

## Hiatal Hernia & Benign Esophageal Surgery Patient Journey Guide

Thank you for choosing **Washington University Physicians**. The information in this guide will help you understand, prepare for and recover from your esophageal surgery. Patients who follow these guidelines are more likely to leave the hospital sooner and may experience fewer complications than those who do not. Your surgeon will discuss your recovery plan with you and you will receive personalized education from our team throughout your journey. The goal is to allow you to go home or discharge to the safest setting.

### YOUR RECONSTRUCTIVE JOURNEY STARTS NOW

*This is your Journey Guide to a healthy recovery. You will have an excellent care team to lead you along the way.*

- Use this guide to learn about what will happen before, during, and after surgery.
- Complete the guide checklists. This will help you prepare for a healthy recovery.
- Your entire care team will refer to this guide throughout your journey. Bring this guide with you to all doctor visits, meetings, and your hospital stay.

We want you to be an active member in your care. If at any time, you have questions, please ask a member of your care team.

If you have questions when you are at home, during business hours, call your surgeon's office. After hours, call the hospital operator at 314-747-3000 who will connect you with the resident on-call.

Everyone on the thoracic surgery team wishes you a healthy recovery. We strive to make your hospital experience excellent.



**Surgery**

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## MyChart: Your Secure Online Health Connection

Manage appointments, get test results, message your doctor, pay bills and request prescription refills online or with the MyChart app.

### How do I sign up?

If you received an email from MyChart: Click the link and follow the instructions. If you received an activation code from your doctor's office:

Visit [MyPatientChart.org](https://www.mypatientchart.org) and click the "Sign Up Now."  
Enter the code and follow the instructions.

Both sign up methods are active for 90 days.

If you have not received the MyChart email or activation code, please call our office.

If you do not have either, you can self-sign-up by going to <https://www.mypatientchart.org>.

# THORACIC SURGERY PHONE LIST

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**Office Hours**

Monday - Friday  
8:00a.m. - 4:00p.m.

**Exchange**

After hours, holidays and weekends  
314-747-3000

**Fax**

314-362-6288

**Website**

<https://cardiothoracicsurgery.wustl.edu/thoracic/>

SURGEONS	PHONE NUMBER
Ruben Nava Bahena, MD	314-362-9181
Benjamin Kozower, MD	314-362-8089
Bryan Meyers, MD	314-362-8598
G. Alec Patterson, MD	314-362-6025
Varun Puri, MD	314-362-4191

INPATIENT - NURSE PRACTITIONERS	
Jennifer Burns, APRN-BC	314-362-4158
Amanda Knobloch, APRN-BC	314-362-4158
Theresa Frazier, APRN-BC	314-362-4158

INPATIENT - CARE UNITS	
5600 ICU	314-362-4026
7400 PCU	314-362-3852
7400	314-362-4054

OUTPATIENT - NURSE PRACTITIONERS	
Nicole Lee, ANP-BC	314-747-4580
Andrea Naes, FNP-C	314-362-3706
Laura Thomas, ANP-BC	314-362-5692

# GETTING TO KNOW YOUR CARE TEAM

*Your care team is here to provide excellent, compassionate, respectful and responsive care. While in the hospital, you will be managed daily by your surgeon and his/her resident, but also cared for by other members of the surgical team.*

<b>Thoracic Surgeon</b> Your surgeon and surgical care team will guide your care and perform your hernia surgery.	<b>Anesthesia Team</b> An anesthesia doctor or advanced practice nurse will evaluate your surgery needs. This team is trained to keep you safe during surgery and in recovery. They also help treat your pain.
<b>Fellows</b> Fellows are physicians who have completed their residency and are undergoing additional training to become board certified in a specialty. If you are an inpatient, you will see fellows on daily rounds, checking your progress.	<b>Advanced Practice Nurses and Physician Assistants</b> These state certified health-care providers are trained at the master's degree level and will work with your surgeon to care for you after surgery. They will follow your progress daily and update your care team as needed.
<b>Registered Nurse (RN)</b> An individual who holds a license to practice professional nursing in the state of Missouri. Nurses are your advocates. They work with your surgeon and health care team to care for you before, during and after your surgery. They will teach you how to stay safe and healthy during every step of your recovery.	<b>Case Manager/Social Worker</b> Your case manager is a trained registered nurse. They work with your care team to help plan your discharge, home equipment needs, and help with insurance questions. Your social worker is available to provide support, help with advanced directives, find community resources, and help the team in preparing you for discharge.
<b>Registered Dietitian (RD)</b> Dietitians are regulated healthcare professionals licensed to assess, diagnose, and treat nutritional problems. They will teach you about healthy nutritional habits to aid in your recovery.	<b>Patient Care Technician/Student Nurse Technician</b> A trained individual who assists the RN in the delivery of direct patient care.
<b>Medical Assistant</b> A trained individual from your surgeons' office who helps coordinate your outpatient care i.e. schedules testing, obtains medical records etc.	

# APPOINTMENTS

Your surgeon's office will coordinate your preoperative appointments. **It is essential that you keep these appointments.** If you are unable to make an appointment call your surgeon's office immediately to avoid delay or cancellation of your surgery. (Page 3)

