Find a Specialist
214-947-1766
We are excited to join your team.

You have been referred to Methodist Dallas Medical Center for pancreatic surgery. Studies show that pancreatic surgeries have better outcomes and fewer complications if done at a hospital that performs these specialized surgeries more frequently.

At Methodist Dallas, you are being cared for by a multidisciplinary team that has increased skill and expertise in this specialty. This team includes surgeons, nurses, radiologists, internal medicine doctors, pathologists, cancer doctors, and other specialized caregivers.

Our Goal

We want to help you through your treatment from beginning to end with as few complications as possible. This guide book will help you learn about what to expect before and after surgery, so you and your family will know how to play an active part in your recovery and healing.
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Total Pancreatectomy

The pancreas
The pancreas is a gland that sits behind the stomach and is attached to the small intestine.

What does the pancreas do?
It has two jobs:

1. It **makes enzymes** that are sent into your intestines to help break down fats and other food.

2. It **produces insulin**, which controls the level of sugar in the blood. Lack of insulin causes diabetes.

The pancreas is in contact with very important veins and arteries as well as other organs. All of these have to be considered when operating on the pancreas.

Why is this surgery done?
This surgery is used to treat many different diagnosis including:

- Intractable pain associated with chronic pancreatitis
- Neuroendocrine tumors
- Premalignant lesions or invasive cancer
- Intraductal papillary mucinous neoplasia with ductal involvement (IPMN)

The procedure
A total pancreatectomy is an operation to remove your entire pancreas. This operation will result in major changes to your life. Because of the location of the pancreas, other portions of organs will be removed as well, including a small portion of the stomach, the duodenum (first part of the small intestine), the end of the common bile duct, the gallbladder, and the spleen.

The surgeon will reconnect your stomach and the remaining portion of your common bile duct to the jejunum. The jejunum is the second part of the small intestine. This ensures that food and bile flow into your small intestines.

The areas in purple will be removed.
Total Pancreatectomy

Benefits of surgery for cancer patients
Potentially curative surgery is used when tests suggest that it looks like all the cancer can be removed. The aim of this surgery is to remove all of the visible tumor or growth. In general, patients treated with surgery survive longer.

How will my lifestyle be affected after my pancreas is removed?

- You will be diabetic and will manage your blood sugars with insulin. You and a care partner will slowly learn how to manage your diabetes. When you go home, you will need to have a doctor to manage the diabetes. It can be your internist or an endocrinologist. You can discuss this with your surgeon.

- You will no longer produce the pancreatic enzymes that help in digestion. They are needed to digest fat. After the operation, you will need to take a pill with your meals that contains enzyme replacement. Although you will need time to recover, almost all patients who have this surgery get back to living their normal lives. You should be able to eat and drink normally and resume your usual activities.

Splenectomy

Function of the spleen
The spleen is a fist-sized organ located in the upper left side of your abdomen. The spleen helps to fight infections, gets rid of old or damaged red blood cells, and stores blood for your body. You can live without a spleen, but you may be more susceptible to certain bacterial infections.

Splenectomy is the name of the operation that will be done to remove your spleen. The spleen is attached to the tail of the pancreas so it will be removed at the same time as your pancreas.

Before- and after-surgery vaccines
You will need to go to your primary care physician, the Dallas Health Department, or Passport Health to obtain these vaccinations to prevent infection.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Revaccination Schedule</th>
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</thead>
<tbody>
<tr>
<td>Pneumococcal vaccine polyvalent (Pneumovax® 23)</td>
<td>Revaccinate every 6 years</td>
</tr>
<tr>
<td>Age &gt; 55: Meningococcal polysaccharide vaccine</td>
<td>Revaccinate every 3 to 5 years</td>
</tr>
<tr>
<td>(Menomune®-A/C/Y/W-135)</td>
<td></td>
</tr>
<tr>
<td>Age 16-55: Meningococcal polysaccharide diphtheria toxoid conjugate vaccine (Menactra® A/C/Y/W-135)</td>
<td>May need revaccination every 3 to 5 years</td>
</tr>
<tr>
<td>Haemophilus influenzae type b conjugate vaccine</td>
<td>No revaccination needed</td>
</tr>
</tbody>
</table>

Vaccines need to be done at least 14 days before surgery, and revaccination should be done according to the list above.

