



Operation Information

Pancreaticoduodenectomy (Whipple Operation)

Introduction

The pancreas is located deep in the abdomen and lies behind the stomach. It secretes digestive enzyme that supports nutrient absorption. It also produces insulin that regulates the blood glucose level. Pancreaticoduodenectomy (Whipple operation) is the conventional operation for removal of lesions from within the head or uncinata process of the pancreas. This is a high risk and complex surgical procedure. During the operation, the head of the pancreas, duodenum, gallbladder, common bile duct, a portion of the stomach and small bowel are involved in complicating excision and will be re-attached again.

Outcomes

This operation is a surgical intervention for pancreatic diseases. Tumor (benign or malignant) in the head of pancreas will be removed. Most patients may experience malabsorption, change in diet, loss of weight or ulcers after the operation.

Procedures

1. The operation is performed under general anaesthesia.
2. The head of the pancreas, the duodenum, the distal part of stomach, the gallbladder and the common bile duct are excised.
3. The remnant bile duct, pancreas and the stomach are re-connected to the small bowel.
4. The wound is closed with sutures.

Possible Risks and Complications

1. Wound bleeding
2. Wound infection
3. Deep vein thrombosis or pulmonary embolism
4. Permanent numbness (around the wound)
5. Anastomotic leakage
6. Delayed gastric emptying
7. Ileus
8. Death

** The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

Pre-operative Preparations

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The operation and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation such as Aspirin, Warfarin, Xarelto or Pradaxa, nonsteroidal anti-inflammatory drug (NSAID) such as Ibuprofen, Naproxen and Chinese medication.
4. You should inform the doctor if and when it appears any signs or symptoms of jaundice-like (yellowing of skin or eyes), itching or changes in urine color.
5. Routine tests such as blood test, x-ray, ECG may be performed before the operation.
6. No food or drink six hours before operation.
7. A pair of anti-embolism stockings will be given to you to prevent post-operative deep vein thrombosis.
8. Pre-medication or intravenous infusion may be given as doctor's prescription.
9. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
10. Please empty your bladder before the operation.

Post-operative Instructions

General

1. You may require a minimum of one day observation in the Intensive Care Unit (ICU) following the operation.
2. After general anaesthesia, you may:
 - experience discomfort in the throat after tracheal intubation.
 - experience side effects of anaesthesia including feel tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
3. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
4. You may be placed on a device that provides pain medication whenever you press a demand button (called a PCA or Patient Controlled Analgesia) if needed.
5. An intravenous infusion will be given to replenish fluids and administer medications.
6. Nasogastric tube and indwelling urine catheter will be inserted during operation, normally be removed a few days after the operation.

Wound Care

1. The wound will be covered with a sterile dressing which must be kept dry.
2. One or two drainage tubes may be placed into the abdomen to drain fluids out of the surgical site and monitor for any postoperative complications. The tube(s) will be removed in a few days following the operation.

Diet

Nil by mouth may be required for a few days postoperatively. You can start on a fluid diet as instructed by your doctor and progressively resume a normal diet.

Activities

Early mobilization can promote a rapid postoperative recovery. You can resume light activities after the operation (As advised by your doctor).

Advice on Discharge

1. There will normally be some bruising, swelling, numbness, initially. The symptoms will subside after a couple of weeks, although some permanent numbness is possible.
2. You may take shower after the operation but must ensure that the dressing is waterproof and remains clean and dry.
3. Physical activities such as lifting, moving or carrying heavy objects should be avoided for the first six weeks after the operation.
4. Immediately consult your doctor or return to hospital for professional attention in the event of severe wound pain associated with redness and swelling, draining pus or blood oozing, shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms etc.
5. Any follow-up consultations should be attended as scheduled.

Alternative Treatment

Chemotherapy may be used according to the doctor's advice.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification