Duodenal Stent Insertion

Interventional Radiology

This leaflet provides information about the procedure, what to expect on the day, the potential risks and important information for afterwards.

Prior to the procedure, you will have a telephone consultation, where you will have the opportunity to ask further questions.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you or with the doctor who will be performing the procedure.

What is a duodenal stent?

A duodenal stent insertion is a procedure used to treat a narrowing or blockage in the duodenum (the first part of the small bowel, just beyond the stomach).

A small metal mesh tube (stent) is placed into the narrowed area to hold it open. This allows food and fluids to pass from the stomach into the bowel more easily.

The procedure is usually performed using X-ray guidance, often combined with endoscopy (a flexible camera), to accurately position the stent.

Duodenal stents are commonly used to relieve symptoms of gastric outlet obstruction, often caused by a tumour or external compression

Why do I need a duodenal stent?

You may be offered a duodenal stent if you have a blockage affecting the normal passage of food from the stomach into the bowel.

Symptoms may include:

- Nausea and vomiting
- Feeling full quickly after eating
- Abdominal discomfort or bloating
- Difficulty eating or drinking
- Weight loss

A stent can help relieve these symptoms, allowing you to eat and drink more comfortably and improving your quality of life.

Tel: 01932 723470 **Email:** asp-tr.ir-referrals@nhs.net

How do I prepare for a duodenal stent?

You will have a pre-assessment telephone consultation with a nurse before your admission and may be asked to have blood tests before the procedure.

You should stop eating 6 hours prior the procedure, however you can drink 1 cup of clear water per hour until the procedure starts.

The procedure will take place in the Interventional Radiology (IR), within the Radiology Department at St. Peter's Hospital. When you arrive, you will be given a hospital gown to change into, and a nurse will insert an IV cannula.

The doctor will discuss the procedure with you; answer any questions you may have and ask you to sign a consent form if you are happy to proceed.

The procedure will likely be performed under local anaesthetic. Intravenous pain relief and light sedation may also be given, to ensure you are as comfortable as possible.

If you are feeling unwell closer to the day of the procedure, please let the team know.

Additional preparation may include:

- A CT scan or endoscopy prior to the procedure
- A nasogastric tube in some cases to decompress the stomach

How is a duodenal stent performed?

You will usually lie on an X-ray table.

The procedure is performed using X-ray guidance, often combined with endoscopy (a flexible camera passed through the mouth into the stomach and duodenum).

A thin tube is guided to the site of the narrowing. Contrast dye is injected to outline the blockage. A guidewire is passed across the narrowed segment.

The stent is then positioned across the narrowing and released. It expands to open the bowel and allow food to pass through.

The procedure usually takes between 30 and 60 minutes.

What are the potential risks / complications of a duodenal stent?

Duodenal stent insertion is a commonly performed and generally safe procedure. However, as with all medical procedures, there are some risks:

Pain or discomfort
- Mild abdominal discomfort is common (up to 30-40%)
- Usually improves within a few days

Stent migration (movement)
- Occurs in approximately 5-15% of patients
- May require repositioning or replacement

Re-blockage of the stent
- Occurs in approximately 10-30% of patients over time
- May be due to tumour growth or food blockage
- Further treatment may be required

Bleeding
- Minor bleeding can occur and usually settles without treatment
- Significant bleeding is uncommon (<1-2%)

Perforation (tear in the bowel)
- Occurs in approximately 1-5% of patients
- This is a serious complication and may require urgent treatment or surgery

Aspiration (vomit entering the lungs)
- Can occur, particularly in patients with significant vomiting before the procedure
- Measures are taken to reduce this risk

Infection
- Uncommon (<1-2%)
- May require antibiotics

Failure to place the stent
- In around 5-10% of cases, the stent cannot be safely positioned

Radiation exposure
- The procedure uses X-ray guidance
- Radiation dose is kept as low as reasonably achievable

What happens afterwards?

After the procedure, you will be monitored in a recovery area.

- Your blood pressure, pulse, and comfort will be monitored
- You will gradually be allowed to start drinking fluids
- Your diet will be slowly reintroduced, usually starting with liquids and soft foods

You should:

- Follow dietary advice provided by your clinical team
- Eat small, frequent meals
- Chew food well and drink fluids with meals
- Remain upright while eating and for at least 30 minutes afterwards

Seek urgent medical advice if you experience:

- Severe abdominal pain
- Persistent vomiting
- Abdominal swelling
- Fever or signs of infection
- Inability to tolerate food or fluids

Follow-up will be arranged with your referring team to monitor your progress and ongoing care.

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

Author: Cathie Tenreiro - IR Clinical Specialist Nurse **Department:** Imaging
Version: 1 **Published:** April 2026 **Review:** April 2029

Interventional Radiology

St Peter's Hospital

Tel: 01932 723470

Email: asp-tr.ir-referrals@nhs.net

We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.

You can use Text Relay to turn telephone communications into text. Use the Relay UK app on your phone, tablet or PC. You can also use Relay UK via Minicom or Uniphone.

اگر نیاز به ترجمه دارید، لطفا با شماره 01932 723553 تماس بگیرید.

ਜੇ ਤੁਹਾਨੂੰ ਤਰਜਮੇ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ ਤੇ ਫੋਨ ਕਰੋ: 01932 723553

اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

Ashford Hospital London Road, Ashford, Middlesex, TW15 3AA Tel: **01784 884488**
St. Peter's Hospital Guildford Road, Chertsey, Surrey, KT16 0PZ Tel: **01932 872000**
Website: **www.ashfordstpeters.nhs.uk**