



*Better
Together*

Patient information

Hepato-biliary Cancer

Surgical Division Royal Liverpool Hospital and
Broadgreen Hospital

Contact Details

Your details:

Name.....

Address.....

.....

Home phone number.....

Hospital switchboard number: **0151 706 2000**

Ward name/number:

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Ward 5B

Tel: 0151 706 2358

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Post-Operative Critical Care Unit (POCCO)

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Text phone number: 18001 0151 706 2888

Pancreatic Enhanced Recovery Unit (PERU)

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Key Worker/Macmillan Nurse

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Name: Jo Garry

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Hepato-Biliary Team Members

You have been referred to a Consultant belonging to the Hepato-biliary surgical team. This team of doctors specialise in treating people with pancreas, gall bladder and liver complaints.

Consultant Surgeons:

- Professor Neoptolemos
- Professor Sutton
- Professor Ghaneh
- Mr Raraty
- Mr Halloran
- Mr Yip
- Professor Kleeff

Oncologists:

- Professor Palmer
- Dr Faluyi

Multi-Disciplinary Team (M.D.T)

Any patient who may have a diagnosis of cancer or a suspected has to be discussed at a multi-disciplinary meeting. This ensures that a group of specialists across different disciplines make a decision regarding what is the best treatment to recommend. Treatment offered will be safe, effective and appropriate for each individual case reviewed.

Your case will be discussed at the Hepato-Biliary M.D.T. meeting, which takes place on a Wednesday morning at 08.15am. At the meeting will be surgeons, gastroenterologists, radiologists, oncologists and specialist nurses. All the scans and tests you have had so far will be reviewed and discussed. The next step of your treatment will then be decided.

Key Worker/Macmillan Nurse

My role as your key worker is to co-ordinate and oversee your care throughout your treatment period. A large part of my role is to ensure that you and your family are kept fully informed, understand what is happening at each stage of your treatment, and that you feel supported at all times.

During your hospital stay, I will work closely with the nursing and medical staff to ensure that you receive the highest standard of care from first diagnosis through whatever treatment path is followed. Any tests or investigations you may need, I can help to arrange as quickly as possible. I will explain any procedures or tests you undergo, making sure you fully understand the treatment planned for you.

By providing a point of daily contact, the opportunity will be available to discuss your diagnosis, treatment plan, and any concerns that you may have.

Part of my role also involves making sure that any symptoms you have are treated effectively with the appropriate medication.

On discharge, I will arrange any community services/support that you may need at home. When you are at home, I will remain the co-ordinator of your care relating to your illness. You or your family can contact me if you or your family have any concerns about your well-being.

If you need hospital admission I will organise this for you with the minimum of delay in an effort to reduce any anxiety you may be feeling.

Patients with a diagnosis of cancer will meet many professionals who will assess and give advice along the staging procedure; different treatment options may be on offer.

It is essential that the patient and family understand the process and treatment planned in order to give informed consent and reduce anxiety.

The Key Worker is the constant person who is able to reinforce and explain advice given. By providing continuity of care the potential for providing uncoordinated and fragmented care is reduced.

Initial Assessment

Date of MDT:

Date first seen:

Key Worker:

Name of Doctor who saw you:

