

# HALO RADIOFREQUENCY ABLATION

## PATIENT INFORMATION FORM

Barrett's oesophagus is a pre-cancerous condition of the oesophagus that results from acid induced injury and inflammation. The pre-cancerous changes are called dysplasia, which consists of low grade and high grade dysplasia. Patients with high grade dysplasia have a 10% / year chance of progressing to cancer if left untreated. Overall patients with Barrett's oesophagus have 70x risk of developing cancer of the oesophagus.

The previous standard treatment of pre-cancerous changes in the oesophagus was surgery to remove the affected oesophagus. However this type of surgery is associated with significant post surgical side effects and a small percentage of patients died as a direct result of the surgery. Therefore endoscopic treatment options have been developed.

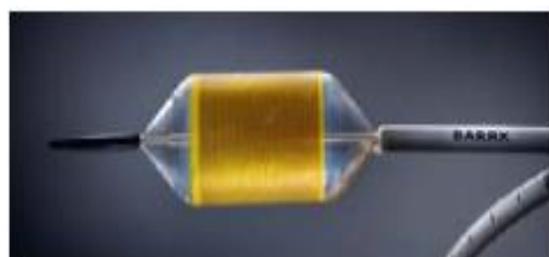
The Department of Human Services has approved a joint application from St Vincent's Hospital and The Royal Melbourne Hospital to purchase the Halo system and provide a state-wide service at those hospitals. This service commenced at both hospitals in early November 2008.

### The HALO Ablation System

The HALO radiofrequency ablation system is designed to destroy the pre-cancerous tissue in Barrett's oesophagus thereby eliminating the cancer risk. It provides uniform and controlled therapy at a consistent depth, which can remove Barrett's lining cells from the oesophagus and allow the regrowth of normal cells. The HALO 360 Ablation System uses a balloon based electrode to eradicate Barrett's lining cells circumferentially within the oesophagus. This is used as the initial treatment for circumferential Barrett's mucosa. The HALO 90 Ablation System is an electrode system that is mounted on the end of an endoscope, allowing the physician to treat smaller areas of diseased tissue. This is generally used at follow-up endoscopies, for any remaining smaller areas of Barrett's mucosa.



HALO 90



HALO 360 Ablation

### Workup of patients prior to Halo radiofrequency

Careful assessment of patients with dysplastic Barrett's is essential to ensure that Halo RFA is the appropriate and optimal treatment. Decision making is complex in individuals with high grade dysplasia. Therefore, the usual workup after referral will include: Consultation in GE Clinic or private rooms. A thorough endoscopic assessment including confocal endomicroscopy (allowing microscopic examination of the oesophagus) and biopsy mapping.

A procedure to remove areas of visibly abnormal tissue which contains high grade dysplasia or early cancer within called "endoscopic mucosal resection" will be required to both assess and treat that area prior to HALO RFA. In patients whom early cancer is detected, further tests will be required to fully assess the stage of the disease, which will in turn determine the treatment options available, including the possibility of surgery.

### The Halo RFA procedure and follow-up

Halo 360 RFA procedure is performed with standard endoscopy under routine sedation as a day procedure. The initial procedure takes approximately 45 minutes. Transient chest discomfort is not uncommon, but serious complications are extremely rare. These complications include narrowing (stricture) of the oesophagus which occurs in 5% of patients and may require dilatation and secondly perforation, which occurs in <1% of patients and may require surgical repair.

Follow-up gastroscopy at 2-3 months, with treatment of any residual Barrett's islands with Halo 90 RFA. Follow-up gastroscopy examinations thereafter 3-6 monthly for 2 years then longer intervals.



Barrett's column before treatment



Barrett's eradicated by HALO RFA

### Contacts

If you have further questions regarding the procedure please contact either:

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