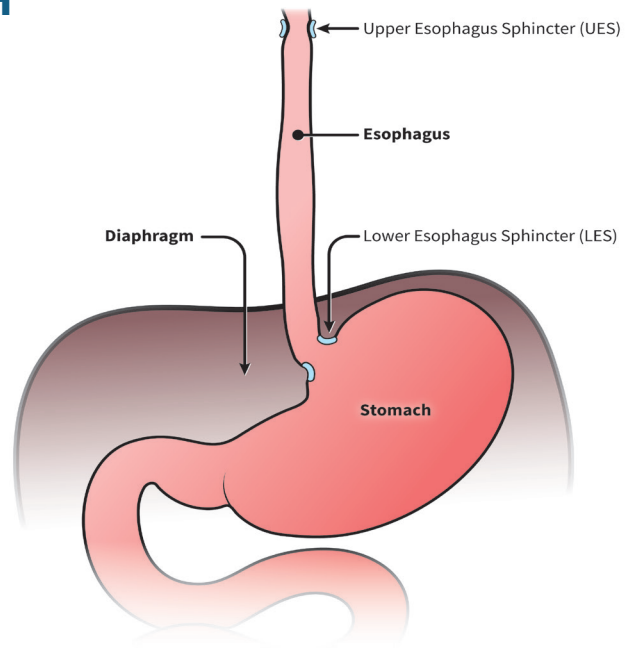
APPOINTMENTS	DATE	TIME	LOCATION
<b>Anesthesia Evaluation</b> Surgery evaluation by the Center for Perioperative Assessment and Planning (CPAP)			<input type="checkbox"/> <b>Barnes-Jewish</b> Center for Advanced Medicine  <input type="checkbox"/> <b>Barnes-Jewish St. Peters Hospital</b>  <input type="checkbox"/> <b>Barnes-Jewish West County Hospital</b>  <input type="checkbox"/> <b>Christian Hospital</b>  <input type="checkbox"/> <b>South County</b> Center for Advanced Medicine
<b>Your Surgery</b> Name of your procedure: <hr/> Surgeon: <hr/> Estimated length of procedure: <hr/>		Surgery start and arrival time will be communicated the afternoon prior to surgery by the OR registration desk.	<input type="checkbox"/> <b>Barnes-Jewish Hospital Plaza Tower</b>
<b>Post-Op appointment:</b>			<ul style="list-style-type: none"> <li>• <b>The Center for Advanced Medicine/ Siteman Cancer Center</b> 4921 Parkview Place, Suite 8B St. Louis, MO 63110</li> <li>• <b>The Siteman Cancer Center South County</b> 5225 Midamerica Plaza Saint Louis, MO 63129</li> <li>• <b>The Siteman Cancer Center at Barnes-Jewish St. Peters Hospital</b> 150 Entrance Way St. Peters, MO 63376</li> <li>• <b>The Siteman Cancer Center West County</b> #10 Barnes West Drive, (Bldg. 2), Suite 100 Creve Coeur, MO 63141</li> <li>• <b>The Siteman Cancer Center Illinois</b> 1418 Cross St., Suite 180 MOB 2 Shiloh, IL 62269</li> </ul>

# DISEASE/CONDITION INFORMATION

## ABOUT THE ESOPHAGUS AND STOMACH

The **ESOPHAGUS** is a 10-inch long tube of muscles. When you swallow, food passes into the esophagus and the muscles contract to push food down into the stomach. The esophagus starts at the back of the throat. The top 2 inches of the esophagus are in the neck. The next 7 inches are in the chest behind the breastbone. Then the esophagus passes through the diaphragm and joins the stomach. The diaphragm is a large, flat muscle that separates the contents of the chest from those of the abdomen.

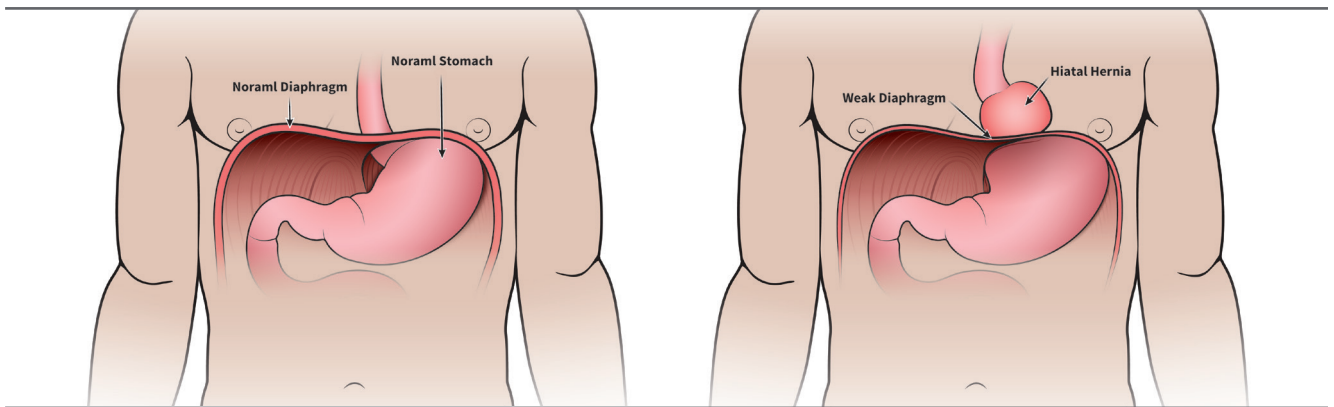
The **STOMACH** is about 10 inches long and 5 inches wide at the widest part. The stomach makes acid juices that digest food. The digestive juices are helpful in the stomach, but may cause problems if the acid juices get into the esophagus.



## ESOPHAGEAL CONDITIONS

### » Hiatal Hernia:

A hiatal hernia occurs when the upper part of the stomach protrudes through the diaphragm, the muscle wall that separates the stomach and the chest. Normally, the diaphragm helps the lower esophageal sphincter prevent acid from entering the esophagus. When someone has a hiatal hernia, it is easier for acid to come up into the esophagus.



### Why should you have your Hiatal Hernia repaired?

Surgery becomes an option when medicine and lifestyle changes aren't successful or when those options aren't reasonable alternatives. A Nissen fundoplication is the standard surgical treatment for GERD. The upper part of the stomach is wrapped around the lowest point of the esophagus to prevent acid reflux and repair a hiatal hernia.

In the case of a large hiatal hernia, the esophagus often becomes shortened. Washington University thoracic surgeons specialize in a procedure to lengthen the esophagus – called a Collis gastroplasty – that helps reduce the recurrence rate of GERD after repair of a large hiatal hernia.