Suspected Diagnosis

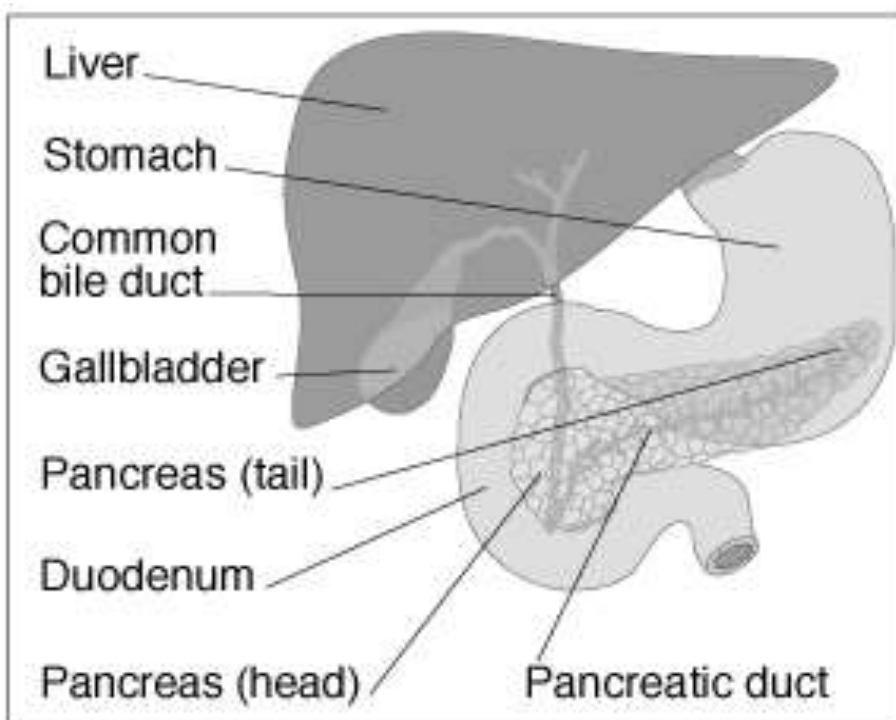
Individual Management Plan

The Pancreas Gland

Where is it?

The pancreas is a solid gland measuring 25-29 centimetres (cms) in length, four to six cms in width and three to four cms in depth. The head of the gland is situated just to the right of the midline of your abdomen and below your right ribcage. It is closely attached to the duodenum, which is the first part of the small bowel into which your stomach empties liquid and partially digested food.

Fig. 1 Position of the pancreas



What does it do?

The pancreas does two important things:

- 1) It makes enzymes, which are necessary to digest food in the intestine.
- 2) It produces insulin to allow every part of the body to use glucose.

Digestion

Digestion of food, which consists of carbohydrates, proteins and fats, is not possible without the pancreas. The pancreas produces enzymes, which are passed into the duodenum along the pancreatic duct; these are responsible for breaking down food into particles ready for absorption.

The digestion of fat is very special; the pancreatic enzymes cannot digest the fat unless it has been prepared first. Bile acids made in the liver and stored in the gall bladder work on the fat first to get them ready for the pancreatic enzymes to help digest them. The bile is passed down the bile duct and into the duodenum; therefore both pancreatic juice and bile are needed for efficient digestion and absorption.

If the pancreatic duct or bile duct become blocked, fat will not be digested and the stools (bowel motions) will become pale and greasy. They may become difficult to flush and give off a strong offensive smell.

If the bile duct becomes blocked, bile is trapped resulting in the bile salts being picked up by the bloodstream. It is then carried around the body making the skin and the whites of the eyes yellow. The kidneys try to excrete (get rid of) it making the urine a dark colour.

Insulin and Glucose Metabolism

All the cells of the body use glucose as a source of energy. Glucose (sugar) comes directly from digestion of food or is made in the liver from concentrated forms of sugar. The level of sugar in the blood is kept constant by special control mechanisms involving hormones. Hormones act as messengers and work like a key opening the lock of a door.

Insulin is a hormone, which is made in special groups of cells called Islets of Langerhans; these are spread throughout the pancreas gland, mostly in the tail. Insulin allows glucose to pass from the blood into the cells, if insulin is lacking then diabetes develops. Instead of the sugars entering the cells of the body, it remains in the bloodstream, which can be very harmful. If part of the pancreas is removed there are usually enough Islets left to prevent sugar diabetes forming.

What is Cancer

The organs and tissues of the body are made up of tiny building blocks called cells. Cancer is a disease of these cells.

Cells in different parts of the body may look and work differently but most reproduce themselves in the same way. Cells are constantly becoming old and dying, and new cells are produced to replace them.

Normally, cells divide in an orderly and controlled manner. If for some reason the process gets out of control, the cells carry on dividing, developing into a lump which is called a tumour. Tumours can be either benign or malignant. Cancer is the name given to a malignant tumour.

What is Hepato biliary Cancer

These are malignant tumor's found anywhere within the pancreas or biliary tract or duodenum.

Symptoms

Pain

This often begins in the upper abdomen and sometimes spreads to the back. The pain may come and go or be there all the time. It may feel worse when you are lying down and be relieved by sitting up or bending forward. Pain caused by pancreatic cancer can usually be well controlled so it is important you discuss it with your specialist.

