, it's also largely due to muscles being out of condition. It is estimated that a college student loses 15 percent of his muscle strength after one week of bed rest. Therefore, it is not surprising that a patient who has been hospitalized and had undergone chest surgery feels weak or ties easily in the first few weeks at home. To regain strength, you must exercise daily. Do not allow yourself to be inactive.

#### What about infection?

If you are worried about the way your incision is healing, please call the doctor's office.

You should report: fever greater than 101 degrees; redness or increasing tenderness along the incision; or excessive drainage from the wound accompanied by fever.

#### What medications should be taken?

At the time of discharge, discuss with the doctor any medications you may have been on prior to surgery which have not been resumed. You will also be given a prescription for pain medication. In addition, patients who have thoracic

# Frequently Asked Questions (continued)

surgery are often discharged with Metoprolol. It is prescribed to prevent any heart irregularities which occasionally occur after surgery. If this medication has been prescribed, you will be asked to make sure you have a follow up appointment with your primary care physician, and or cardiologist, as often this mediation only needs to be taken for a short time, or changed over to your prior heart medications (if you were taking any prior to surgery).

#### When is it safe to drive a car?

You may drive when you are no longer taking narcotic pain medication.

#### When will I see the doctor?

Your first post-operative checkup will be scheduled about three to four weeks after you are discharge. After that you will be followed on a regular basis dependent on your diagnosis.

# When can I go back to work?

If your job requires heavy lifting, you will need to take off work for two-three months from the date of surgery. However, if you job is less strenuous, you may be able to go back to work in about six to eight weeks. This can be discussed with the doctor at your office visit.

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Authors: Erin Larowe, Rishindra Reddy, M.D.

Patient Education by <u>Michigan Medicine</u> is licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License</u>. Last Revised 04/2017