

Department of
GENERAL SURGERY

Patient Guidebook for Enhanced Recovery after Pancreas Surgery



Contents

1. Introduction	1
2. Important Notes	1
3. What do You Need to Know About Your Pancreas Surgery?	2
3.1 Understanding Your Surgery	
4. How Should You Prepare for Your Surgery?	3
4.1 Eating Well and Eating Right	
4.2 Staying Active	
5. What Should You Expect a day Before the Surgery?	4
6. What Should You Expect on the day of the Surgery?	5
6.1 What do You Need to do?	
6.2 Preparation	
6.3 Anaesthesia Consultation	
6.4 Surgery	
6.5 After the Surgery	
7. How can You Improve Recovery After the Surgery?	6
7.1 Resuming Your Normal Diet	
7.2 Resuming Your Physical Activities	
7.3 Managing Your Pain	
8. What Should You Expect Before Your Discharge From the Hospital?	8
9. What Should You do When You are Home?	9
9.1 What can You Eat?	
9.2 How can You Improve Your Nutrition Intake if You are Losing Weight or if You have Poor Appetite?	
9.3 How can You Manage Pain at Home?	
9.4 Activity and Movement	
9.5 What if I Have Questions or Complications From the Surgery?	

1. Introduction

Pancreas surgeries are major surgeries that can be made very much safer with the care, diligence and professionalism of your medical team. However, the best outcomes only occur with your understanding and your participation in your own treatment.

This guidebook will help you understand and prepare for your surgery. Your doctor and nurse will explain how you can play a part in your recovery and what you can expect during your hospital stay.

We hope this will make you better prepared for the journey ahead with us.

that are checked indicate important points to note for your surgery.

2. Important Notes

Please bring along this booklet with you on your appointments with any or all of the following departments:

- Clinic listing room in Clinic 2A or 2B
- Pre-Admission Counselling and Evaluation (PACE)
 - Dietitian
 - Physiotherapist
 - Case Manager
 - Geriatrician (if you are 65 years old and older)
- On the day of your surgery.

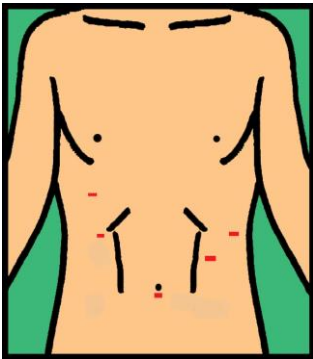
3. What do You Need to Know About Your Pancreas Surgery?

3.1 Understanding Your Surgery

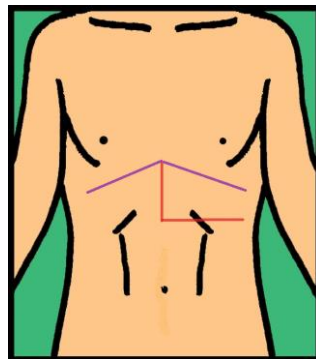
Your surgery would involve the removal of the affected pancreas and may also include the nearby organs such as the duodenum (part of the small intestine), the spleen, part of the small intestines and part of the stomach.

The surgery can be performed through:

- Small cuts in the skin, for keyhole or robotic surgery
- A longer cut, for the traditional open surgery



Key hole or robotic surgery



Traditional open surgery incisions

The images above only shows possible incisions. Actual incisions may vary depending on the surgical technique and the location or extent of the disease.

Do clarify with your doctor if you have any questions.

4. How Should You Prepare for Your Surgery?

4.1 Eating Well and Eating Right

It is important to eat well before your surgery. You should not be losing weight too quickly before the surgery as this will affect your recovery. A healthy, well balanced diet including a wide variety of food (from all food groups – rice and alternatives, meat and alternatives, fruits and vegetables) is important to upkeep your immunity and aid in your recovery after the surgery.

