

## Patient information

# **Endoscopic Ultrasound Examination (EUS) Guided Hepatogastrostomy**

### Digestive Diseases Care Group

Your Consultant or doctor has advised you to have an Endoscopic Ultrasound Examination (EUS) guided Hepatogastrostomy (biliary drainage).

Endoscopy is the insertion of a long, thin tube directly into the body to observe an internal organ or tissue in detail.

#### **What is EUS guided hepatogastrostomy?**

You are possibly familiar with an ultrasound scan, one use of which is to look at babies in the womb of pregnant women by rolling a probe over the abdomen. EUS combines an ultrasound scan with endoscopy (flexible camera) so that fine detail of the lining of the gut or of certain internal organs such as the pancreas, liver, gallbladder and bile ducts can be examined.

In some cases there is an obstruction to the normal flow of bile from the biliary duct into the small intestine (biliary obstruction). When this happens it is possible to aid the drainage of biliary fluid by inserting a stent (tiny tube used to keep open a blocked passageway) from the stomach (when access through the small intestine proves difficult due to anatomy) to the common bile duct, under the guidance of EUS if and when endoscopic retrograde cholangiopancreatography (ERCP) fails or when there is no other way to unblock the bile ducts.

#### **What are the benefits of EUS guided hepatogastrostomy?**

Left untreated, biliary obstruction can cause serious health problems such as infection, sepsis and chronic liver disease. It can even be life threatening. The purpose of EUS guided hepatogastrostomy is to relieve the blockage to help prevent further complications.

#### **Are there alternative procedures available?**

One alternative procedure is endoscopic retrograde cholangiopancreatography (ERCP) but it is likely that you have already had this procedure and the drainage was unsuccessful. Another alternative is percutaneous transhepatic biliary drainage (PTBD). With PTBD the specialist will be able to pass a needle through the skin into the liver to locate the bile duct and place a drain to allow drainage through the skin. However, because the drain is placed through the skin this procedure can be painful. If you want to discuss this further you must speak to the doctor who referred you for the procedure.

## **What will happen if I decide not to have this procedure?**

If you decide not to have this procedure then the other option would be to drain via the skin as described (PTBD) or ERCP (if not already been performed).

A decision not to proceed with bile drainage will cause your jaundice to get worse and risk serious health problems such as, dangerous build-up of bilirubin, infection, sepsis, liver disease. Also this will prevent other treatment options to proceed. This could in turn lead to hospital admission and may be life threatening.

## **What are the risks of EUS guided hepatogastrostomy?**

EUS is a very safe procedure. However with any invasive procedure there is a risk of complication, but the chance of this is minimal.

- There is a small chance of an allergic reaction to the drugs used for sedation or occasionally even from the throat spray.
- You may have a slightly sore throat from the procedure, which will usually wear off within 24hours.
- There is a small risk of bleeding [less1%] or sepsis [1-5%] but these can usually be treated if they arise.
- There is a minimal risk of bile leakage [5%]
- There are no known risks associated with the ultrasound part of the procedure.
- Vary rarely the flexible camera can cause a tear (perforation) [less than1%] in the lining of the gullet or gut.
- There is a small risk of failure to place the stent [5%] due to the way the bile tube or small bowel is. In this situation the doctors may recommend PTBD.

Any of the risks can usually be easily treated and can be discussed with you during the consent process on the day of procedure.

## **What anaesthetic or sedation will I be given?**

Both local anaesthetic throat spray and intravenous sedation will be given to you. The local anaesthetic spray is used to numb your throat, while the intravenous sedation involves the injection of two medications given into the vein via a cannula (plastic tube that aids insertion of medication and fluids). Of the two medications one is a sedative and the other a pain relief.

Please be aware that you will be slightly drowsy and relaxed, but you will not be unconscious.

The drugs used in sedation may affect your memory or concentration for up to 24 hours. Many patients remember nothing about the procedure or even what the doctor has said to them afterwards.

**You must not drive: operate machinery, climb ladders or sign important documents for 24 hours following the sedation. It is also essential to bring an escort to take you home and stay with you for 24 hours, without which the procedure may be cancelled**

A side effect of these medicines can be to slow your breathing; it is not normal for this to happen, but sometimes patients can be oversensitive to the medication and is the main reason why we do not give high doses of these. You will also be supported with additional oxygen during the test.

**If you are worried about any of these risks, please speak to your consultant or a member of their team.**

### **Getting ready for your procedure**

- **Do not have anything to eat for at least six hours before your test.** This is to make sure that we can have a clear view of your stomach.
- You will be asked to remove any tight clothing, ties, dentures, spectacles and contact lenses.
- Please **do not** bring large amounts of cash or valuables with you as the Trust cannot be held responsible for them.

