Percutaneous gastrostomy

When a patient cannot eat or drink normally, they can be fed via a tube (called a gastrostomy) placed directly into the stomach through the wall of the abdomen. Percutaneous (through the skin) **gastrostomy** is also performed to provide drainage (gastric decompression) when food and liquid cannot exit the stomach normally due to an obstruction of the opening of the stomach into the small intestine.

How will the procedure benefit me?

After the procedure, you can be fed through the gastrostomy tube and supplied with all the calories and nutrients that your body needs. If you are vomiting because the normal exit of the stomach is blocked, the vomiting will be stopped by draining your stomach through the tube.

How should I prepare before the procedure?

If you are taking aspirin or blood thinners your doctor may instruct you to stop taking them for a specific period of time before your procedure. Other medications may also need to be adjusted (e.g. insulin if you are a diabetic). A blood sample will be drawn for various tests, including to ensure that your blood is clotting normally. You will be instructed not to eat or drink for 6-8 hours before the procedure. You may be given barium liquid to make the colon easier to see under image guidance. If you cannot drink, this liquid will be delivered through a nasogastric tube (tube from a nostril to the stomach).

The procedure

A gastrostomy is usually performed using a combination of local anaesthesia and intravenous pain relief and sedation. During the procedure, you will be positioned comfortably on your back and connected to a machine to monitor and record your vital signs. You will be given fluids and the medications intravenously.

If not already in place, you will require a nasogastric tube through which air will be injected into the stomach to make it clearly visible on screen to the Interventional Radiologist. The site for a very small incision on the abdominal wall will be determined using x-rays, the skin prepared with a sterile solution and local anaesthetic given.



Gastrostomy tube

Guided by the images on the screen, the interventional radiologist will puncture the wall of the stomach and insert a very small 'anchor' attached to a thread which, when pulled, brings the walls of the stomach and the abdomen close together. They are kept together by stitching the external portion of the thread to the skin. Depending on the operator, a number of these anchors may be placed. Once the stomach wall is 'anchored' in this way, a needle is inserted and a guidewire passed through it. The needle is then removed and a series of dilators inserted over the wire to gradually make the hole in the stomach wall big enough to take the gastrostomy tube, which is then slid into place over the wire. The correct location of the gastrostomy tube is finally confirmed and then fixed to your skin. The tube through your nose can then be removed, either straight after the procedure or back in the ward.

What are the risks?

When performed on suitable patients, gastrostomy is generally considered a safe procedure with a low complication rate. The most common complications include skin infection around the gastrostomy entry point and bruising. Other complications include bleeding, dislodgment of the tube, stomach bloating, nausea and aspiration. It is possible, but rare, that the colon could be injured during the placement of the tube, which can lead to severe peritonitis. If the gastrostomy tube is placed through the liver, you may experience bruising in your liver.

What should I expect after the procedure? What is the follow-up plan?

You may experience some discomfort around the catheter in the first few hours following the procedure. If you had been sedated, you will regain control of your physical and mental faculties quickly. You may have a drainage bag and you will need to take care not to pull out the tube. When the tube can be used for feeding will depend on your hospital.

You and your family will be instructed how to recognise and prevent infection around the tube, how to prepare and insert food through the tube, what to do if the tube becomes blocked or if it gets pulled out. You will be advised at what stage the sutures attached to the stomach 'anchors' can be cut at the skin (between 48 hours and 1 week depending on the hospital). A follow-up plan should be discussed with your doctor, as they will need to see you regularly in order to check your stoma and tube condition, your nutritional state, feeding regime and your weight.

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