# DISEASE/CONDITION INFORMATION (Cont'd)

## ESOPHAGEAL CONDITIONS (Cont'd)

### » Gastroesophageal reflux disease (GERD)

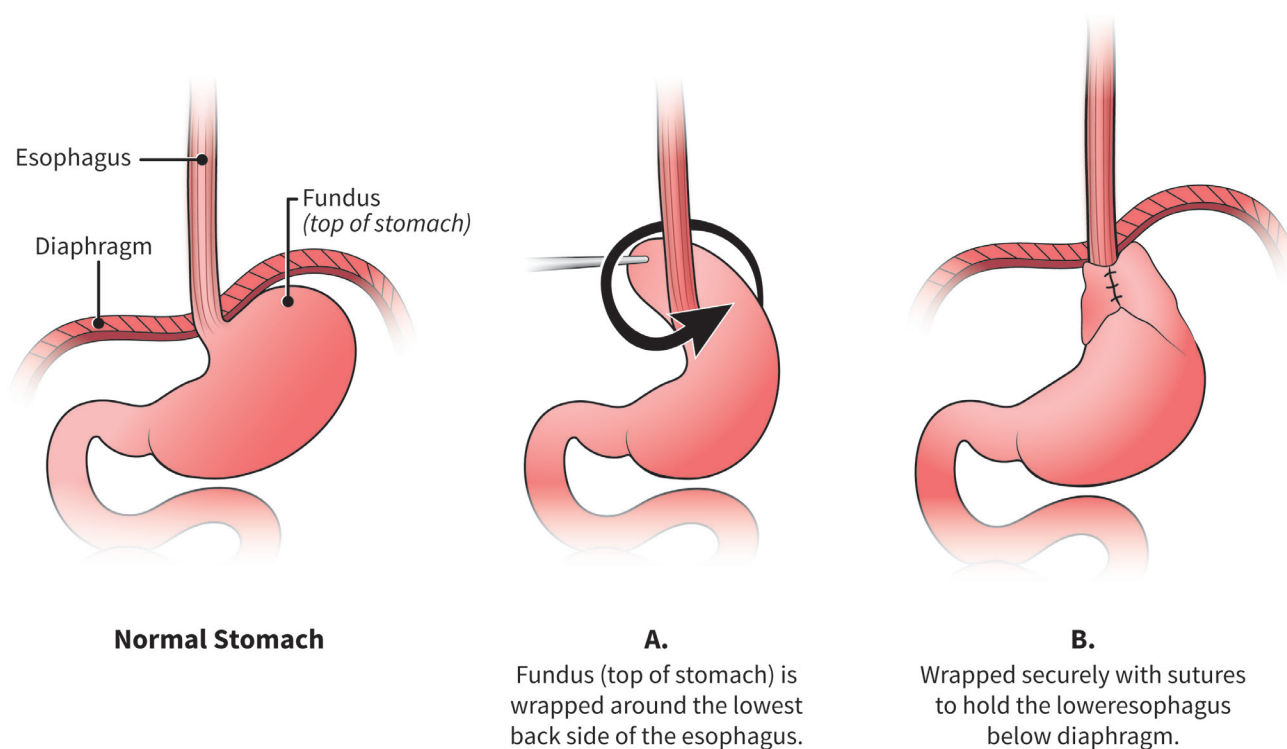
Gastroesophageal reflux disease (GERD) is a condition in which gastric contents from the stomach backflow into the esophagus. The esophagus is not made to resist acid, and so the acid burns the esophagus, causing the symptom of heartburn.

#### Why surgery?

Many patients with reflux are treated with medicines to decrease acid production in the stomach. However some patients continue to have severe symptoms of either regurgitation or incomplete healing of their esophagus despite high doses of medical therapy. These patients should consider surgery as another option.

#### Surgical approach:

A laparoscopic **Nissen fundoplication** is the standard surgical treatment for GERD. The upper part of the stomach is wrapped around the lowest point of the esophagus to prevent acid reflux and possibly repair a hiatal hernia.





# DISEASE/CONDITION INFORMATION (Cont'd)

## ESOPHAGEAL CONDITIONS (Cont'd)

### » Achalasia

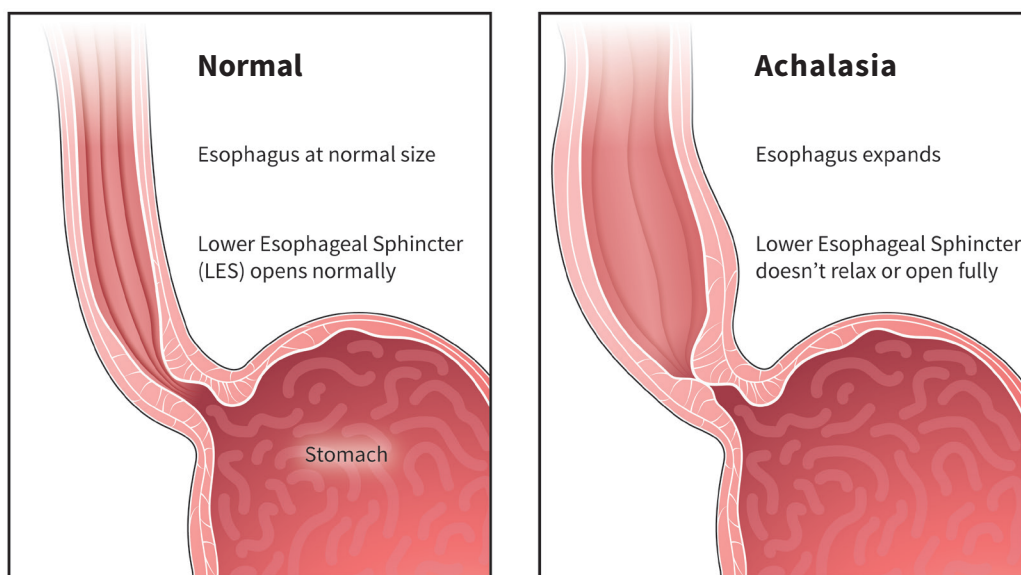
Achalasia is a rare disorder of the esophagus characterized by a progressive inability to swallow. It occurs when the esophageal muscles become progressively weaker and eventually stop working at all. In addition, the lower esophageal sphincter never completely opens, so that food does not enter the stomach easily. These two problems cause increased difficulty in swallowing and may lead to vomiting, weight loss, malnutrition and dehydration.

### Surgical approaches

A surgical procedure called the **Heller myotomy** is the treatment of choice for achalasia, offering long-term symptomatic relief. The procedure weakens the faulty muscles at the gastroesophageal junction, allowing the valve between the stomach and the esophagus to remain open so that food and liquid can pass into the stomach.

