## **Endoscopic Ultrasound drainage of Pancreatic Pseudocyst**

## What is a Pancreatic Pseudocyst?

A pancreatic pseudocyst develops in about 1 in 4 people with chronic pancreatitis and up to 1 in 5 people with acute pancreatitis.

Pancreatitis is inflammation in the pancreas and may be acute or chronic. Acute pancreatitis is a condition of the pancreas that occurs when digestive juices made by the pancreas, attack the pancreas itself and cause the inflammation.

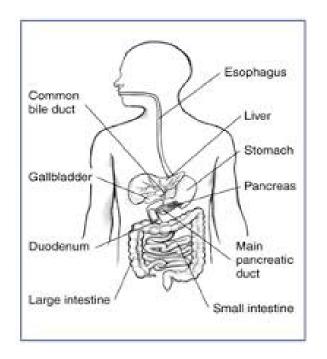
This can happen for several reasons but the most common causes in the UK are gallstones or alcohol. When this happens the juices made by the pancreas which are rich in chemicals (enzymes) can collect into a fluid filled cavity (cyst).

Chronic pancreatitis is a more long-term condition where the inflammation is often less severe but goes on over a much longer period of time leading to scarring and damage to the pancreas.

In chronic pancreatitis, cysts can also form sometimes as a result of damage to the pipe that drains the pancreas. Cysts can swell to various sizes and may cause symptoms such as worsening pain, feeling sick and vomiting. Sometimes they go away without treatment but sometimes they need to be drained.

## What is Endoscopic Ultrasound drainage of Pancreatic cyst?

An Endoscopic Ultrasound is a procedure that combines the ability to look directly at the lining of the upper gut with a video camera, whilst also showing the structures that lie outside the gut (such as the pancreas) using ultrasound. This is done using an ultrasound scope, which is a long thin flexible tube with a light and an ultrasound probe at the end of it. It is passed into the mouth and down the gullet (oesophagus), into the stomach and sometimes the duodenum.



Under sedation and using this technique, the pancreatic cyst is identified and using special endoscopic tools, the cyst is entered and a drainage tube placed. The tube enables the contents of the cyst to drain directly into the stomach. You will need to return at a later date to have the drain removed once the cyst is cleared. The aim of this procedure is to reduce/resolve your pain, the inflammation of your pancreas and reduce the size of the cyst.

This is not a painful procedure and usually takes between 20 - 40 minutes, although if it takes longer, you should not worry. During the procedure the Doctor may wish to take samples. This is called Fine Needle Aspiration (FNA). You should not feel them being taken. It is standard to recover you for a minimum of 4 hours following your procedure, so please expect to be on the unit for most of the day.

#### What are the risks associated with this procedure?

- Bleeding if this occurs it is usually minor and settles spontaneously. Very rarely, if the bleeding is very significant, an operation is required to stop bleeding.
- Perforation this is a situation where a small hole in the lining of the gullet or stomach can
  occur as a result of manipulation of the endoscope. If the hole is significant, an operation
  may be needed to close the hole.
- Air embolism this occurs when air gets into the circulation and passes to other organs in the body. Although serious this is an extremely rare complication.
- Fistula whereby the false channel created to drain the cyst does not heal once the stent is removed
- Damage to other structures for example, gall bladder during the procedure
- Leakage of cyst contents into the abdominal cavity
- Pancreatitis
- Using sedation can cause breathing complications in up to 1 in 200 procedures, but is usually not serious.
- Bloating and abdominal discomfort is not unusual for a few hours after the procedure
- You may have a sore throat for 24 hours
- There may be a slight risk to teeth, crown or dental bridge work. You should tell the nurses if you have either of these.
- Technical failure for some reason the cyst cannot be adequately or safely accessed to successfully drain it
- Infection the contents of the cyst may become infected, particularly if the stent becomes blocked (for example by bits of dead tissue from the pancreatitis).

 Other very rare complications include aspiration pneumonia (inflammation of the lungs caused by inhaling secretions from the mouth) or adverse reactions to intravenous sedative drugs.

The person doing the test will discuss any worries you have about the risks associated with this procedure

#### What are the alternatives to this procedure?

The alternative to this procedure would be surgical drainage of the cyst or the placement of a drain directly through the skin into the cyst.

