

Rigid Upper Endoscopy

Consisting of:

- Examination under anaesthetic of Post Nasal Space
- Pharyngoscopy
- Oesophagoscopy
- Direct Laryngoscopy
- Microlaryngoscopy
- Bronchoscopy

Endoscopy means visualising the inside of a viscus (inside organ). Upper endoscopy normally involves looking into the pharynx, oesophagus, larynx and trachea, and bronchus. Sometimes in addition, we also look at the back of the nose. By and large each of these procedures is named by marrying the name of the organ and the word "scopy" (which means viewing or looking into) and as such there are various names in use.

Normal function of the organs involved:

The organs involved in the upper aerodigestive system, as the name indicates, are concerned with breathing and eating/drinking. The front end of the nose is where the respiratory system begins and the mouth is where the digestive system begins, despite the fact that we sometimes use the latter to breathe. These tracts swap positions, with the respiratory tract coming to the front and the digestive tract going to the back, at the level of the pharynx. As such, endoscopy of these organs is carried out in close liaison with the anaesthesiologist.

Procedure and equipment:

The equipment used for upper endoscopy consists of a rigid brass or steel (and sometimes matted steel) tubes which are illuminated with a light. Also comprises of a suction tube, forceps and micro-scissors (long slender instruments to take biopsy etc.) Examination of the post nasal space (back of the nose) is probably an exception where this is done with a rigid fibre optic endoscope and biopsy forceps used through the nose.

Reasons for the Procedure:

The reason for the procedure falls into 2 categories, diagnostic and therapeutic. It is done either to make a diagnosis or if the diagnosis is already made, to take a piece of the abnormal tissue or to treat it in one way or another; for example, using laser.

Preparation:

Generally these examinations are done under a general anaesthetic and therefore preparation as for any other general anaesthetic should be observed, such as starving before the operation. Before you come to the theatre it is also important to remove any artificial dentures and/or inform the clinician of any loose teeth.

The Procedure:

Once you are anaesthetised by the anaesthetist you are transferred onto the operating table. After proper positioning and adjustment of the pillow, the surgeon protects your teeth with a gum shield or a piece of gauze and introduces the lighted endoscope carefully through the mouth, throat and into the viscus under examination. This may be the pharynx, the oesophagus, the larynx (the voice box), trachea or bronchi (the wind pipes). If the surgeon sees any lesion that is not normal he usually takes a biopsy (a piece of tissue for examination). If the endoscopy was done for treatment, for example removal of polyps, nodules or growths from the vocal cord, etc this would be done either by using scissors or forceps at the end of a long handle or indeed sometimes using laser. Once the surgeon has finished doing his part of the operation the anaesthetist will then take over and wake you up.

Results:

After the procedure, when you are awake usually a doctor will come and explain to you how the operation went, explaining to you the findings. However, if a biopsy was taken this will normally take about 7-10 days before the results are available.

Alternatives:

When the surgeon indicates the need to carry out a rigid endoscopy on you, it would mean that any other alternative investigation is probably of inferior quality, this includes x-ray imaging like plain x-ray, CT scan or MRI scan. However, you could discuss the alternatives with the surgeon during the consultation.

Benefits:

The benefits of rigid upper endoscopy include exclusion and/or establishment of any pathology or instituting treatment of the known pathology through the scope.

Side effects and Risks:

As normally the endoscopy instruments are passed through the oral cavity into the throat and down to the other organs one may experience a sore throat post operatively. However this usually settles down within 24 hours. You may also have streaks of bleeding if there has been any laceration to the structures of the mouth or throat. You must also be aware that injury to the teeth is a possibility in this procedure. However a major complication would be perforation or tear of the viscera (internal organs). This is rare. However when it happens the patient may have to be hospitalised for a longer time and thus treated adequately.

Increased Risk Factors:

These include those who are 70 years of age, those who are obese (over their recommended body weight for height and weight accordingly to the body mass index), heavy drinkers, (more than 40 grams a day for men and more than 20 grams a day for women), use certain drugs including cortisone, insulin and blood thinning medication, and those with chronic bowel disease like Crohn's disease or irritable bowel syndrome.

Post-procedural care:

If the procedure has been straight forward the patient is allowed home the same day. However if there is a suspicion of any possible complication the patient is usually observed over night in the hospital. Oral intake after an upper endoscopy should be followed according to the nurses/doctors instructions. This is usually done in a slowly progressive manner. This means you start with sips of water, then go on to drink water in plenty and if you are feeling OK then you go on to drink any fluids and when you feel happy drinking, you then go on to eating a soft diet and then normal diet. The entire length of this process depends upon how confident the nurse or the doctor is with you. Once you are discharged you would normally get a follow up appointment to be reviewed in the Outpatient Department.

Summary:

Rigid upper endoscopy is a common procedure carried out by the Ear, Nose and Throat surgeons. When a surgeon recommends endoscopy it is usually the best way forward. The other available alternatives are usually of inferior quality. By and large serious complication rate is low, and as such you should not have any major concerns. However feel free to discuss any point of concern with your doctor before the operation if you have any.