

Thank you for choosing Duke Health for your healthcare needs. Your provider ordered a Transoral Incisionless Fundoplication (TIF) for you. Please review the information about your procedure to prepare for it. If you have questions about your procedure, appointment, or prep, please call Duke Gastroenterology (GI) at (919) 684-6437.

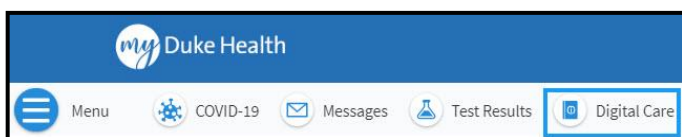


What is a Transoral Incisionless Fundoplication (TIF)?

A TIF is a non-surgical endoscopic procedure to treat gastroesophageal reflux disease (GERD). Your doctor will place a flexible tube into your mouth. The tube passes through your esophagus to your stomach. Therapeutic maneuvers are performed during this procedure. You will receive general anesthesia to help you sleep and stay comfortable during your procedure. After your procedure, you will stay in the recovery area until your doctor decides it is safe to go home.

TWO (2) WEEKS Before Your Procedure

- ☐ Log into your My Duke Health account and review your procedure prep information. Select the Digital Care button to review and print the information.
- ☐ Sign up for the Care Convoy® mobile health app. This app is designed specifically for Duke GI patients. It is a tool that will guide you through each step of your prep. You can access the app from Google Play or the Apple Store using the QR code below. You will also get an email invitation from Care Convoy® with download instructions. The app will support you through your prep and allow you to confirm your procedure appointment. Care Convoy will ensure you are well-prepared and at ease for your procedure.



Care Convoy QR Code

- ☐ Ask a family member or friend to drive you to your procedure, **stay with you**, and drive you home. Your driver needs to stay in the endoscopy department during your procedure. Your driver must be an adult over 18 with a valid driver's license. You cannot go home in a taxi, bus, or ride-share.
- ☐ Review your procedure location (address), date, and arrival time.
- ☐ Plan to be in the GI department for your procedure for about six (6) hours.
- ☐ Since you will receive IV sedation for your procedure, you cannot drive or work for the rest of the day.
- ☐ Put your procedure instructions in a safe place, like on your refrigerator.
- ☐ If you have diabetes, contact your diabetes provider to ask if you need to adjust your medicine or insulin.
- ☐ If you take medicine that thins your blood, ask your provider if and how long you need to hold your medicine. (Examples Coumadin, Pradaxa, Eliquis, Xarelto, Plavix, Effient, or Brilinta).

Shopping List - Prep Items

Purchase the clear liquids at any grocery store.

- ☐ Purchase assorted clear liquids to drink the day before and the day of your procedure.
- ☐ Review the clear fluid list below. ****Do not buy Red or Purple fluids.****

TWO (2) WEEKS Before Your Procedure

- ☐ If you have diabetes, contact your diabetes provider to ask if you need to adjust your medicine or insulin.
- ☐ If you take medicine that thins your blood, ask your provider how long you need to hold your medicine. (Examples Coumadin, Pradaxa, Eliquis, Xarelto, Plavix, Effient, or Brilinta).
- ☐ Review your post-procedure patient education information.

FIVE (5) DAYS Before Your Procedure

- ☐ Stop taking Fish Oil supplements.

TWO (2) DAYS Before Your Procedure

- ☐ Do not eat any solid food for the entire day.
- ☐ Drink clear liquids all day. See the list below.
- ☐ Follow your provider's instructions and take your medicines.

ONE (1) DAY Before Your Procedure

- ☐ **Do not eat any food for the entire day.**
- ☐ Drink clear liquids all day. See the list below.
- ☐ Follow your provider's instructions and take your medicines.

The Day of Your Procedure

- ☐ **Do not eat any food for the entire day.**
- ☐ Follow your provider's instructions and take your medicines with a sip of water.
- ☐ **STOP drinking all clear fluids FOUR (4) hours before your procedure.**

Pre-Procedure Frequently Asked Questions (FAQs)

If you have a **Pacemaker or Internal Defibrillator**, Bring your device information card to your anesthesia and procedure appointment. When you check in for your procedure, give the device card to your nurse.

If you do not or cannot accept blood products in an emergency, please call The Duke Center for Blood Conservation at (919) 668-2467 one week before your procedure.