Nausea

There are a variety of effective anti-sickness medications to prevent or reduce nausea and vomiting which can be prescribed by your specialists.

Weight loss

This may occur without a clear cause such as dieting. If you have lost weight or have a poor appetite we can refer you to a dietician and you can be prescribed nutritional drinks to supplement your diet.

Jaundice

People with jaundice may have yellowing of the skin and the whites of the eyes, itchy skin, dark yellow urine, and pale bowel motions.

It can happen if cancer in the head of the pancreas blocks the duct that carries bile from the liver to the small bowel (bile duct). The bile can't drain away and builds up in the body causing the symptoms of jaundice.

If the cancer has blocked the bile duct causing jaundice you will require a procedure to relieve the blockage. This will involve a stent being placed into the bile duct to hold open the duct, allowing the bile to drain into the bowel. Stents are most commonly placed using an ERCP or if it is not possible to carry out this procedure you will require a PTC.

Diarrhoea, Wind and Bloating

This may be as a result of pancreatic enzyme insufficiency. You will be prescribed an enzyme supplement (Creon) to take with meals and snacks to help you to digest your food. The dose required varies between individual patients and you may have to ask your specialist to increase the dose until your symptoms improve.

Diagnosing Pancreatic Cancer

Blood tests

Many pancreatic cancers produce a substance called CA 19-9, which can be measured in the blood. CA 19-9 is known as a tumour marker. Measuring the level of CA 19-9 can help to diagnose pancreatic cancer.

About one in four people don't make CA 19-9, so a normal level on its own doesn't mean someone definitely doesn't have pancreatic cancer.

Ultrasound

An ultrasound takes place in the X-ray department. A scanning device with jelly on is passed over your abdomen and pictures are obtained on a screen. Information about the pancreas, liver, gall bladder and bile ducts can be obtained.

C.T. Scan

A CT (computed tomography) scan is another type of X-ray that gives more in-depth pictures of the abdomen and involves you lying on a bed that moves in and out of the scanner that is shaped like a large polo mint, while pictures are taken. Special liquids are often used to allow particular areas of the body to be seen more clearly on the scan. You may be asked to drink some liquid or it may be given as an injection.

(PET) /CT Scan

This is a combination of CT and PET (positron emission tomography) scan and uses low doses of radiation to measure the activity of cells in different parts of the body.

E.R.C.P.

(Endoscopic retrograde cholangio-pancreatography).

This test is performed under sedation. A small flexible tube called an endoscope is passed through your mouth and stomach, and out into the biliary tract. A special dye is injected which shows the common bile duct and pancreatic duct. If there is a stricture causing obstruction to the flow of bile then a stent (narrow tube) can be pushed down the inside of the blocked duct to hold it open. This is a temporary measure until jaundice settles and any surgery needed can be carried out. Sometimes the stents are left in permanently if surgery is considered unlikely.

P.T.C. (Percutaneous Transhepatic Cholangiography)

If you are jaundiced and a stent cannot be passed through the blocked duct during an ERCP, then a P.T.C. will be carried out. This involves a fine needle being passed through the skin and into the liver to the bile duct.

A stent (narrow tube) is placed into the bile duct, through the stricture allowing the bile to flow freely into the duodenum. Sometimes one end of the catheter is in the bile duct and the other lies outside your body connected to a bag, which collects the bile. It is usually left in for a few days. Once the catheter is removed the hole heals over within two days.

Endoscopic Ultrasound

This is a very similar procedure to an E.R.C.P and involves an ultrasound probe being passed down the endoscope to take an ultrasound scan of your pancreas and surrounding organs. It can also be used to take a biopsy of the pancreas if it required to confirm diagnosis.

Laparoscopic Ultrasound

Laparoscopic ultrasound is required if one of the blood tests called a tumour marker (Ca19.9) is raised to assess to see if the tumours has spread to surrounding tissues or organs.

This is a day case procedure which is done in theatre under a general anaesthetic. It involves examining your pancreas, liver and other internal organs within your abdomen, combining special x-ray equipment with "keyhole" surgery through small incisions (cuts) on your stomach.

Using a scanning camera pictures are taken of your liver and the surgeon is able to assess other areas of your abdomen to ensure the mass is confined to the pancreas/biliary tree.