### → Pre-operative diet:

You may need to be on a clear liquid diet for several days prior to surgery. Please contact your surgeon's office for further details about this.



## ESOPHAGEAL CONDITIONS (Cont'd)

### » Diverticular disease of the esophagus

Diverticular disease of the esophagus (an abnormal pouch opening from the esophagus) can affect both the upper and lower end of the organ.

*Zenker's diverticulum:* This is an abnormal pouch in the upper part of the esophagus. It can allow food to become trapped, causing bad breath, irritation, difficulty in swallowing and regurgitation.

An operation (**Cricopharyngeal myotomy**) performed by Washington University thoracic surgeons relieves the symptoms of patients with Zenker's diverticulum.

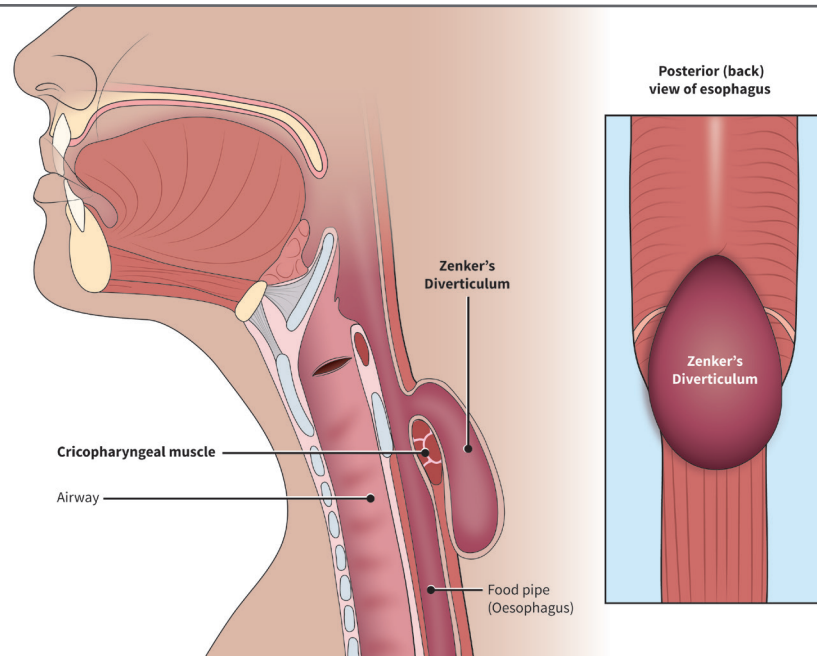


# DISEASE/CONDITION INFORMATION (Cont'd)

## ESOPHAGEAL CONDITIONS (Cont'd)

### » Diverticular disease of the esophagus

#### Zenker's Diverticulum:



*Epiphrenic diverticulum:* This diverticulum occurs at the lower end of the esophagus. Retention of undigested food can result in regurgitation, difficulty swallowing and abdominal or chest pain.

### » Benign esophageal stricture

Benign esophageal stricture is a narrowing of the esophagus that can be caused by GERD, viral or bacterial infections, injuries caused by endoscopes or other conditions or injuries. Symptoms may include difficulty swallowing, pain with swallowing, regurgitation and unintentional weight loss.

Washington University thoracic surgeons perform dilation (stretching) of the esophagus as the preferred treatment for stricture.

#### Your Surgical Approach

##### → Robotic Assisted Thoracic Surgery

Four to five small incisions are made in your chest or abdomen (belly) without any large incisions. Your surgeon operates the camera and the instruments from a console located next to you in the operating room. Robotic assisted surgery provides improved magnification and visualization using four arms that move the surgical instruments controlled by your surgeon. Typical recovery time is 2-4 weeks.

## ASK QUESTIONS!

It is important that you understand what will happen to you before, during and after your surgery. You will be asked to sign a consent form to give the doctor permission to proceed with the surgery.

# GETTING HEALTHY FOR SURGERY

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*Take steps to feel good about your health – starting now. These steps will help you to be healthy before, during, and after surgery.*

## Boost your activity

- It is important to be active prior to your surgery. Try starting a daily walking program. Start out at 5 minutes a day and work your way up to 20 minutes twice a day.
- The better shape you are prior to surgery, the more you can do after. This can also help reduce complications after surgery.

## Stop smoking and the use of nicotine products

- Stopping at least 2 weeks before surgery will prevent infection and help your body recover faster. Ask your surgeon for tools to help you quit or call 1-800-QUITNOW (1-800-784-8669). Visit [Smokefree.gov](http://Smokefree.gov) for more information.
- You will not have access to tobacco products, alcohol, or illegal drugs during your hospital stay.

## Eat well

- Eat well-balanced meals to be healthy for surgery. The food you eat will help your body heal after surgery.
- We recommend you eat a wide variety of healthy foods:
  - *Fruits & Vegetables*
  - *Whole Grains*
  - *Low-fat dairy products*
  - *Skinless poultry and fish*
  - *Nuts and Legumes*
- If you have questions, using a registered dietitian may help you reach your goals, perform better, and be healthier. MOVE by BJC at 314-286-0525.

## Manage your diabetes

- It is important to control your blood sugar levels during your journey, this will help you heal faster and prevent infection. If you have questions or need help controlling your diabetes, the Barnes-Jewish & Washington University Diabetes Center can help. To make an appointment with a diabetes specialist call 314-TOP-DOCS (314-867-3627) or toll-free 866-867-3627.

## Support your recovery

- Your main responsibility after surgery is to focus on recovery.
- Plan for a family member or friend to stay with you for a few days when you go home to assist you with meal prep, household work and other necessary errands.

# GETTING HEALTHY FOR SURGERY (Cont'd)

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## Take care of your mental health

- It is important to take care of your mental health before and after surgery. Taking control of your anxiety, depression, or other mental illnesses will help your recovery. If you have questions or need help with your mental health the psychiatrists at Barnes-Jewish & Washington University can help. To make an appointment call 888-998-8076.

## Local lodging

- For short-term and long-term lodging options and to inquire about special rates at area hotels, call 314-362-5301 or toll free at 800-551-3492, 8:30 a.m.-4:30 p.m., Monday-Friday or email us at [conciergeservices@bjc.org](mailto:conciergeservices@bjc.org).
- Please make these arrangements before the day of surgery.

