

## PH Study: Patient Information

### What is 24 Hour PH Study?

The 24hr pH study measures how often and how much acid from the stomach enters the oesophagus over a 24 hour period which may be accountable for your symptoms of reflux, cough or chest pain. Normally the stomach contents do not enter the oesophagus due to constricted Lower oesophageal sphincter (LES). LES acts like a valve between the oesophagus and stomach preventing food from moving backward into the oesophagus. But in patients with GORD (Gastro-oesophageal reflux disease) stomach contents travel back into the oesophagus because of a weak or relaxed LES.

It is often done in conjunction with the oesophageal manometry which measures pressures in the oesophagus.

### Why Should I have a 24 Hour PH Study?

It is primarily performed for the following reasons

- Diagnose and quantify gastro-oesophageal reflux disease (GORD)
- To determine if chronic cough, sore throat or recurrent chest pain (With negative work up of cardiology) is secondary to reflux.
- As part of work up prior to weight loss (bariatric) surgery or Hiatus hernia repair/Nissen fundoplication
- To Differentiate functional oesophageal disorders/non acid reflux from acid reflux.
- To determine the effectiveness of medications that are given to prevent acid reflux.

### How do I prepare for my PH study?

You will be advised to stop your acid suppression medication as per below.

#### 7 days before your appointment:

Any proton pump inhibitor such as:

- Omeprazole (Losec)
- Lansoprazole (Zoton)
- Rabeprazole (Pariet)
- Esomeprazole (Nexium)
- Pantoprazole (Somac)

#### 3 days before your appointment:

Any Histamine H2-receptor antagonist or drugs listed here:

- Ranitidine (Zantac)
- Cimetidine (Tagamet)
- Nizatidine
- Famotidine (Pepcid)
- Domperidone (Motilium)
- Metoclopramide (Maxolon)

One day before your appointment:

- No Antacid including over the counter i.e. Gaviscon, Mylanta, Quick-Eze
- **Stop all liquid and solid meals at midnight (Fasting from night prior to procedure)**

**If you find it really hard to stop acid suppressive medication, please inform before the procedure.**

Day of your appointment:

- Medications that need to be taken regularly, such as high blood pressure and heart medication, can be taken with small sips of water when you awaken in the morning.
- If you have diabetes, skipping breakfast may affect your need for diabetic medication. This should be reviewed with your gastroenterologist.
- Medications that are not essential (vitamin supplements etc) should not be taken on the day of the test until after the test is completed.

During the Study

- Avoid carbonated drinks, alcohol and fruit drinks during study.
- Take your regular meals 3-4 times
- You should record all the information in the device by pressing the appropriate buttons, however if you forget to press the required button, then please write in the diary, which will be provided on the day (See below)
- If you need to write something in patient diary, Please complete it as concisely as possible; use the time displayed on the recorder to write down the time of events in the diary.
- If you take any medications during study Please record the names of any medications in the diary along with time.

**What is 24 Hour PH Study?**





Procedure involves the placement of a catheter (about the size and flexibility of a smartphone power cord) through your nasal passage, down the back of your throat and in the oesophagus with drinks of water. The other end of the catheter will be taped to your cheek, wrapped over your ear, and attached to a small data recorder (see Image) that you will wear at waist level, held by a strap over your shoulder. A local anaesthetic was administered to your nasal passage to decrease discomfort during catheter placement. Therefore, do not eat or drink for at least one hour after the procedure.



It is normal to feel the probe in the back of your throat and this feeling should improve over a few hours.

You will be able to swallow, talk, and breathe without any difficulty during the test. This tube has sensors at standard distances which measure the PH change in real time and record the amount of PH change that occurs in your normal 24 hours period.

You will be advised to press the appropriate buttons on the recorder as below:

	Press the <u>Symptom Button</u> once for each individual event, e.g. heartburn, reflux, chest pain, cough, etc.
	Press the <u>Med Button</u> once if medication is taken. Medications to be entered into the diary are any medications you are taking for heartburn or reflux during the study.
	Press the <u>Meal Button</u> once at the start of your meal/snack. The LED will remain illuminated until the button is pressed to end the meal/snack. You may drink whatever you like during a meal/snack but limit amounts between meals. Any liquids you drink between meals must be recorded in your diary.
	Press the <u>Supine Button</u> once when laying down for bed. The LED button will remain illuminated until the button is pressed upon getting up. Include any time you get up during the night.

### What happens after PH study?

The next day, you will be required to return to have the catheter removed and return the diary. **Removing the catheter takes less than one minute.** You will be instructed, where to return the equipment.

- Please treat the equipment with respect, do not leave it in sunlight or near water.
- The catheter is single use only but leave the catheter attached with the recorder.

The information from the data-recorder is downloaded on a computer for assessment. An appointment will be made with your Gastroenterologist to discuss the results.

### What are the risks and side-effects?

- PH Study is a very safe procedure.
- The risk of causing serious harm to you with this test is very rare. Complications are very infrequent.
- Minor side effects of PH study could include a runny nose or discomfort in the nose and throat. This is caused by the tube that irritates or inflames the nasal tissue or throat. Both of which usually disappear on the removal of the tube.
- Rarely, there could be a nose bleed as a result of the procedure.
- Occasionally, during insertion, the tube may enter the larynx (voice box) and cause temporary choking feeling. When this happens, it is usually recognised immediately, and the tube is rapidly removed.

### Answers to FAQ's

- Placement of the catheter generally takes about 10 minutes, but if you are also having an oesophageal manometry your appointment will take longer. **Please give yourself at least an hour for this appointment.**
- Wear loose comfortable clothing that buttons up in front as you will be required to pass the tube underneath your clothing.
- Please refrain from wearing make-up and do not apply moisturizer to your face or neck.
- You cannot take a shower or bath while wearing the monitor.
- You should otherwise go about your daily routine and eat your regular diet in order to get a realistic recording of how much reflux occurs during your usual routine.
- You should be careful around pets and small children to make sure they do not come close enough to accidentally pull the catheter out.
- No X-rays while the catheter is in place.
- Since there is no anaesthesia/sedation involved, you can drive yourself home.
- You cannot be put to sleep or sedated during the procedure. You will be asked to sit upright on a couch.
- You do not necessarily need to be accompanied by a family member or friend for this appointment. They are welcome to attend however they generally will not be able to come into the room during the procedure but there is plenty of seating in the waiting area should you wish to bring someone for your support.

**If you believe you are unable to tolerate this procedure we do have an alternative procedure available called Bravo PH study which may last for 96 hours. It can collect much more information and it is completely wireless however it requires gastroscopy.**

For further information. Please contact our staff.

### Who can I contact if I have any questions?

If you have any questions or need advice please contact our rooms or specialist (if after hours) using the contact details as above.