Oesophagogastroduodenoscopy (OGD) in Children

What is OGD ?

Oesophagogastroduodenoscopy (OGD) is a visual examination of the lining of the oesophagus, stomach and duodenum. The endoscope is a small, long flexible tube of about half to one centimeter diameter with a light source and lens at the tip. The image is then transmitted through a micro digital camera (CCD) or optical fibers to a video monitor. The doctor will then be able to look for any abnormalities in the digestive tract. If necessary, the doctor can also take small tissue samples (biopsies) and perform treatments through the endoscope.

Indication for OGD

OGD can be used for diagnostic or therapeutic purposes.

OGD is useful in finding the cause of the following conditions:

1. Upper gastrointestinal tract bleeding (e.g. bleeding peptic ulcers and esophageal varices)
2. Epigastric, abdominal or retrosternal pain
3. Unexplained recurrent vomiting
4. Pain or difficulty in swallowing
5. Intestinal malabsorption
6. Unexplained iron deficiency anemia

Therapeutic OGD is useful for the following operations:

1. Foreign body removal (e.g. bones, battery and coins)
2. Hemostasis for bleeding in the oesophagus, stomach and duodenum
3. Dilatation of the esophagus (e.g. balloon dilatation for esophageal narrowing)
4. Percutaneous endoscopic gastrostomy (e.g. insertion of feeding tube into the stomach through the skin in the abdomen for enteral nutrition)

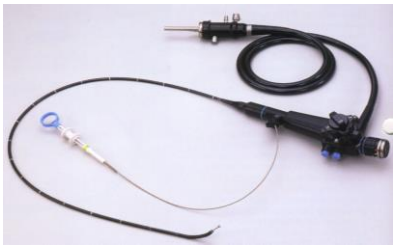
What are the Preparations?

1. The child should not eat or drink for at least six hours before OGD to keep the stomach empty for a clear view. This also avoids vomiting and aspiration during and after the procedure.
2. Children with certain heart diseases may require oral or intravenous antibiotic prophylaxis to prevent bacterial endocarditis (infection of heart valves).
3. You must tell your doctor if your child is allergic to certain drugs or is taking regular medication, e.g. anticoagulant and warfarin.
4. Parents should be encouraging and optimistic so as to help the child to relax. With the help of the doctors, parents should explain to the child why the examination is necessary.
5. Parents or caretakers must accompany the child.

How is the Procedure Done?

1. Most children undergoing OGD will require intravenous sedation, analgesia and

local anesthesia. In some situation the child may need a general anesthesia.
2. A local anesthetic will be sprayed onto the child's throat to make it numb.
3. The child will lie comfortably in a left lateral position on the examination bed and a guard will be placed in the mouth to protect the teeth.
4. The doctor will pass the endoscope through the mouth and down the throat. Older children will be instructed to swallow in order to permit easy advancement of the endoscope into the esophagus.
5. The endoscope will not interfere with the child's breathing and the nurse will clear the saliva in the mouth.
6. The doctor will see the esophagus, stomach and duodenum through the endoscope. Mucosal biopsies and certain procedures will be carried out as indicated.
7. The examination usually takes 10 to 30 minutes.



What are the Precautions Afterwards?

1. Those children receiving sedation will lie comfortably in a recovery position. The nurse will monitor the vital signs until the child become fully conscious, usually in the next few hours.
2. The child should not attempt to eat or drink until swallowing reflex is normal, usually in the next one to two hours.
3. Some children may have mild sore throat, nausea or belching after the examination, which usually disappear in the next few hours. You should notify your doctor immediately if these symptoms persist or you have vomiting or blood in the stool.

Any Risk and Complication?

1. In general, diagnostic endoscopy and mucosal biopsy should be safe and confers a very low risk of serious complications. Complications may be related to reactions to medication for sedation and anesthesia.
2. Problems are more likely to be encountered in an acutely ill child, during emergency and depend on the particular therapeutic procedures. Serious complications include drug allergy, infection, tooth injury, aspiration pneumonia, respiratory distress, pneumothorax, pneumomediastinum, peritonitis, arrhythmia, digestive tract injury, bleeding and perforation (tear). The chance of having such serious complications is less than 1%.

Remarks

The list of complications is not exhaustive and other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For any queries or further information, please consult our medical staff.