It is important that you see a doctor IMMEDIATELY if you have any of the following symptoms because these are signs that you may have an infection:

- Fever
- Chills
- Abdominal pain
- Skin rash
- Diarrhea
- Achy or weak feeling
- Cough
- Vomiting
Once a decision for surgery has been made, the office scheduler will provide you with information on the time and place of your surgery. Your doctor will tell you if you need to be evaluated by a cardiologist and/or pulmonologist before surgery can be scheduled.

**Pre-op appointment**
About a week before surgery, you will be called to make a pre-op appointment. During this appointment, your medical history will be recorded and your blood will be drawn. Bring your medication bottles to this appointment. This helps doctors to prescribe the right medications while you are in the hospital. Please make sure you have plenty of your usual medicines at home before you come to the hospital for surgery.

**Diet and bowel clearing**
In the weeks before surgery, you should try to eat a high-protein diet as well as five servings of fruits and vegetables a day.

- The day your surgery is scheduled, we will give you instructions that include the date of your surgery and what to eat the day before surgery.
- You can continue to eat a normal diet until 24 hours before your surgery.
- During the 24 hours before your surgery, you may only have clear liquids. Examples include chicken broth, Jell-O, water, and apple juice. Do not drink anything red.
- You may be instructed to take a laxative the day before surgery.
- The morning of surgery, you should drink water or Gatorade until you head to the hospital. Once you have started your trip to the hospital, you should have nothing more by mouth.

**Stopping medicines before surgery**
There are several medicines that do not mix well with surgery. When your surgery is scheduled, you will receive written directions on which medicines to stop taking and when. These are usually blood-thinning medications like aspirin, warfarin, and Plavix and herbs like St. John’s wort.
After Surgery

Monitoring

Blood Sugar
After the operation, your blood sugar will be tested several times a day. While you are in the hospital, an endocrinologist will help manage your diabetes. You will receive the correct dose of insulin to keep your blood sugar levels within a safe range. A registered dietitian will also visit you in the hospital.

While you are in the hospital, you will see specialists who will spend time helping you learn your new daily routines. There will be plenty of resources available to help you adjust. Please ask us any questions you have. When you go home, we will help arrange for you to have resources close to your home to help you as you continue to learn how to manage your diabetes and enzyme replacement.

Breathing and heart
You may be placed on a ventilator (breathing machine) overnight. You will be taken off the ventilator as soon as possible. When the breathing tube is in place, you will not be able to talk.

When the breathing tube is removed, the nurses will teach you how to cough and take a deep breath.

You will also have a heart monitor so that the nurses and doctors can check your blood pressure and heart rate more frequently.

Where you will be cared for
Immediately after surgery, you will go to the recovery room for about an hour until you are able to wake up. During this time, your family will be updated by the surgeon on how your surgery went. After the recovery room, you will go to the intensive care unit for a few days. Once you are more stable, you will be transferred to the surgical floor. This is a special floor with staff that is trained in caring for your surgery. Once you are in your hospital room, your family can visit. You will usually stay on the surgical floor until you go home.
Tubes and drains
You will have one drainage tube on the right side of your abdomen that is connected to a little bulb. This is called a Jackson-Pratt drain. This tube will drain the extra fluid in the area where surgery was done. This tube will stay in after you go home and will be removed in your doctor’s office at your first follow-up visit after surgery.

You may also have a feeding tube placed during surgery (gastric tube or jejunostomy tube). If needed, this can be used to give you nutrition during your hospital stay and after discharge. The tube will be removed in the office at your first follow-up visit or when your surgeon feels you’re eating enough and able to maintain your weight.

Your Team
During your hospital stay, your day-to-day treatment team will consist of many different professionals, all working together.

NURSE
He or she will check on you multiple times a day to give you medications, monitor your wounds, monitor your vital signs, assess your condition every few hours, and report changes to your doctor.

PATIENT CARE TECHNICIAN (PCT)
Your PCT will check on you frequently and help with daily bathing, linen changes, bathroom assistance, vital signs, blood drawing, and other necessary tasks.

SURGEON
Your surgeon will check on you at least once a day.

RESIDENTS AND INTERNS
These are doctors who have finished medical school and are being trained at Methodist Dallas Medical Center by your surgeon. They will be around frequently, keeping a close watch on your progress and reporting to your surgeon. They are in the hospital 24 hours a day, so if an issue arises the residents and interns are easily available.
After Surgery:
Pain expectations and management

What kind of pain should I expect after surgery?
Everyone’s pain experience after surgery is different and unpredictable due to opioid tolerance, previous experience, comorbidities, age, gender, type of surgery, and type of anesthetic.