I am a diabetic. Should I change my insulin or medicine during the clear liquid diet?

Contact your diabetes provider to ask how to adjust your medicines or insulin for this procedure.

Is alcohol, wine, or beer an acceptable clear liquid? No, alcohol, wine, and beer are not clear liquids. Do not drink any alcohol the day before your procedure.

What if I lose my prep information? Log into My Duke Health, select Digital Care to review or print your instructions, or call Duke GI for help.

Why do I have to drink clears for two days?

Your stomach must be empty for this procedure. You can't eat solid foods for two days before your TIF procedure. The diet restrictions ensure your esophagus and stomach are empty. Review your post-procedure diet restrictions.

Start a Clear Liquid Diet - Two (2) Days before your Procedure

Clear Liquid Examples

All fluid must be light in color and not red or purple.

- Water
- Tea and black coffee without any milk, cream, flavor, non-dairy, or powdered creamer
- Flavored or coconut water without red or purple color
- Clear, light-colored juices such as apple, white grape, lemonade without pulp, and white cranberry
- Clear broth, including chicken, beef, or vegetable
- Sodas or Seltzer such as Mountain Dew®, Ginger-ale, Sun-drop®, or 7-Up®,
- Sports drinks such as Gatorade Zero®, Hydralyte®, Pedialyte®, Powerade Zero Sugar® or Propel®
- Popsicles without fruit or cream (no red or purple colors)
- Jell-O® or other gelatin without fruit (no red or purple colors)
- Boost® Breeze Tropical Juice drink

TIF Procedure Frequently Asked Questions (FAQs)

Will I be admitted to the hospital after my TIF procedure?

- Some patients are admitted to the hospital after the procedure for 24-hour observation.
- Talk to your GI provider about your post-procedure plan.

If you are admitted to the hospital for observation:

- You may stay longer if you have uncontrolled pain or cannot eat.
- While in the hospital, your doctor will monitor you for any complications—such as a hole in your esophagus (swallowing tube) or stomach, bleeding, or infection.
- While in the hospital, you will receive fluids and medications for pain and nausea through an IV (a small, flexible tube in your arm).

Will I experience pain after the TIF procedure is performed?

Although this is an endoscopic procedure, it is still a surgical procedure, and you will experience pain after this procedure. Your doctor will review how to manage post-procedure pain.

Do I need to hold my blood thinner medicines for the procedure?

You must hold your blood thinners (such as Coumadin, Warfarin, Ticlid, Plavix, Lovenox, Pletal, Pradaxa, Xarelto, Persantine, Eliquis, and Aggrenox) before the procedure. Contact your prescribing provider for instructions on how long you need to hold your medicine(s).

What are the risks of a TIF procedure?

The risks of a TIF include perforation, infection, bleeding, and an unsuccessful procedure. Discuss the risks with your doctor before your procedure.

How long will the TIF procedure take? The procedure will take two (2) to three (3) hours to complete, and you will receive general anesthesia.

When will I feel better after the TIF procedure?

You will experience pain and some nausea after the procedure for up to two (2) weeks. The pain will slowly decrease over the next two weeks. It is important to follow the post-procedure diet for 14 days to decrease pain and nausea.

How does my doctor know if the TIF worked?

The procedure is successful if you no longer have GERD symptoms or the symptoms are reduced.

Do I have to follow a special diet after the TIF procedure? Yes, please refer to your post-procedure diet instructions. You must follow the specific diet instructions for 14 days.

What will I feel after the TIF procedure? Although this is an endoscopic procedure, you may experience pain in your chest or esophagus (swallowing tube) for up to two weeks. However, your pain will significantly decrease in the third week after your procedure.

Do I need to continue taking medicines for acid reflux?

Yes, continue to take the acid reflux medicine. These medicines are called Proton pump inhibitors (PPI). PPIs decrease your stomach acid, prevent acid reflux, and allow the esophagus to heal. Take the prescribed PPI twice a day. Take your medicine - 30 minutes before breakfast and dinner. Your provider will review these medicines during your follow-up appointment.

When is it safe to take NSAID medicines like Advil, Motrin Aleve, or aspirin after having a TIF procedure?