## Think about when to returning to work

- Recovery time and when patients can safely return to work varies by patient. Your care team will help you prepare to go back to work and return to your active lifestyle.
- Plan to discuss returning to work at your follow up appointment.

## Family and Medical Leave Act (FMLA) paperwork

- FMLA paperwork can be faxed to 314-362-6288, mailed to the office or given to your surgical coordinator. We cannot email records for FMLA paperwork due to privacy rules.
- Please allow 7-10 days for FMLA paperwork to be completed and returned to your employer.

# PREPARING FOR SURGERY

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## PRE-OP PLANNING VISIT WITH THE CPAP TEAM

Many patients have an appointment with a member of the anesthesia team before surgery. This is held in our **Center for Preoperative Assessment and Planning (CPAP)** or over the phone (TPAP).

### What to bring with you to CPAP:

- ☐ This patient journey guide
- ☐ Insurance card, driver's license or state ID
- ☐ Advanced directive (if you have one) [Such as a living will, health care proxy, or health care power of attorney documents.]
- ☐ Complete list of your current medications including prescriptions, over-the-counter, vitamins and herbal supplements

# PREPARING FOR SURGERY (Cont'd)

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## At the CPAP appointment

- You will have a complete history and physical and any necessary blood tests.
- You will discuss medications you take and allergies you have.
- You will discuss the different types of anesthesia (the medicine that makes you comfortable during your surgery) and their risks and benefits. Please let your care team know if you've ever had a problem with anesthesia in the past.
- You will talk about side-effects you may have from anesthesia or surgery, like:
  - Drowsiness
  - Nausea, vomiting, gas or headache
  - Sore throat, dry mouth, and thirst
  - Shivering or coldness
  - Soreness or discomfort
- Your medications will be discussed at your CPAP appointment.  
**Please follow all instructions for stopping any medications before surgery.**
- If you are unclear or have not been given specific instructions regarding certain medications, please call your surgeon's office.

## Blood Thinners

- Many blood thinners need to be stopped for at least 1 week before surgery.
- Please discuss your medication list with your surgeon and/or nurse practitioner for your individual pre-surgery instructions.

## Please alert us if you are taking any of these medicines:

- |               |                |              |               |
|---------------|----------------|--------------|---------------|
| • Abciximab   | • Coumadin     | • Ibuprofen  | • Pradaxa     |
| • Aggrastat   | • Dabigatran   | • Integrilin | • Prasugrel   |
| • Aggrenox    | • Dipyridamole | • Lovenox    | • Reopro      |
| • Apixaban    | • Ecotrin      | • Meloxicam  | • Rivaroxaban |
| • Asaphen     | • Effient      | • Motrin     | • Ticlid      |
| • Aspirin     | • Eliquis      | • Naproxen   | • Ticagrelor  |
| • Brillinta   | • Empirin      | • Persantine | • Ticlopidine |
| • Celebrex    | • Eptifibatide | • Plavix     | • Tirofiban   |
| • Cilostazol  | • Heparin      | • Pletal     | • Warfarin    |
| • Clopidogrel |                |              | • Xarelto     |

# THE DAY/NIGHT BEFORE SURGERY

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## WHAT TO BRING TO THE HOSPITAL

- **BRING THIS JOURNEY GUIDE WITH YOU!**
- An attitude of success!
- Insurance card and photo ID
- Phone numbers of your other doctors
- Copy of Advanced Directive
- Health History and list of medications
- Phone numbers of family/friends
- Glasses and contacts (with cases)
- **Do not** wear contacts the morning of surgery
- Bring cases with you
- Hearing Aids
- Loose fitting clothing
- Comfortable slip on shoes and socks (cane, walker if needed)
- CPAP/BiPAP if applicable
- Insulin pump and/or continuous glucose monitor supplies
- CAPD bags/supplies

## WHAT TO LEAVE AT HOME

- Jewelry (rings, etc.)
- Valuables such as purse, wallet, cash, credit cards
- Medications from home

# WASHING WITH PRE-SURGICAL SOAP (DECOLONIZATION)

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*You can help reduce your risk of surgical-site infection if you wash properly with antiseptic soap twice before your surgery.*



See “A Guide for Patients Having Surgery” from our CPAP team for your 2-Day CHG Bathing [TS1] Protocol on pages 7-8.

## THE DAY OF SURGERY

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### Before you arrive

- Shower with remaining half of antiseptic soap as previously detailed
- Take medications as instructed
- Follow any other instructions

### HELPFUL TIP

- Arrive on time and at the correct location.
- Before and during surgery, medications and medical devices will be used to help you relax, breathe, and help your heart recover.
- Family will be updated during and after surgery, but visitation may be limited.

# YOUR HOSPITAL STAY

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*We are committed to delivering excellent care by listening carefully and explaining things to you, and treating you with courtesy and respect. We invite you and your family to partner with us. As a team, we will work together to make sure your experience is a safe one.*

## Pain management after surgery

The GOAL OF PAIN MANAGEMENT after surgery is to manage your pain enough to allow you to do the things you need to do in order to heal, walk, eat, breathe deeply and sleep and to minimize medication side effects.

## Pain expectations

- Pain after surgery is normal
- Pain is usually more intense the first 2-3 days after surgery
- Pain can be managed by combining different management techniques:
  - Non-medication therapy such as mindful breathing, relaxation, music, physical therapy, meditation, reflection, short walks
  - Non-opioid medications (e.g., ibuprofen, acetaminophen)
  - PCA - patient controlled pain medicine
  - Short-acting opioids taken only as needed

## Helping you move

- Moving is vital to improving your progress. Starting the day of surgery, you will be encouraged to increase your movement during your hospital stay. Physical Therapy will visit you and help you get out of bed the day after your surgery.
- Safety is our biggest concern.
  - **Prevent a Fall – Call Your Nurse:** You are at risk for falling and becoming injured because of anesthesia, medications, weakness, and equipment you received.
    - » **Please call your nurse for assistance when getting out of bed!**
    - » Do NOT get out of bed on your own!