Your doctor may refer you to see a dietitian before your surgery to help improve your nutritional status. If you have difficulty eating or if you are losing too much weight, the dietitian may also prescribe you with oral nutritional supplements to take before surgery to boost your nutrition, especially if your nutritional status is suboptimal.

4.2 Staying Active

If exercising is already part of your lifestyle, continue to do so. If not, you should start to progressively add exercise into your daily routine.

You can begin with simple exercises like taking a 15-30 minute walk at a comfortable pace.

By staying active, you are likely to return to normal activities more quickly after the surgery.

Your doctor may also refer you to see a physiotherapist before your surgery to teach you specific exercises to optimise your exercise tolerance before the surgery.

5. What Should You Expect a day Before the Surgery?

The Day Surgery Centre will call you one day before your surgery to advise you on the reporting time.



You will be reminded to take a carbohydrate drink (2 sachets with 800 ml of water between 9 to 11pm) if your doctor has prescribed it to you previously.



6. What Should You Expect on the day of the Surgery?

6.1 What do You Need to do?

❑ You will need to take the second dose of the carbohydrate drink (1 sachet mixed with 400 ml of water at 2 to 4 hours before the surgery) at home before you come to the hospital.

6.2 Preparation

The medical team will meet you at the Day Surgery Centre when you arrive at the hospital. They will come to speak with you while you are in the preoperative area to confirm the procedure you are scheduled for and to answer any last minute questions you may have.

6.3 Anaesthesia Consultation

Before entering the operating room, you will meet the anaesthetist in charge of your case. Your anaesthetist will review your medical history and explain how anaesthetic will be administered during the procedure. He/she may administer an epidural anaesthetic through a small, plastic tube placed in your back outside the spinal cord for pain relief during and after the surgery.

You will be placed under general anaesthesia during the course of the surgery. This means you will be asleep and will be unable to move or feel pain once the anaesthesia is administered.

6.4 Surgery

The duration of your surgery may depend on the type of surgery you are having.

6.5 After the Surgery

After the surgery, you will be brought to the recovery bay. You can expect to stay in recovery for monitoring for several hours before being transferred to the ward. You will have a drip, nasogastric tube and urinary catheter attached to you.

7. How can You Improve Recovery After the Surgery?

Eating and engaging in physical activity after surgery helps to increase the speed of your recovery. It also reduces the risk of complications after your surgery.

7.1 Resuming Your Normal Diet

You may start drinking a few hours after the surgery. You may also be given oral nutritional supplements before progressing to a soft diet.

Soft diet may begin as early as on the same day after the surgery. This will increase your nutritional needs that will aid in your recovery and healing. Inform the nurse or doctor if you feel any nausea or abdominal discomfort.

Your dietitian will advise you on the types of food and oral nutritional supplements that are suitable for you.

7.2 Resuming Your Physical Activities

You are encouraged to sit up for at least 3 hours a day starting from the day after your surgery.

You may increase the level of your activities (sitting up and walking) to at least 6 hours a day for the next few days after your surgery. Your nurse or physiotherapist will support you as required.

It is also important to use your spirometer (equipment to measure amount and speed of air inhaled and exhaled) at hourly intervals when you are awake to prevent lung infection.

7.3 Managing Your Pain

Pain relief plays an important role in your recovery. You should be able to move around the ward and eat without experiencing any pain.

You may have a special preperitoneal catheter placed next to the surgical wound after the surgery. This will be accompanied by a special balloon pump device placed in a black pouch. The device, On-Q® PainBuster®, will deliver the pain killer directly into the layers of the abdominal wall to allow better pain control post-surgery.

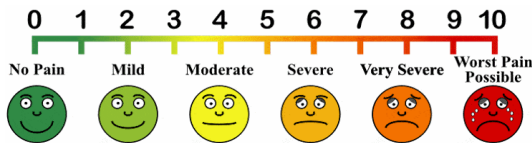
If you were given epidural anaesthesia before your surgery, you will continue to receive epidural pain relief together with oral pain relief medication for the first few days post-surgery.