### Preparing for this procedure

Please read the information enclosed carefully. If you have any queries, contact the unit where you will be having your procedure.

If you are **diabetic**, **on warfarin**, **clopidogrel**, **rivaroxaban**, **apixaban**, **or dabigatran** please contact the unit for further information. Please bring any medication you are currently taking (including sprays and inhalers) with you to your appointment. If you are taking a number of tablets please bring in your repeat prescription sheet.

#### To allow a clear view the stomach must be empty, so please follow these instructions:

- Do not have anything to eat for at least **six** hours before the test
- Do not drink milk for four hours before your test. Milk will line the stomach and not allow a clear view of the lining
- You may drink clear fluids (water, black tea or black coffee) up to **two** hours before the time of the appointment

#### When you arrive at the hospital

Please report to the reception desk where a receptionist will check your details and direct you to the waiting area. Please be aware the appointment time you have been given, will be your admission time. Your procedure will be carried out as near to this time as possible, however on occasions due to emergency patients being seen, this may be delayed.

- Please do not bring any valuables to the hospital with you
- Please do not wear any nail varnish, lipstick or jewellery (tongue studs must be removed
- Please bring a contact number of a relative or friend with you

A nurse will then explain the procedure to you, to make sure you understand the benefits, and possible risks as detailed in this leaflet. The staff will want you to be as relaxed as possible and will not mind answering your questions.

Just before the procedure you will also see the person who will be performing the test and provided you are happy for the procedure to be performed, they will ask you to confirm your agreement and they will also sign your consent form.

This form also asks for your consent to further procedures that may be necessary, including taking tissue samples (biopsies) that may be helpful in diagnosing your problem. Tissue may be used for

research but you can request that no removed samples be used for this purpose on your consent form.

If you need the help of an interpreter to understand any of this information, or on the day of the procedure, please contact the unit where you will be having the test, as soon as possible. Please note relatives/friends or children should not be used as interpreters when you are required to sign your consent form. You should contact the Endoscopy Unit who will arrange for an interpreter to be present.

## Important information for patients arriving by ambulance:

To ensure you do not miss your appointment and arrive home in a timely fashion, please when booking your transport, give the following instructions:

#### For morning appointments:

Please arrange for the ambulance to collect you at 8 am

#### For afternoon appointments:

Please arrange for the ambulance to collect you at 12 noon

### **Privacy & Dignity**

Delivering same-sex accommodation is a long standing commitment in the NHS as part of the drive to deliver the best possible experience for all patients (DOH 2007). Endoscopy Units within the Heart of England NHS Foundation Trust, maintain these standards either by operating single sex areas or single sex days.

Eliminating mixed sex accommodation is our priority except where it is in the overall best interests of the patient, i.e. in an emergency (they have a life threatening condition) or where delays to that patients treatment would mean deterioration in their condition. Should a patient of the opposite sex require such urgent care during your visit, we will ensure your privacy and dignity is maintained by screening off the patient of the opposite sex

On occasions medications are used during this procedure, which are known as 'off shelf'. This means medicines that are used for clinical situations which fall outside of the terms of their Summary of Products Characteristics. The use of medicines in this way is seen as a legitimate aspect of clinical practice and is often necessary in many areas of medicine. For further information concerning the use of 'off shelf' drugs, please log onto the Medicines and Healthcare product Regulatory Agency (MHRA) website.

## **During the test**

You will not have to get undressed but we will give you a gown to wear. You are advised to wear very loose clothing i.e. track suit and avoid any clothing that contains metal i.e. belts, under wired bras. You will have to remove dentures, glasses, contact lenses and loosen any tight clothing around the neck.

In the examination room you will be made comfortable on the couch resting on your left side. A nurse will stay with you throughout the procedure. To keep your mouth slightly apart, a plastic mouthpiece will be put gently between your teeth. When the person doing the test passes the ultrasound scope into your stomach it will not cause pain, nor will it interfere with your breathing. The whole examination usually takes between 20-40 minutes.

#### Sedation and oxygen

This procedure is usually carried out using a combination of throat spray, which will be applied to the back of the throat to numb it, and sedation. If you have sedation it will be given through a small needle in the back of your hand or in your arm. Sedation will make you slightly drowsy and relaxed but not unconscious. You will be in a state called co-operative sedation. This means that although drowsy you will still hear what is said to you and will be able to follow simple instructions during the procedure.