## Preventing blood clots

- Resting in bed for a long time after surgery can increase your risk of a blood clot forming in a deep vein inside your body. This type of blood clot is known as deep vein thrombosis or DVT.
- You may be given a type of drug to thin your blood after surgery.
- While you are in the hospital you may need to wear pumps around your legs to help prevent blood clots.
  - The nurse or patient care technician will place Velcro wraps on your legs. The wraps are attached to a pump.
  - The pump inflates with air every few seconds. This increases blood flow to help prevent blood clots.



# YOUR HOSPITAL STAY (Cont'd)

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## Preventing infection

- **Keeping Your Lungs Clear**

- Incentive spirometer

- » *This hand-held device will help you take deeper breaths to prevent lung infection (Pneumonia).*
    - » *We will show you how to use it.*
    - » *Use your incentive spirometer, take deep, slow breaths, and cough every hour while awake.*

## Keeping your skin healthy

- The single most important thing you can do is wash your hands often with soap and water or alcohol hand foam. Always wash your hands after using the bathroom and before eating.
- Daily antiseptic soap (CHG) skin treatment

## Eating after surgery

- You will have **clear liquids to start and advance to Full Liquid Diet.**
  - The dietitian will teach you about the **“Full Liquid Diet”**.
- Your surgeon will advance your diet at your post-operative visit.

## Preventing constipation

- Medications used during surgery and in the hospital can cause constipation.
- We will prescribe medications to help prevent this from happening.
- Walking will speed up return of bowel function as well.

# TRANSITION TO THE FLOOR

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## Your care schedule

- Your surgical care team will make rounds in the morning, visit you, and discuss your plan for the day.
- You are encouraged to take part in bedside shift report. This is a great time to talk about questions or concerns.
- Use the blank pages in this guide to write down questions or concerns you would like addressed by your care team.
- You will be checked on every hour by a staff member.
- You will have access to your nurses at all times with a call light button. Your nurse will show you how this works.
- Visitor guidelines will be shared at the hospital.
- Discharge planning rounds are held with your nurse and surgical care-team daily.

# GETTING READY FOR DISCHARGE

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*We treat all of our patients as individuals and plan care according to your needs. You will receive written instructions on how to take care of yourself at home. Please share any concerns or questions you have related to your discharge from the hospital.*

## Know your medications

### ☐ You will receive a list of medicines to take at home.

- Make sure you understand what they are for, how much to take, when to take them and what the side effects may be.
- You will be told if there are any home medicines you should stop taking.
- You will be told if a medication you were taking at home will now have a higher or lower dose than what you were used to. If so, be sure you understand whether you can use the medicine you already have at home, or if you will need a new prescription.

### ☐ You will be given a prescription for any new medications.

*\* If you want, you may have them filled by our mobile pharmacy before you go home.*

## It is normal to:

- **Not have much appetite.** It can take several weeks for your appetite to return. It is important to continue to eat small, frequent meals as tolerated.
- Have **difficulty sleeping** at night. Try sleeping at in incline or sitting up to relieve discomfort. If this remains a problem, call your surgeon's office.
- Have problems with **constipation**. If on pain medications, a stool softener or laxative should be used. We will recommend continuing your bowel regimen at discharge.
- **Experience soreness** in your chest or abdomen. This should get better the farther out you are from surgery.
- Have good and bad days. Do not let this upset you. If you have concerns, call your surgeon.

# YOUR RECOVERY AT HOME

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## Good nutrition

- Good Nutrition is important for proper healing after your surgery.
- You will go home on a “**Full Liquid Diet**” (see page **22**).
  - *The restrictions of the “Full Liquid Diet” are temporary.*
  - *Your doctor will decide when you are ready to eat a normal diet again.*
- Typically you will start a soft food diet after your post-operative visit.

## Care of your incisions

You will have **Dermabond** (skin glue) on your incisions, it will fall off in a couple weeks as your incision heals. Please do not pick this off. It will fall off on its own.

- Wash your hands before and after touching your incisions. Gently wash your incisions with mild, unscented soap and warm water every day. Pat dry and do not scrub.
- It is best to keep surgical incisions open to air.
- Once healed, use sunscreen on your scar to prevent it from getting dark.
- **Don't:**
  - *Use very hot water on your incisions.*
  - *Soak in a bath or swim until your incisions are healed and you are cleared by your surgeon.*
  - *Use lotions, powders, creams or ointments until your incisions are healed.*

## **CALL 911 or GO TO YOUR LOCAL EMERGENCY ROOM:**

- New or worsening chest pain
- Heart rate faster than 150 beats/minute with shortness of breath or new irregular heart rate
- Shortness of breath **NOT** relieved by rest
- Coughing up bright red blood
- Sudden numbness or weakness in arm or legs
- Sudden severe headache
- Fainting spells
- Severe abdominal pain
- Bright red blood in stool

# YOUR RECOVERY AT HOME (Cont'd)

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## CALL YOUR SURGEON IF YOU HAVE ANY OF THE FOLLOWING:

- Increased tenderness of the incision site
- Increased redness, warmth, swelling or drainage of the incision
- Worsening shortness of breath
- Sharp pain when taking a deep breath
- A persistent fever over 101°F for 24 hours or chills
- Worsening ankle swelling, leg pain or calf pain that becomes worse when pointing toe up to head
- Persistent nausea or vomiting
- Persistent or increased pain not relieved with your pain medication
- No bowel movement for more than 3 days

(See page 3 for Surgeon's office numbers)

## Slowly increase your activity

Use common sense. If it hurts, don't do it. Listen to your body.

- **Walk**  
Walk at least 1 to 2 times a day. Start with short walks and plan to walk a little longer each day. Do more as you feel stronger. Walk at your own pace. Stop and rest if you get tired.
- **Use Stairs**  
If your surgeon allows, you may use stairs. Go slow and rest if you get tired. Hold onto the rail for safety.
- **Posture**  
Please sit and stand up straight. Do not let yourself bend toward your incision. This makes you stiff and uncomfortable.
- **Do NOT lift more than 10 pounds**  
For at least 4 weeks after surgery.  
Don't hold your breath during any activity, especially when lifting or using the bathroom.
- **Rest**  
You need a balance of rest and exercise. Plan to rest between activities. Take short naps as needed.
- **Drive**  
You can ride in a car at any time. Don't drive until your surgeon says it's OK. If you're taking pain medicine, don't drive. If you're traveling, get out of your car every 1-2 hours and walk for a few minutes.

