

Drainage and / or stenting of bile ducts

Radiology

What is the aim of this leaflet?

The aim of this leaflet is to explain the procedure for patients undergoing drainage or stenting of bile ducts. This leaflet is not meant to replace informed discussion between you and your doctor, but can act as a starting point for outlining risks and benefits.

What is a biliary drain?

A drain is a plastic tube that will be inserted into the bile duct and attached to a bag to collect the bile.

Why do I need bile duct drainage?

You need this procedure because the bile ducts have become blocked. The most common causes of bile duct blockage are gallstones and pancreatic masses. In some situations the cause of the obstruction is not clear.

The blockage prevents the bile from draining into the gut. The progressive build-up of bile within the liver makes you very susceptible to infection. Furthermore you will become yellow (jaundiced) which in some patients may be extremely itchy. Being jaundiced may prevent you from having some types of treatment.

What is a biliary stent?

A stent is a short metal or plastic tube that is placed in your bile duct to keep it open so that the bile can drain into your gut as normal.

Why do I need a biliary stent?

Sometimes the system needs draining before the stent can be inserted or placed. Once the stent has been positioned, the drain may be left in for a couple of days then removed or the drain will be removed at the time of stent insertion.

Who has made the decision?

The physician or gastrointestinal consultant in charge of your care has made the decision for you to have this procedure. Although this decision has been made in your best interests, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctor, you no longer want the procedure, you can decide against it.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Consent

We must seek your consent for any procedure or treatment beforehand. A written consent will be obtained from yourself, by a doctor, to give permission to have the procedure carried out. Your doctor will explain the risks, benefits and alternatives where relevant before you sign the consent.

What are the potential benefits of having a drain / stent insertion?

Benefits:

- To reduce Jaundice symptoms
- To relieve a build-up of bile collected from a poorly draining system.

What are the potential risks of having a drain / stent insertion?

This procedure is performed in large numbers and carried out by specialist radiologists around the world. The risks are very low and will be discussed during consent. You will also have the opportunity to discuss any concerns before your procedure. The more ill you are, the higher the risks may be.

Risks of biliary drain / stent:

- There may be some pain after the procedure
- If the bile is infected there is a small chance this may leak and make you unwell. You will be put on antibiotics for this
- Patients with jaundice usually suffer from poor clotting. There is a chance the procedure may cause bleeding. If this becomes severe, an operation or another radiological procedure may be necessary to stop the bleeding. A blood transfusion may need to be given if you lose too much blood
- The tube (drain) which is draining the bile may get displaced (pulled back) so bile will leak into your tummy (abdominal cavity) and cause pain and infection. You may need antibiotics and the tube replaced into the correct position within your liver
- If the procedure is not successful, an operation may be needed to relieve the build-up of bile
- The pancreas is very close to the bile ducts and may become inflamed when the drain is put in
- **Radiation:** Ionising radiation may cause cancer many years or decades after the exposure. We are all at risk of developing cancer during our lifetime. 50% of the population is likely to develop one of the many forms of cancer at some stage during our lifetime. It has been estimated that undergoing this procedure may increase the chances of this happening to you to about 0.1%. The requesting doctor and the doctor that will be performing your examination feel that the benefit of having the test or treatment outweighs the risk from the exposure to radiation. If you have further questions about the risk of exposure to radiation, please talk to your doctor during consent
- **Please contact the X-ray department as soon as you receive this appointment if you think you may be pregnant**
- **Contrast agent:** The "dye" that is used to show up the bile duct can have side effects for a minority of patients:
 - 3 in 100 patients experience nausea and hot flushes
 - 4 in 10,000 may have more serious effects including breathing difficulties.If a side effect does occur the doctors, nurses and radiographers are trained to deal with it.

Are there any alternative treatments and what if I decide not to have it done?

The Consultant in charge of your care will discuss the alternatives with you, which may include surgery and a procedure known as an ERCP (endoscopic retrograde cholangio-pancreatography) if not already attempted. They will also discuss the consequences of no treatment.

Are there any special preparations required?