If you are given Patient Controlled Analgesia (PCA), our nurses will teach you how to control the usage of the PCA.

After you have completed the course of epidural or PCA, stronger oral pain relief medication may be added.

Your doctor and nurse will ask you about your pain score. You should not feel pain more than a score of 3 out of 10.

If you still experience pain despite these steps, please speak with your nurse so you can get the help that you need.



Pain Score Scale

8. What Should You Expect Before Your Discharge From the Hospital?

Most patients are discharged 5 to 7 days after their surgery. You will be discharged from the hospital when the following has been achieved:

- Successfully passed flatus (gas) and stools
- Surgical drains are removed
- Pain control is managed well with oral pain medication

You may be discharged with a surgical drain left in its original position placed within a stoma bag. Our nurses will teach you and your family how to take care of the drain. The drain will be removed during your follow-up clinic visit.

If the physiotherapist assessed that you need rehabilitation after your surgery, you may be discharged to a community hospital for further care.

- A follow-up appointment will be scheduled with your doctor.
- A follow-up appointment may be scheduled with the dietitian upon discharge to support and guide you in improving your nutrition post-surgery.



9. What Should You do When You are Home?

9.1 What can You Eat?

You are encouraged to have a varied diet to aid in the healing of your wound. Depending on your tolerance, you will be gradually changed to a well-balanced regular diet over several weeks after surgery.

It is normal to have a reduced appetite for a period after surgery, but your appetite should slowly improve.

You are advised to monitor your weight on a weekly basis and inform your doctor or dietitian if you continue to experience weight loss. Adequate nutrition is important to maintain weight and help with your recovery after the surgery.

9.2 How can You Improve Your Nutrition Intake if You are Losing Weight or if Your Appetite is Poor?

Have small but frequent meals and snacks

Increase your protein intake by eating soft and easy-to-eat food such as minced meat, fish, milk, eggs or tofu

Drink oral nutritional supplements as recommended by your dietitian

Drink water between or after meals

9.3 How can You Manage Pain at Home?

It is normal to experience some pain when you are at home. You should continue the oral pain medication prescribed to manage the pain.

You should take oral paracetamol regularly for 3 to 5 days after your discharge.

Only take the stronger pain medication when the pain becomes unbearable.

9.4 Activity and Movement

- You are encouraged to stay active at home. An example could be taking occasional short walks. It is normal if you easily feel tired from these exercises in the weeks after the surgery.
- You should not do any heavy load lifting for about 2 months after your surgery to prevent any injury.



9.5 What if I have Questions or Complications from the Surgery?

- A nurse will call you 2 to 3 days after your discharge to check on you. Inform the nurse if you feel unwell, have a fever, worsening abdominal pain or bloatedness.

If you have any questions, you may contact the **Hepato-Pancreatico-Biliary Service Nurse Coordinator**, Ms Wang Bei, at 9720 8661 or Ward 11 at the following numbers:

- 11A – 63572111
- 11B – 63572112
- 11C – 63572113
- 11D – 63572114

- If you experience severe pain, fever, nausea or repeated vomiting, please contact us immediately. If you are unable to reach us at these numbers, please seek immediate medical attention at the Emergency Department at TTSH Basement 1.

Clinic 2A

TTSH Medical Centre, Level 2

Contact:

6357 7000 (Centralised Appointments)

6357 8000 (Non-Subsidised Appointments)



© Tan Tock Seng Hospital, Singapore 2018. All rights reserved. All information correct as of [month] [year]. No part of this document may be reproduced, copied, reverse compiled, adapted, distributed, commercially exploited, displayed or stored in a database, retrieval system or transmitted in any form without prior permission of Tan Tock Seng Hospital. All information and material found in this document are for purposes of information only and are not meant to substitute any advice provided by your own physician or other medical professionals.