## Keeping your lungs clear

Continue to use your incentive spirometer, take deep, slow breaths, and cough every hour while awake.

# YOUR RECOVERY AT HOME (Cont'd)

## Support your recovery

- Wear comfortable, loose fitting clothes that don't put pressure on your incision. Your clothes may feel tight for a while due to swelling after surgery.
- Take all the medications as prescribed by your doctors.
- Clean your hands often with soap and water or hand sanitizer to protect you from germs that cause infections. Remind your family and friends to do the same. Germs are everywhere - even healthy people can spread them.

WEEKS 1-4	AFTER 4 WEEKS Continue the activities of weeks one to four (but you may be able to tolerate more).
<input type="checkbox"/> <b>Light housework:</b> – Dusting – Setting the table – Washing dishes – Folding clothes	<input type="checkbox"/> <b>Heavy housework:</b> – Vacuuming – Sweeping – Laundry
<input type="checkbox"/> <b>Light gardening:</b> – Potting plants – Trimming flowers	<input type="checkbox"/> <b>Heavy gardening:</b> – Mowing the lawn – Raking leaves
<input type="checkbox"/> <b>Needlework</b>	<input type="checkbox"/> <b>Ironing</b>
<input type="checkbox"/> <b>Reading</b>	<input type="checkbox"/> <b>Business or recreational travel</b>
<input type="checkbox"/> <b>Cooking meals</b>	<input type="checkbox"/> <b>Fishing</b>
<input type="checkbox"/> <b>Climbing stairs</b>	<input type="checkbox"/> <b>Light aerobics</b> (no weights)
<input type="checkbox"/> <b>Small mechanical jobs</b>	<input type="checkbox"/> <b>Exercising:</b> – Biking – Swimming – Light weight lifting
<input type="checkbox"/> <b>Shopping</b>	<input type="checkbox"/> <b>Golfing</b>
<input type="checkbox"/> <b>Restaurants or movies</b>	
<input type="checkbox"/> <b>Church</b>	
<input type="checkbox"/> <b>Attend sporting events</b>	
<input type="checkbox"/> <b>Passenger in car</b>	
<input type="checkbox"/> <b>Walking/ treadmill</b>	
<input type="checkbox"/> <b>Stationary bike</b>	
<input type="checkbox"/> <b>Shampooing hair</b>	
<input type="checkbox"/> <b>Playing cards/games</b>	

- Limit visitors for the first few weeks. If you get tired, excuse yourself and lie down.
- It may take some time to start feeling like yourself again. Be patient.

## Follow-up Appointments

- At the time of discharge you will have already been scheduled for your follow up appointments.  
◦ Approximately **3-4 weeks** after surgery. (See page **5**)

## Eating well after your post-op visit:

- You can start a soft diet today! I attached a handout. Do this for about 1 week. If you tolerate this well after 1 week, you can start a regular diet. Always make sure that you eat slowly and chew your food well.
- Some foods that might cause digestive problems would include high sugar food and high fat foods. Avoid these if you notice digestive issues after eating.

## » Things to AVOID:

- Carbonated beverages. You may need to take **Gas-X®** (simethicone) with meals if you experience bloating after meals.
- Retching or forceful vomiting after surgery as this may cause recurrence of the hernia. If you have issues with nausea or vomiting please contact your surgeons' office.
- Excessive weight gain following surgery as this places you at risk for recurrence of your hernia.

# SURGICAL LOCATION

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## Barnes-Jewish Plaza Tower

**Main Phone:** 314-362-5000

**Surgical Waiting Room:** 314-362-1164

**Website:** <https://www.barnesjewish.org/Patients-Visitors/Locations-Directions/Barnes-Jewish-Plaza-Tower>

### How to Scan a QR Code

1. Open the QR Code reader or camera on your phone.
2. Hold your device over QR Code so that it's clearly visible within your smartphone's screen.  
*\*The phone may automatically scan the code.*
3. If necessary, press the button.



# FULL LIQUID DIET

Your surgeon recommends a full liquid diet after your esophagus surgery.  
This diet eases the movement of food through the areas that are swollen temporarily.  
Eat small, frequent meals six or more times each day.

GROUP	FOODS ALLOWED	FOOD TO AVOID
<b>Milk</b>	Milk, eggnog, milkshake, yogurt without seeds or fruit	All others
<b>Breads and Cereal</b>	Cream of rice, cream of wheat, grits	All others
<b>Fruits</b>	All fruit juices (without pulp)	All others
<b>Vegetables</b>	All vegetable juices	All others
<b>Meats</b>	None	All meats
<b>Soups</b>	Broth, strained or blended cream soups	All others
<b>Fats</b>	Margarine, butter, cream, nondairy creamer	All others
<b>Desserts</b>	Ice cream, sherbet, gelatin, custard, pudding, fruit ice, popsicle	All others
<b>Sugar and Sweets</b>	Sugar, syrup, honey, hard candy	All others
<b>Beverages</b>	All beverages: coffee, tea, nutritional supplements	No restrictions
<b>Miscellaneous</b>	Salt, herbs, mild spices	All others

## SAMPLE MENU:

### Breakfast

- Apple juice
- Cream of wheat
- Milk
- Custard
- Coffee or tea

### Morning snack

- Milkshake

### Lunch

- Strained cream of chicken soup
- Grape juice
- Gelatin
- Milk
- Coffee or tea

### Afternoon snack

- Vanilla pudding
- Cranberry juice

### Dinner

- Strained cream of potato soup
- Apple juice
- Ice cream
- Milk
- Coffee or tea

### Evening snack

- Nutritional supplement



# SOFT DIET

**This diet is recommended for those patients who have difficulty swallowing due to narrowing or postoperative swelling in the esophagus. It will help the passage of food and make eating more comfortable and avoid having food stick.**

## MILK AND MILK PRODUCTS

All milk and milk products are okay excluding yogurt with fruit.