Do not take non-steroidal anti-inflammatory medicine for seven (7) days after your procedure. Avoid NSAIDs such as ibuprofen and sodium bicarbonate, aspirin, or aspirin products unless you are prescribed aspirin for a heart condition.

I take a prescribed blood thinner. When should I start taking my blood thinner after my procedure?

Please talk to your prescribing and GI provider about your blood thinner medicine. Hold your blood thinner medicine for three (3) days after a TIF procedure. Restart your medicine on the morning of day (4) four. (Examples: warfarin, clopidogrel bisulfate, cilostazol, dipyridamole, dipyridamole ER, rivaroxaban, dabigatran, apixaban, ticlopidine hcl, enoxaparin).

What can I eat after performing the TIF procedure?

After your procedure, continue eating only clear liquids for three more days.

On Day 5, you may start eating soft foods for the next two weeks. These foods may be chopped, ground, mashed, pureed, and moist. After two (2) weeks, you may eat whatever you feel comfortable eating, with no restriction. If you are still having nausea, pain, or vomiting, start eating soft foods again, call Duke GI, and speak to a nurse.

When can I return to work or school after having a TIF procedure?

Rest and remain at home for at least five (5) five days. You should be able to drink without pain before returning to work or school. Limit physical activity and exercise until you have your follow-up GI appointment.

Post Procedure Home Care Instructions

Follow these instructions after your procedure

General Information

- Return home after your procedure and rest.
- You may start your regular activity slowly over the next week.
- Rest frequently for the next 24 to 48 hours.
- Although this is an endoscopic procedure, you will experience pain for the next 7 to 14 days. You may have pain in your chest or esophagus (swallowing tube) for up to two weeks. In the third week, you will have a significant decrease in pain.
- If your belly feels tight or swollen, stop eating and continue to walk or move often. Walking will help you pass the air and decrease the bloated feeling in your belly (*abdomen*). The air put into your stomach during the procedure can cause this pain. You should feel better after passing gas, and you should not need treatment for this.
- Monitor your stools for any blood. Your stool may be dark purple or black, appearing like tar. Changes in your stool may be a sign of bleeding. Notify your doctor immediately or seek medical care at your local emergency department.
- Monitor your IV site. If you have redness or swelling at your IV site, place a warm, wet washcloth over the area for 20 minutes four (4) times daily. Repeat this process until the redness or swelling goes away. Raising your arms on pillows can help decrease the swelling. If you notice redness or swelling that continues for more than two (2) days, call the office and ask to speak to a nurse.

Medication Information

- Your doctor will prescribe a proton pump inhibitor (PPI). This medicine will decrease your stomach acid, prevent acid reflex, and allow your esophagus to heal. You will take this medicine **twice a day**. Take your medication - 30 minutes before breakfast and dinner.
 - Please pick up your prescription at your pharmacy as soon as possible.
 - If the medicine costs too much, please call Duke GI Resource Nurses for assistance.
- **DO NOT TAKE ANY** non-steroidal anti-inflammatory medications (NSAID examples Ibuprofen, Motrin, Advil, Aleve, Alka-Seltzer, Goody's, or BC Powder) for **SEVEN days**.
- **DO NOT TAKE ANY aspirin for SEVEN days** unless you are prescribed aspirin for a heart condition.
- For the next three (3) days, **HOLD** blood thinners like Coumadin™, Plavix™, Eliquis™, Xarelto™, and Pradaxa™, unless otherwise directed by your prescribing provider.

Follow-up appointments

- Follow-up appointments are important for your health and safety. Be sure to schedule and go to your follow-up GI appointments. Call your GI doctor if you have problems at (919) 684-6437.

Activity level and exercise information

- Avoid any activity that increases intra-abdominal pressure for one week (7 days).

Follow this weekly outline for your activity.