Alternatively, your doctor may have discussed with you having the procedure done under Propofol sedation. If this is the case a separate information sheet will accompany this, providing you with information about this.

For either forms of sedation, you will be given oxygen through small tubes placed gently in your nostrils or through the plastic guard in your mouth. A clip will be attached to a finger or ear-lobe so that the levels of oxygen in the blood can be monitored and your blood pressure may also be measured automatically during the procedure using a small cuff around your arm

Please note that we will not be able to give you either forms of sedation if you do not have a responsible adult to collect you and stay with you for 24 hours following your procedure.

#### **Further information**

Training doctors and other health professionals is essential to the continuation of the NHS, and improving the quality of care. Your treatment may provide an important opportunity for such training under the careful supervision of a senior doctor. You can, however, decline to be involved in the formal training of medical and other students - this won't affect your care and treatment.

## Going home after you have received sedation

After the test you will remain in the unit to rest for about four hours. It is essential that a responsible adult comes to pick you up from the unit and accompanies you home by car or taxi – **public transport is not suitable**. Please note the unit closes at 6pm. Your relative/friend should arrive no later than 5.30pm to collect you.

When you arrive home, it is important to rest quietly for the remainder of the day, with someone to look after you for 24 hours. It is advisable to have the following day off work but in any event for the first 24 hours following sedation **DO NOT**:

- Drive a car
- Drink alcohol
- Take sleeping tablets
- Operate any machinery or electrical items even a kettle
- Sign any legally binding documents
- Work at heights (including climbing ladders or onto chairs)

Sedation can impair your reflexes and judgement.

#### When will I know the results?

Before discharge from the unit, either the doctor who performed your procedure, or a nurse who has been looking after you, will discuss your procedure with you. If a sample has been taken from

the cyst, this will be sent to the laboratories for analysis. The results should be available in around 2-4 weeks. You will be given a copy of the report to take home with you.

We would advise against travelling abroad in the first three days following your procedure. If you have any travel plans please discuss these with us.

The nurse will advise you to discuss the details of the results and any necessary treatment with your GP or hospital specialist. If you have any questions about the test, please contact the unit where you will be having your procedure performed.

If you are unable to keep your appointment please telephone the number on your appointment letter as soon as possible, so the appointment can be allocated to another patient.

If you have any questions about the test, please contact the unit where you will be having the Endoscopic Ultrasound performed.

To contact us by telephone before your appointment (NOTE this number should NOT be used for booking enquires):

**Heartlands Endoscopy Unit** 

Monday to Friday 8.30 am to 5.30 pm – Excluding Bank holidays 0121 424 0438

**Queen Elizabeth Hospital Endoscopy Unit** 

Monday to Friday 8.30 am to 5.30 pm – Excluding Bank holiday 0121 371 3833

#### Our commitment to confidentiality

We keep personal and clinical information about you to ensure you receive appropriate care and treatment. Everyone working in the NHS has a legal duty to keep information about you confidential.

We will share information with other parts of the NHS to support your healthcare needs, and we will inform your GP of your progress unless you ask us not to. If we need to share information that identifies you with other organisations we will ask for your consent. You can help us by pointing out any information in your records which is wrong or needs updating.

#### **Additional Sources of Information:**

Go online and view NHS Choices website for more information about a wide range of health topics http://www.nhs.uk/Pages/HomePage.aspx

#### You may want to visit one of our Health Information Centres located in:

- Main Entrance at Birmingham Heartlands Hospital Tel: 0121 424 2280
- Treatment Centre at Good Hope Hospital Tel: 0121 424 9946
- Clinic Entrance Solihull Hospital Tel: 0121 424 5616 or contact us by email: <a href="mailto:healthinfo.centre@heartofengland.nhs.uk">healthinfo.centre@heartofengland.nhs.uk</a>.

### PATIENT SATISFACTION SURVEY

Your Feedback is important to us. Please use the QR code below to complete our patient feedback survey and let us know how we can improve our services for you.



If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email: <a href="mailto:interpreting.service@uhb.nhs.uk">interpreting.service@uhb.nhs.uk</a>