Will I be pain-free?
The goal of pain management is to restore function after surgery. We will work with you to establish a safe level of pain relief. Your discomfort level may not go down to a 0 out of 10, but we want to do everything we can to make you as comfortable as possible without over-sedating you.

Why is pain management important?
With good pain management you get well faster. You can start walking, do your breathing exercises, and regain your strength more quickly. Good pain management has been shown to speed recovery and increase good outcomes by allowing the patient to meaningfully participate in postsurgical recovery activities.

How can I participate in my pain management?
Ask about the schedule of pain medicines. Some medicines are scheduled and will be brought at a set time. Other medicines are brought to you only when you request them. Please inform your nurse if your pain is not being well controlled.

Can I get addicted to pain medicine after surgery?
As long as pain medication is taken when there is actual pain and not for other reasons, addiction should not be an issue. Addiction to pain medication can happen if the medications are used improperly. Each week your need for pain medication will decrease as your incision heals.
How will my pain be managed?

During surgery
Depending on your surgeon’s choice, you may have a pain medicine injected into your back during surgery. This is called an epidural. Another option your surgeon may choose is inserting an On-Q® pain pump into the surgical incision. This releases medicine to the direct site.

After surgery

IV NARCOTICS
After surgery, intravenous (IV) pain medications will be used to treat your pain. The most common are morphine or Dilaudid.

ORAL NARCOTICS
Once you are able to eat a solid diet, oral pain medications will be used to treat pain. Common oral medications are hydrocodone (Norco) and tramadol (Ultram).

NON-NARCOTICS
In addition to narcotics, your physician can order mild medications to assist with pain relief. The common thought is that mild medications like Tylenol or ibuprofen cannot treat pain better than strong narcotics. The truth is, they work very well when used together and can greatly improve pain relief.

What pain management techniques can be used other than medication?

- **Relaxation:** Simple techniques can help to increase comfort.
- **Music:** Music can provide relaxation and distraction.
- **Physical agents:** Heat or cold therapy, massage, rest, and good body alignment may help to lessen pain.

Will I have pain management help after going home?
You will go home with a prescription for oral pain medication if needed at the time of discharge.
After Surgery

**Eating and drinking**

The few days after surgery are spent without eating or drinking. During this time, you may have ice chips, sugar-free gum and hard candy, but nothing more. We are waiting for your bowel function to return.

Once you pass gas, you will be given water and other clear liquids to try. If you are able to drink these without feeling sick to your stomach, you will be given heavier liquids and then soft food. These steps will take place over several days.

**Difficulty eating**

*Nausea*

It may be hard to eat and drink at first because of feeling sick to your stomach. This is not unusual. Please let your nurse know, and he or she will give you medicine to help with your stomach sickness. Before you go home, a dietitian will talk to you about what foods to eat at home during your recovery.

*Decreased appetite*

A small portion of the stomach and small intestine are removed during this surgery. It is not uncommon for the stomach to be slow returning back to full function. There is no way to predict how fast your stomach will resume its normal activity, and all patients must use the trial-and-error method of reintroducing foods during this time. This may take several weeks to get back to your usual habits again. While it may be frustrating, it is completely normal after this type of surgery to feel full quickly or to have a low appetite.
Preventing problems

Blood clots
After surgery, you will be given a daily injection of a blood thinner until you go home. You will also have blue wraps on your legs that pump up to help your blood circulate. The risk of blood clots goes up if these wraps are not used.

Pneumonia
You will be given a breathing exercise called an incentive spirometer. You will suck on this like a straw, and it will help you take deep breaths. It may make you cough as well, which is good for your lungs. You should take 10 breaths with the incentive spirometer every hour while you are awake to reduce risk of getting a lung infection and to decrease the use of the oxygen supplement.

Getting out of bed and walking: You can bring a robe from home for walking in the halls. After you have your Foley catheter removed, you can wear your own pants or pajama bottoms.

Activity plan

Day 1  Spend at least two hours out of bed in the chair. One walk outside of the room in the hallway with assistance.

Day 2  Spend four hours out of bed in the chair. This can be done one hour or two hours at a time if breaks are needed. Complete two walks outside of the room with assistance.

Day 3  Six hours out of bed. Your walks should be getting longer.

Day 4  Take three or more walks around the halls from this day forward.

ALWAYS WAIT FOR STAFF ASSITANCE BEFORE GETTING OUT OF BED.

The above activity plan is recommended to help with recovery. Incomplete participation in out-of-bed activities can lead to slower recovery time, digestion delay, and possibly more serious problems.