If there are any abnormal areas, a biopsy will be taken for examination under the microscope. This investigation helps the Surgeon decide whether a major operation is possible

Treatment

The aim of treatment is to treat the cancer and any problems it may be causing. Treatment may differ from person to person depending on where the tumour is, how big it is, if it has spread, your age and any other medical problems you may have.

Surgery

Removal of a pancreatic cancer is a major procedure and should only be carried out in specialist centres. The complication rate is about 30-40% and the success rate is about 98%. This means that about 2% of patients will not survive the procedure. The success rate is better depending on your overall fitness both mentally and physically.

The type of operation carried out depends on where the mass is situated, common operations performed are briefly explained below.

Pylorus-Preserving Kausch Whipple - Similar to the above only in this operation part of the stomach is not removed. Tissue removed includes gall bladder, head of pancreas, duodenum and two thirds of the bile duct.

The small bowel is used afterwards to join directly onto the stomach, remainder of bile duct and pancreas so that the gut can function normally.

Kausch-Whipple - Involves removing part of the stomach, the gallbladder, bile duct, duodenum and the head of the pancreas.

Left Pancreatectomy - Also called a Distal Pancreatectomy. Only tail end of pancreas removed if mass is in the tail or body of the pancreas. This can sometimes be done with keyhole surgery.

Radical Left Pancreatectomy – Removal of the tail of pancreas and spleen.

Total Pancreatectomy - In some cases, especially if there is a large cystic tumour or an endocrine tumour, the whole pancreas is removed.

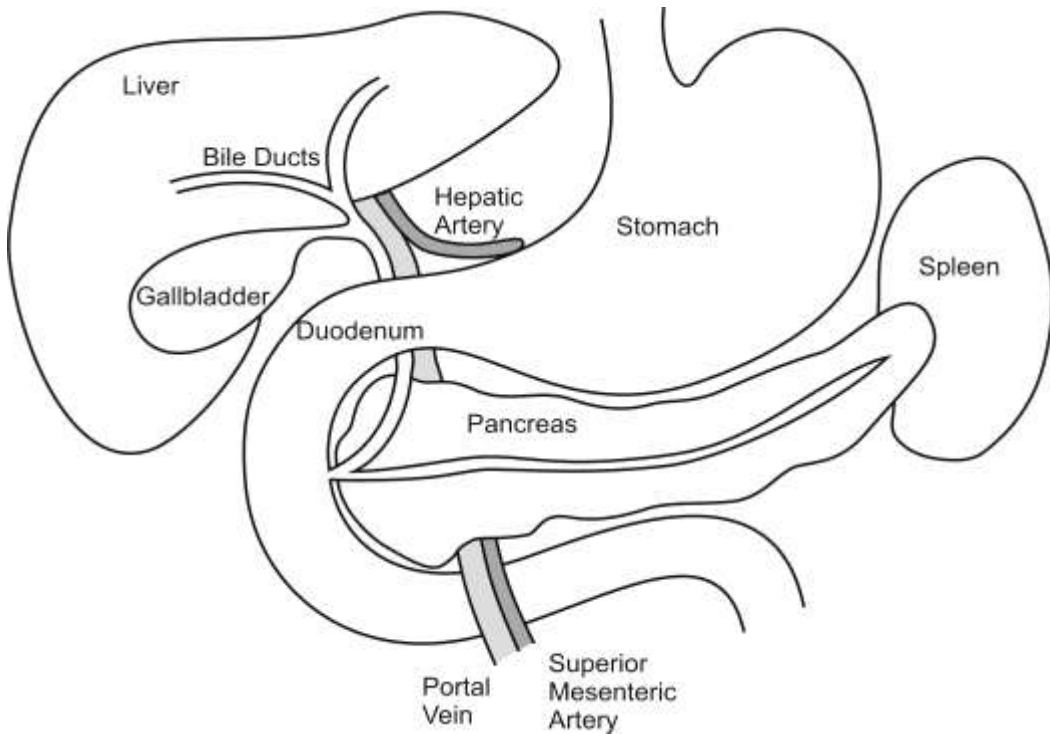
Gastric and Biliary Bypass – Palliative Bypass

This operation is performed if the pancreatic mass cannot be removed, or metastases (a spread of cancer) are noted in surgery.

