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ENDOSCOPIC RESECTION AND PLICATION (RAP) Information sheet

PROCEDURE DATE……..

ARRIVAL TIME……..

HOSPITAL St Vincent's Northside, 627 Rode Rd, Chermside

How are you to prepare?

On the day of your procedure you are to consume NO FOOD from midnight. If your appointment is later in the day you may have **CLEAR FLUIDS ONLY** (eg. Water, lemonade, apple juice, black tea and coffee, etc.) **until four hours prior to your procedure**. You should then be Nil By Mouth (i.e. no food, fluids, water, smoking) until after your procedure. You should therefore be **nil by mouth from _____.**

Important post-procedure care instructions

You will receive the post procedure diet which will guide you as you progress from liquids slowly back to solid food.

You will remain in the endoscopy unit for up to 3 hours until the main effects of the sedation wear off and you have had something to eat/drink. You may feel slightly bloated due to the air that has been introduced through the endoscope. This will quickly pass. You should avoid alcohol for 12 hours after your procedure.

-For legal reasons you MUST NOT drive a vehicle or operate machinery for the remainder of the day following intravenous sedation. This is at the discretion of your anaesthetist. Failure to do so carries the same implications as drink driving.

-You MUST have a responsible adult escort you home (i.e. you should not go to work) and stay with you overnight after the procedure. Also you should not care for dependent persons without responsible help for at least 12 hours after your procedure.

IF THESE REQUIREMENTS ARE NOT MET YOUR PROCEDURE MAY BE CANCELLED. These requirements are compulsory for all hospitals and all anaesthetists.

-You are also advised to be very careful in simple household tasks in the 12 hours after receiving sedation. Your coordination may be impaired for some time.

-Air Travel - If you intend to travel within 24 hours of your procedure please contact us to discuss.

If you develop any pain, fever, vomiting or blood loss after the procedure, you should contact your doctor immediately or the hospital where your procedure took place. Alternately, after hours, you can contact our after hours service on 3261 9570.

Medications

Continue taking all medications as usual unless otherwise instructed. If your procedure is early in the morning you can:

- Take medications as usual prior to your nil by mouth time
- After your nil by mouth time take medications with a small sip of water (i.e. approx. 20ml)
- Bring the medication with you to hospital to have after your procedure (unless you take heart or blood pressure medication, in which case you should take this as normal with a small sip of water)

If you take blood thinning medication or are diabetic please inform our rooms as soon as possible. You may receive a call from our practice nurse to discuss this further.

Endoscopic Resection and Plication Technique for Gastro-Oesophageal Reflux Disease

INTRODUCTION

Gastro-oesophageal reflux disease is the passage of gastric contents from the stomach into the lower oesophagus. There can be a range of symptoms associated with this, from a burning discomfort in the lower chest through to frank passage of food and fluid up into the throat.

The endoscopic resection and plication (RAP) technique is an endoscopic technique to try to mechanically reduce the tendency of contents from the stomach to enter the oesophagus. This procedure involves the use of an endoscope, which is a flexible video camera with a working channel, a light source and a way of insufflating air into the gastrointestinal tract. The procedure is done under intravenous sedation; the sedation is a heavy sedation and you will be unaware of what is happening. The endoscope is introduced into the oesophagus and to the first part of the stomach. The first part of the procedure is the **resection** phase. In this phase, the endoscope is used to remove the inside lining of the gastrointestinal tract, including the very lower part of the oesophagus and the very proximal part of the stomach. This is achieved by injecting a small amount of fluid between the inside lining of the gastrointestinal tract and the muscle layer of the gastrointestinal tract. This changes the flat lining into a mound. Following this, a special device is attached to the outside of the endoscope. This consists of a cap with rubber bands on the outside of it. The tissue that has been injected can then be sucked up into the cap and a rubber band deployed so that the flat lining of the gastrointestinal tract now becomes a polyp-type structure above the band. This can then be cut using a snare and electrocautery so that the tissue can be removed. This process is repeated until an area of the gastrointestinal tract has been resected to the satisfaction of the proceduralist. Following this, the **plication** part of the procedure is then performed. This involves the use of a different endoscope which has two working channels. Attached to this endoscope is a special device called an OverStitch (see apolloendo.com). The OverStitch device allows surgical grade suture placement into the gastrointestinal tract. A suture is then applied in a special pattern so that the area that has been resected is closed. As the area is closed, the vertical and horizontal planes are shortened to provide remodelling of the sphincter mechanism between the oesophagus and the stomach. When the suture is in an adequate position, the needle is placed into the gastrointestinal tract and then becomes a T-tag. As tension is applied to this suture, the T-tag embeds in the tissue and provides resistance so that tension can be held on the suture. Once adequate position is achieved, the tension is maintained and the excess suture is cut by the application of a cinch. The cinch, the suture and the needle are all connected and stay permanently inside you. The procedure will take between half an hour and an hour and fifteen minutes.