Biliary drain insertions are usually performed under local anaesthetic and sedation

- You can enjoy a light breakfast before 08:30 and drink as normal before the procedure then free fluids and drugs only. The nurse on the ward will already know how to prepare for your procedure
- If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the procedure
- The nurse looking after you care will give you antibiotics before you are sent to radiology. This is to prevent the risk of Infection
- Your bloods will also be taken prior to the procedure.

If you are taking the following medication and the doctor has not discussed them during consent please contact the X-ray Department when you receive this information:

Acenocoumarol, Apixaban, Aspirin, Bivalirudin, Dabigatran, Dalteparin, Danaparoid, Dipyridamole, Edoxaban, Enoxoparin [Clexane], Fondaparinuxm, Heparin, Phenindione, Tinzaparin, Warfarin.

Who will do the procedure?

You may have already had previous Imaging such as an ultrasound or computerised tomography (CT scan) in which case the interventional radiologist will review the images and use them to perform the drain insertion. They have special expertise in interpreting the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

During your care within the hospital, a team of specialists may have made the decision for what interventions or procedures you may have in the future. The outcome of this decision may mean that you will have a stent inserted at the same time as the drain insertion or at a later date in a separate procedure.

Where will the procedure take place?

The procedure will take place in the angiography suite; this is located within the Radiology department. This is similar to an operating theatre in which specialised X-ray equipment has been installed.

If you are admitted to a ward, the angiography suite will liaise with your ward nurse and porters to arrange transport to your procedure.

What actually happens during a biliary drain or stent insertion?

You will be asked get undressed and put on a hospital gown. Observations of your heart rate and blood pressure will be taken during and after the procedure. This is routine. A team of nurses and radiographers will assist the radiologist during the procedure. You may be given sedation (a medication used to produce a state of calm or sleep) to help relax you during the procedure.

The skin on tummy will be swabbed with antiseptic liquid and then covered with sterile drapes. An interventional radiologist uses an ultrasound probe and X-rays to allow accurate access and treatment through a minute incision. Local anaesthetic (a medication used to numb an area of the body to reduce pain) is injected at the procedure site this maybe the centre or right side of your tummy. This may sting for a few seconds but then will go numb. The interventional radiologist places various wires into the bile ducts. You may be able to feel this but there should be no pain.

If a stent is requested, the radiologist will insert this. This will be discussed with you before the procedure. A larger tube known as a drain will be left in after the procedure which may either be capped off or used to drain bile into a bag outside the body.

Will it hurt?

When the local anaesthetic is injected, it will sting a little, this will soon wear off.

Patients do experience some discomfort during this procedure. You can be given sedation and strong injected painkillers in order for the procedure to be as pain-free as possible.

If you feel very anxious please discuss with the staff on the ward about having sedation.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about one to two hours.

What happens afterwards?

- You will be transferred back to your bed and taken back to the ward. If you have had sedation you will feel drowsy
- Bed rest will be required and you will need to take it easy for the rest of the day
- You will have a small tube coming out of your tummy or the right side of your abdomen, which may be closed off, or draining directly into a small bag
- A few hours after the procedure you may feel nausea, this is due to the sedation, take sips of water then later you can eat and drink normally
- You will have your pulse and blood pressure checked regularly by the nurse
- You may feel sore when the anaesthetic wears off. Please ask your ward nurse for pain relief.

Going home advice

This will be given by your doctor and nurses on the ward, when you have recovered enough to be discharged from hospital.

Trainees

A radiology trainee (qualified experienced doctors training in radiology) or occasionally a student may be present during the examination. If you would prefer them not to attend, please let a member of radiology staff know.

How to contact us

If you have any personal access needs, require wheelchair access and wish to speak to a member of staff for further information please contact the Interventional Radiology department on (01902) ext. 6344 between 9.00am and 5.00pm

Angiography Suite / Interventional Radiology

Second floor Radiology A2
New Cross Hospital
Wolverhampton
West Midlands
WV10 0QP

Patient Advice and Liaison Service

New Cross Hospital
01902 695362
Email: rwh-tr.pals@nhs.net

Further information

Further information about your examination is available from The British Society of Interventional Radiologists at:

<http://www.bsir.org/patients/biliary-drainage-and-stenting/>

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਆਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。