A mass in the head of the pancreas can cause a blockage to the small bowel and stomach. Any food eaten has difficulty passing out of the stomach into the bowel and builds up in the stomach, resulting in nausea and vomiting. If the mass also blocks the bile duct, jaundice will occur.

The surgical method of dealing with the obstruction is to bypass it. A gastric bypass (gastro-jejunostomy), involves connecting a piece of the small bowel (the jejunum) to the stomach, allowing food to be diverted away from the obstruction directly into the intestine. A biliary bypass (hepatico-jejunostomy), involves connecting a piece of the small bowel (jejunum or duodenum) to the bile duct or the gall bladder above the part where the bile duct is blocked enabling the bile to drain from the liver directly into the intestine.

A gastric or biliary bypass can be carried out as individual operations or can be performed together; this depends on where the mass is, and what symptoms you may have.



Chemotherapy

Chemotherapy is the use of anti-cancer (cytotoxic) drugs to destroy cancer cells. It is one of the most commonly used treatments for pancreatic cancer and may be offered following surgery or as a palliative treatment where surgery is not possible.

Chemotherapy following surgery is called adjuvant chemotherapy. Adjuvant chemotherapy aims to destroy any microscopic cancer cells, which might still be in your body after surgery.

It is now standard treatment to give chemotherapy if you have the common ductal type of pancreas cancer, once you recover from the operation, usually six to twelve weeks after.

Palliative chemotherapy is offered to potentially slow down or shrink the cancer. This may be given as part of a research trial.

How chemotherapy is given

Chemotherapy for pancreatic cancer is usually given as a combination of tablets and Intravenous injection. Chemotherapy can be given into a vein in your arm or hand, or through a flexible plastic tube (a central line) that sits in a vein just under your collarbone at the top of your chest.

Whether chemotherapy is given as tablets or into a vein, the drugs are absorbed into the blood and carried all round the body. The chemotherapy then destroys cancer cells wherever they are in the body.

Chemotherapy is usually given as several sessions of treatment. Each treatment is followed by a rest period of a few weeks to allow your body to recover from any side effects.

The treatment and the rest period together make up what's called a cycle of treatment. The number of cycles you have will depend on the drugs that are used, and how well the treatment is working. This is checked by your doctor at regular appointments.

Most people can have their chemotherapy as an outpatient.

Side effects

Chemotherapy can sometimes cause side effects, but it can also make you feel better by relieving the symptoms of the cancer. Most people have some side effects, but these can often be well controlled with medicines.

Some of the possible side effects are described here, along with some of the ways in which they can be reduced.

Clinical Trials

Because doctors have still to work out the best type of chemotherapy there are many clinical trials that patients are asked to take part in. Generally speaking patients usually benefit by taking part in a trial, but it is up to the individual to decide whether to take part. Trials take place to try and find out if a new treatment is actually better than what is already available. If you are interested in taking part in any of the trials a research doctor or nurse will come and speak to you, offering further advice and support.

Palliative Care

If after a full discussion of your treatment options you decide you would rather not receive any active treatment, or we felt treatment would not help we will refer you for palliative care. This is supportive care to help alleviate any symptoms and is not a curative treatment.

For many people with pancreatic cancer the main aim of treatment is to control symptoms. You will be given support and help from your hospital key worker, family doctor (GP), district nurse, macmillan nurse and palliative care specialists.

Further Information

If you need any further information please contact your Key Worker/ Macmillan Nurse.

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Other sources of information

Pancreatic Cancer UK

Website: www.pcrf.org.uk

Telephone: 0203 535 7090

Macmillan Cancer Information

Website: www.macmillan.org.uk.

Telephone: 0808 808 0000

The Macmillan Cancer Information Centre

Ground Floor of the Linda McCartney Centre

Telephone: 0151 706 3720

Text phone number: 18001 0151 706 3720

Pancreatic Cancer Action

Website: www.PancreaticCancerAction.org

Telephone: 01428654740

Cancer Research UK

Website: www.cancerhelp.org.uk

Telephone: 0808 800 4040

Author: Hepato-Pancreato Biliary Surgical Team

Date: March 2019

All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

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