- **Week One - The first week after your procedure**
 - Minimal physical activity - You can walk short distances
 - Avoid sexual activity
 - Do not lift anything over 5 pounds
 - Limit climbing stairs
- **Week Two**
 - Slow climbing of stairs
 - Do not lift anything over 5 pounds
- **Week Three to Six**
 - No intense exercise
 - You can lift objects weighing 25 pounds or less
- **Week Seven**
 - Begin your regular activity

Medicine Information

- Your doctor will tell you about any changes to your medicines.
- If your doctor prescribes new medicines, pick them up on your way home from the hospital at your preferred pharmacy.
- If you are not taking an acid reducer (proton pump inhibitor – PPI), your doctor will send a new prescription to your pharmacy. Proton pump inhibitors (PPI) will decrease stomach acid, prevent acid reflux, and allow the esophagus and stomach to heal. You will take the PPI twice daily for eight (8) weeks. Take the PPI medicine 30 minutes before breakfast and dinner.
- If any new medicines are too expensive, please call the Duke GI Nursing Team for assistance.
- **DO NOT TAKE ANY** non-steroidal anti-inflammatory medications (NSAID examples Ibuprofen, Motrin, Advil, Aleve, Alka-Seltzer, Goody's, or BC Powder) for **SEVEN days after your procedure.**
- **DO NOT TAKE** blood thinners (for example Coumadin™, Plavix™, Eliquis™, Xarelto™, and Pradaxa™) unless otherwise directed by your prescribing provider for **THREE days after your procedure.**

Diet Information – Follow these instructions to avoid complications

- Avoid drinking red liquids for the first three days.
- After your procedure, continue eating only clear liquids for **the first week.**
- Follow these instructions to advance your diet (review the examples below)
 - **Second week** - advance your diet to full liquids
 - **Third week** - eat pureed and soft foods if tolerated
 - When tolerating soft foods, you can restart eating your regular diet.
 - If you are still having nausea, pain, or any vomiting, eat only soft foods and contact Duke GI immediately.

Post Procedure Diet Information with menu examples

Days 1 – 7	Drink examples	Food Examples
Clear Liquids Diet only	Soft drinks – orange, ginger ale, Sprite, 7-Up, Gatorade, or Gatorade G2 Fruit juices without pulp – apple, white grape Water Pedialyte® Hydralyte®	Jell-O (lemon, lime, orange; no fruit or toppings) Popsicles (no sherbet or fruit bars) Low-sodium chicken or beef bouillon/broth (no solid pieces of noodles, vegetables, or meat) Vegetable or soy broth

Days 8 – 14	Drink examples	Food Examples
Full Liquids Eat Small Frequent Meals	Soft drinks – orange, ginger ale Sports drinks, electrolyte replacement drinks, or water Fruit juices without pulp – apple, white grape	Mashed potatoes Pudding Ice cream and milkshakes Yogurt Applesauce Blended soups without solid pieces of noodles, vegetables, or meat

Day 14 until tolerating a soft diet	Food Examples
Eat Small Frequent Meals Pureed Diet	Place cooked food in a blender and add water, broth, or milk to make it a thick liquid.

DAY 14 until tolerating a regular diet	Drink examples	Food Examples
Soft Diet	Soft drinks – orange, ginger ale Sports drinks, electrolyte replacement drinks, or water Fruit juices without pulp – apple, white grape Protein Drinks	Mashed potatoes or mashed sweet potatoes Pudding, Ice cream, milkshakes Yogurt, Cottage cheese, tofu Scrambled or cooked eggs Applesauce, cooked fruits, or soft fruits with peeled skins, such as peaches, bananas, avocados Soups with small soft pieces Oatmeal, Cream of Wheat

Contact the Duke GI Nursing Team if you have any of the following symptoms:

- The stool changes color and looks dark - purple or black like tar.
- Sick to your stomach (*nauseous*) or throw up (vomit).
- Chest pain or difficulty breathing or swallowing,
- Sore throat that continues for over two (2) days.
- Redness, pain, or swelling at the IV site lasts two days.
- Belly pain that is severe or worsens throughout the day.
- Belly is painful to touch.
- Temperature over 101 degrees or chills.
- If you received medical care at an urgent care emergency department or were hospitalized within 30 days of your endoscopy procedure.

If you have any of these symptoms, go to the nearest Emergency Department for care

- Reddish purple (maroon), black, or "coffee ground" color stools.
- Rigid or firm abdomen or your stomach is painful to the touch.
- Abdominal pain or severe discomfort worsens throughout the day.
- Vomiting that will not stop.
- Vomiting bright red blood or blood clots.
- Chest pains, difficulty breathing, or swallowing.
- A sore throat continues for more than 2 days.
- Temperature over 101 degrees or chills.

Please contact Duke Gastroenterology at (919) 684-6437 if you received medical care at an urgent care or emergency department or were hospitalized within 14 days of your endoscopy procedure.

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