## MEAT AND MEAT SUBSTITUTES

Use ground, tender meat only. Puree meat as necessary. Eat casseroles with ground meat, eggs, smooth peanut butter and luncheon meats. Dried beans and peas as tolerated.

- » **Avoid:** stringy, dry or fibrous-type meats (e.g. fish, seafood, stew meat, roast beef, chicken and turkey). Meats containing gristle or peppercorn, sausage, bacon or chunky peanut butter.

## BREADS AND STARCHES

You can have cereals without nuts and dried fruits, noodles, potatoes and pasta.

- » Breads may cause “sticking” initially and should be avoided until you are comfortable with eating most soft foods. **Avoid:** popcorn, rice and all breads with nuts.

## FRUIT

You may have canned, cooked or frozen fruit without membranes, skin or seeds (e.g. canned peaches, applesauce). You may also have bananas and melons without seeds.

## VEGETABLES

Canned, cooked or frozen vegetables that are soft (e.g. mashed potatoes, squash, carrots, spinach).

- » **Avoid:** all raw vegetables, including salads, cooked vegetables that are fibrous, tough, “woody”, or contain seeds (e.g. broccoli, tomato, okra or celery)

## MISCELLANEOUS

All beverages, fats and sweets as tolerated. Soups with allowed meats and vegetables as tolerated. Carnation Breakfast Essentials or Ensure may be beneficial if you cannot eat or drink enough at first.

- » **Avoid:** nuts, seeds, trail mixes, peppercorn, soups with chunks of meat, particularly if not ground

## SAMPLE MEAL PLAN

### Breakfast

- ½ cup orange juice 1 egg, scrambled
- 1 slice toast/margarine
- ½ cup milk

### Lunch

- ½ cup macaroni and cheese
- ½ cup cooked carrots
- ½ cup fruited gelatin
- ½ cup milk

### Dinner

- 2 oz. meatloaf
- ½ cup mashed potatoes with gravy
- ½ cup peaches
- ½ cup milk

### Mid-morning snack

- 1 oz. soft cheese 6 crackers
- ½ cup milk

### Mid-afternoon snack

- 1 cup yogurt
- 3 graham crackers
- ½ banana

### Evening snack

- ½ egg salad sandwich
- ½ cup juice

## SOFT DIET (Cont'd)

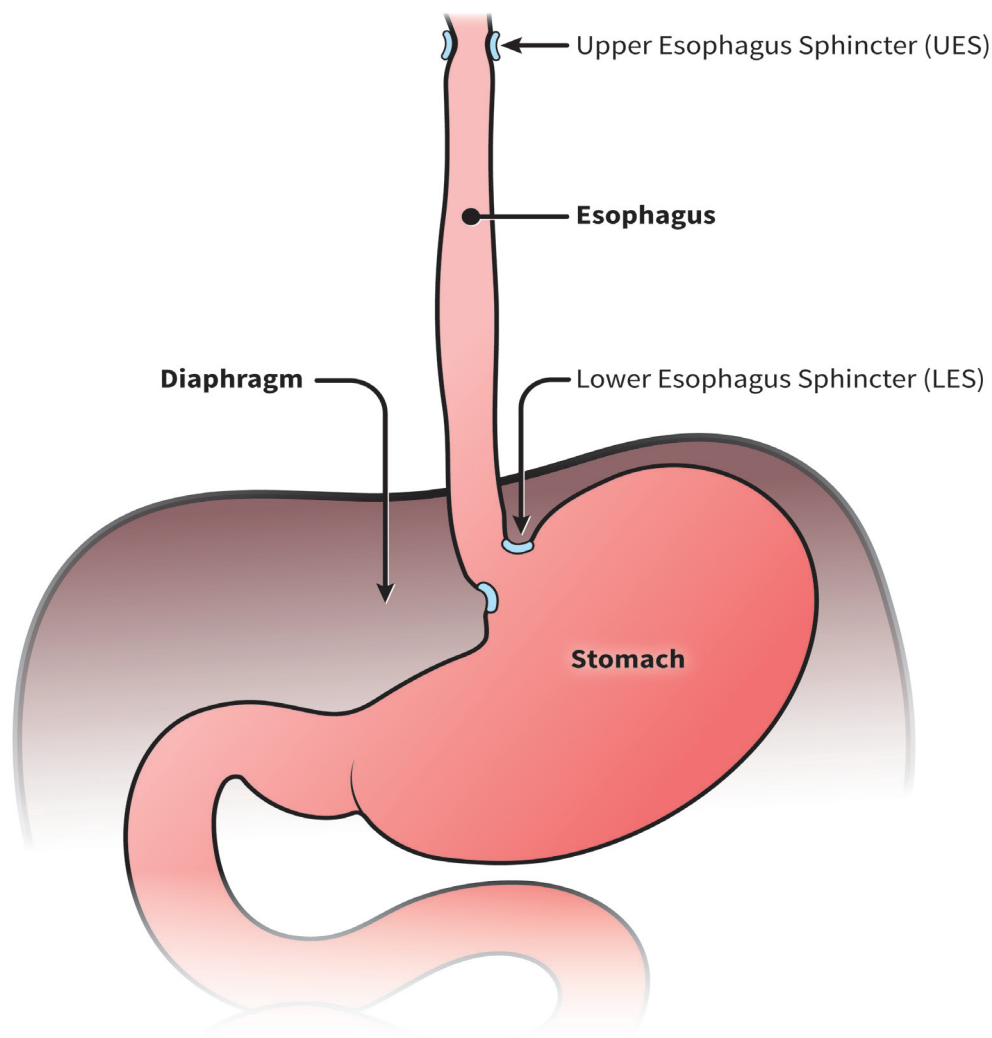
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### **IMPORTANT TIPS:**

- Chew carefully, eat slowly, take small bites and eat small amounts.
- This diet does not refer to the types of foods (e.g. spicy) but rather to the consistency of the food.
- Stop eating when you are full.
- If you are on a special diet (diabetic, low-salt, etc.) due to a medical condition, please continue it, but change the consistency.
- If you experience increased bloating or intestinal gas, you may want to take an anti-gas medication (e.g., Phazyme, Gas-X, Mylanta II).

## DIAGRAM

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## This image shows a full page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.



## Surgery