What will happen?

After checking into the hospital and completing your admission you will be seen by a pre-admissions nurse for a brief health check. Please inform the staff if you have any loose teeth or crowns. The anaesthetist and procedural doctor will talk to you prior to the procedure.

At the beginning of the procedure you will be asked to lie on your left side and a guard will be placed in your mouth to protect your teeth. You will be given a sedative by injection in a vein before the procedure begins and usually you will not remember anything about the actual examination.

Safety and Risks

The procedure is a safe procedure. The complications from this procedure relate to specific factors with the resection phase and the plication phase. These risks are on top of the standard risks for an endoscopy, which include very rare side effects such as damage to the oesophagus, bleeding, infection or perforation in addition to the complications of sedation and anaesthesia.

The specific complications related to the resection include a small chance of perforation. This can occur if a small amount of muscle tissue from the gastrointestinal tract becomes lodged in the rubber band of the resection technique and is then cut with the snare using electrocautery to produce a hole. This is usually recognised immediately and is simply fixed by using the OverStitch device and suturing the hole closed. The resection phase can also cause bleeding as there are many vessels in the plane where the tissue is removed. This can be controlled using various endoscopic techniques.

With regard to the plication part of the procedure, the needle of the OverStitch device can travel full thickness through the gastrointestinal tract and potentially damage adjacent structures. This is very rare but can include damage of organs such as the diaphragm, pericardium, pleura, spleen, liver and adjacent blood vessels. There is a small risk of infection as the needle can take bacteria from the inside of the gastrointestinal tract to the sterile field on the outside of the gastrointestinal tract. To try to prevent this, intravenous antibiotics are given during the procedure.

As part of the resection and plication technique, there is a narrowing of the gastrointestinal tract at the level of where the oesophagus joins the stomach. In some cases, a stricture (or a narrowing) can occur at this point as the tissues heal. This narrowing can then lead to some food tolerance issues, especially with more solid foods. Generally, the narrowing softens or loosens over time but, occasionally, a repeat gastroscopy with a dilatation may need to be performed to treat the stricture.

Occasionally, the suture placed at the time of the procedure can move (dehisce) or break. Occasionally, the suture may be too tight, preventing progression of diet and occasionally, it may even need to be cut at a follow-up gastroscopy. Despite the best efforts and intentions, the nature of any surgical intervention is that there is a failure rate and some people may not get the desired effect following the endoscopic surgery.

Rarely patients may have a reaction to the sedation. Complications of sedation are uncommon. Rarely, serious adverse events can occur e.g. heart or lung complications or aspiration (fluid coming from the stomach into the lungs).

In the unlikely event a complication occurs, your doctor will take all due care to ensure your safety. This may include consultation with other specialists (e.g. surgeon) and additional testing (radiology & blood tests) for which there *may* be additional fees.

Fees

We do bill privately for these procedures and then give you a receipt to claim from Medicare and your health fund. This will be discussed at the time of booking.

Post Procedure

Most patients will go home the same day. On the day of the procedure, you will just be on clear liquids. The following day you will start a post-procedure diet. Separate information will be given to you about this but essentially this entails being on a liquid diet for two weeks, a puréed diet for two weeks and then a soft diet for two weeks. You will need to take a reflux tablet (proton pump inhibitor) for the first six weeks after the procedure as the injury to the gastrointestinal heals. An appointment will be made for you to follow up with Dr Walsh in the DDQ rooms six to twelve weeks later to gauge your response to the treatment.

Results

A copy of the results will be sent to your referring doctor and you will receive a copy of the typed report. Your treating specialist will contact you if he has any serious concerns or if you require a further appointment with him. Should you have any questions or concerns contact our practice nurse at Digestive Diseases Queensland.