For medical reasons, your surgeon may instruct you to slow down or stop your out-of-bed activity for a day or so. This will be temporary.
Discharge

You will be discharged when you are:

• Eating a regular diet
• Having regular bowel movements
• Not showing signs of infection or running a fever
• Able to walk with minimal assistance
• Pain is controlled by oral medications only.

Most patients go home 10 to 14 days after surgery.

Follow-up
A follow-up appointment with your surgeon should be made for one to two weeks after your discharge. At your first follow-up appointment, the abdominal drain will be removed in the office.

Further treatments
If your surgery was to remove a tumor or growth, a sample was sent to the lab to look for cancer cells. If cancer cells were found, your surgeon will discuss this with you at your follow-up appointment and will have you make an appointment with an oncologist. The oncologist will discuss with you if chemotherapy is recommended.

Further testing
If cancer was found, it is important that you have a CT scan every three months and bring the disk with you to your doctor’s appointments to watch for any new changes.
Medicines you will be prescribed at home

**Acid blocker (proton pump inhibitors)**
Acid reflux is a common issue after this surgery due to the reconstruction of the small intestine. Your surgeon will prescribe Nexium, Protonix, or another type of PPI.

**USE:**
This medicine is used to help control acid reflux symptoms. It should be taken in the morning on an empty stomach.

**POSSIBLE SIDE EFFECTS:**
Headache, diarrhea, or abdominal pain.

**Creon® (pancreatic enzymes)**
Your pancreas makes natural proteins called enzymes that help break down foods so they can be absorbed by the body. After this surgery, you will no longer make pancreatic enzymes to break down food. Your surgeon will prescribe you Creon.

**USE:**
Creon is taken with each meal and snacks to help digest food and prevent indigestion, bloating and gas.

**POSSIBLE SIDE EFFECTS:**
Blood sugar changes (increased or decreased), or hard stools.

*If you have hard stools while taking Creon, you may need to lower the number of capsules you take.*

**Insulin**
You will be insulin dependent after the pancreas is removed. There are many different types and doses of insulin. You will likely be placed on a long-acting insulin that you take once a day, as well as a short-acting insulin that you take before meals. You will receive specific information on these medicines before going home, once your doctor determines the best course for you.

**POSSIBLE SIDE EFFECTS:**
Low blood sugar or dizziness; keep sugar packets with you.
Diet and nutrition

Counting carbohydrate servings may help control your blood glucose level so that you feel better.

The balance between the carbohydrates you eat and insulin determines what your blood glucose level will be after eating. Carbohydrate counting can also help you plan your meals.

Foods with carbohydrates include breads, crackers, cereals, pasta, rice, and grains; starchy vegetables such as potatoes, corn, and peas; and beans and legumes. Other foods that have carbohydrates are milk, soy milk, yogurt, fruits and fruit juices, and sweets such as cakes, cookies, ice cream, and jelly.

In diabetes meal planning, one serving of a food with carbohydrate has about 15 grams of carbohydrates. Check serving sizes with measuring cups and spoons or a food scale.

Read the nutrition facts on food labels to find out how many grams of carbohydrate are in the foods you eat.

Meal-planning tips

A meal plan tells you how many carbohydrate servings to eat at your meals and snacks. For many adults, eating three to five servings of carbohydrate foods at each meal and one or two carbohydrate servings for each snack works well.

In a healthy daily meal plan, most carbohydrates come from:

- 5 servings of fruits and vegetables
- 3 servings of whole grains
- 2 to 4 servings of milk or milk products.

*(source: Eat Right-National Care Manual)*

The dietitian will meet with you before you are discharged with additional instructions.
Diabetes management

Insulin
After your pancreas is removed, your body will no longer make insulin. Insulin helps regulate the amount of sugar in your blood. To help your body balance out sugar levels, you will need to have insulin injections several times a day. To assist with this life transition, Methodist has a Diabetes Self-Management Program. It is located at Methodist Charlton Medical Center:

Program objectives:
• Educate about diabetes, including types of diabetes, signs, symptoms, prevention, management, and treatment of diabetes
• Advise on the dangers of uncontrolled diabetes
• Explain how to monitor blood sugar, what blood sugar levels should be, and how blood sugar control helps protect health
• Help create satisfying and healthful meal plans to fit individual lifestyles
• Explain how regular exercise is essential for controlling body weight and blood sugar
• Help form exercise habits people enjoy
• Teach how to prepare and inject medications, if needed
• Follow up with participants to make sure they have the tools to maintain good health with diabetes.

For more information, call 214-947-7262 or visit MethodistHealthSystem.org/Diabetes.