### **Important: If you have:**

- ❖ **Diabetes**
- ❖ **Are taking: (Warfarin tablets, Clopidogrel (plavix) tablets)**
- ❖ **Anticoagulants:**
  - Warfarin
  - Heparin/Fragmin/Clexane
  - Dabigatran
  - Rivaroxiban
  - Sinthrome
  - Apixaban
  - Fondaparinux
  - Edoxaban
- ❖ **Antiplatelet therapy:**
  - Clopidogrel (Plavix)
  - Prasugrel (Efient)
  - Ticagrelor (Brilique)
  - Dipyridamole (Persantin) and Aspirin
- ❖ **Are on dialysis**
- ❖ **Have suffered a heart attack within the last three months**

**You must contact the Endoscopy Unit as soon as you receive this information leaflet.**

**Tel: 0151 706 2656**

**Text phone number: 18001 0151 706 2656**

**When you come to the department, please tell the doctor or nurse about any drugs you are taking and in particular, about any possible allergies or bad reactions you may have had in the past.**

### **Your EUS guided hepatogastrostomy**

- In the endoscopy room you will be made comfortable lying on your left side; you will be given some oxygen through your nose. The test involves passing a slim flexible telescope through the mouth and down into the oesophagus (gullet) and stomach.

- You may have already had a gastroscopy and this test is very similar from your point of view. EUS is not a painful procedure but the sensation is slightly unpleasant.
- This entire procedure lasts between 30 and 40 minutes.

### **After your EUS guided hepatogastrostomy**

You will be transferred to the recovery area after the procedure is completed and the nursing staff will monitor your blood pressure and pulse for the next two hours. When you are fully recovered you can be discharged home.

### **Results**

Sometimes the doctor or nurse may let you know the result after the procedure is complete. However if a biopsy, photograph or other information is taken which need to be assessed further, the result may not be available for a week or two. In this case the result will be sent to your family doctor (GP) or be available to discuss with you during your next clinic appointment.

### **What should I expect when I go home?**

It is normal to have a sore throat and some mild discomfort for a couple of days after your procedure.

### **For the 24 hours following procedure you must not**

- Travel alone.
- Drive any vehicle e.g. car, scooter or ride a motorcycle or bicycle.
- Operate machinery (including domestic appliances such as a kettle).
- Make any important decisions, sign any legal documents.
- Climb ladders.
- Drink alcohol.
- Return to work within 12 hours of treatment. Your general health and any medicines you are taking may increase the time you need off work.

### **You should**

- Take it easy for the rest of the day, avoid strenuous activity.
- Take your medications as usual.
- Let someone else care for anyone you usually look after, such as children or elderly or sick relatives.
- Ensure that you have a responsible adult escort to look after you for 24 hours.

## **Cancellations**

If you are unable to keep this appointment, please let us know as soon as possible on  
Tel: 0151 706 2656  
Text phone number: 18001 0151 706 2656

We won't be able to give your appointment slot to another patient and re-arrange your procedure date if you do not contact the department to inform of cancellation.

## **Feedback**

Your feedback is important to us and helps us influence care in the future

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated

\* Please be aware that we are a large teaching Trust and so we are involved in teaching students and in research work. Qualified doctors and nurse practitioners may perform your test under supervision by a skilled endoscopist. You may also be asked to take part in research. If you do not feel happy about this, please tell a member of staff. You have the right to refuse and your decision will not affect your treatment in anyway.

## **Further information**

**If you have any questions or queries, please contact the Endoscopy Unit during the following hours**

<b>Monday – Thursday</b>	<b>0800 – 2100 hrs</b>
<b>Friday</b>	<b>0800 – 1700 hrs</b>
<b>Saturday/Sunday/BH</b>	<b>0800 – 1600 hrs</b>

**Tel: 0151 706 2656**  
**Text phone number: 18001 0151 706 2656**

**Clinic appointment enquiries**  
**Tel: 0151 706 5555**  
**Text phone number: 18001 0151 706 5555**

**The Emergency Department (A&E) is open 24 hours**  
**Telephone number: 0151 706 2051/2050.**  
**Text phone number: 18001 0151 706 2051/2050**

**Author: Digestive Disease Care Group**  
**Review Date: May 2023**

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

يمكن توفير جميع المعلومات المتعلقة بالمرضى الموافق عليهم من قبل ائتمان المستشفى عند الطلب بصيغ أخرى، بما في ذلك لغات أخرى وبطرق تسهل قراءتها وبالحروف الطباعة الكبيرة وبالصوت وبطريقة برايل للمكفوفين وبطريقة مون والإلكترونية.

所有經信托基金批准的患者資訊均可以其它格式提供，包括其它語言、易讀閱讀軟件、大字體、音頻、盲文、穆恩體（Moon）盲文和電子格式，敬請索取。

در صورت تمایل میتوانيد کلیه اطلاعات تصویب شده توسط اتحادیه در رابطه با بیماران را به اشکال مختلف در دسترس داشته باشید، از جمله به زبانهای دیگر، به زبان ساده، چاپ درشت، صوت، خط مخصوص گوران، مون و بصورت روی خطی موجود است.

زانیاری پئوئیددار یو نمخوئانهی له لایسن ترامتیهوه پسماند کران، ننگر داوا بکریت له قورماتمکائی تردا بریتی له زمانمکائی تر، نیزی رید (هاسان خویندنهوه)، چاپی گموره، شریتی دمنگ، هیلی موون و نملیکترونیکی همیه.

所有经信托基金批准的患者信息均可以其它格式提供，包括其它语言、易读阅读软件、大字体、音频、盲文、穆恩体（Moon）盲文和电子格式，敬请索取。

Dhammaan warbixinta bukaanleyda ee Ururka ee la oggol yahay waxaa marka la codsado lagu heli karaa nuskhado kale, sida luqado kale, akhris fudud, far waaweyn, dhegeysi, farta braille ee dadka indhaha la', Moon iyo nidaam eletaroonig ah.