The oesophagus (foodpipe) is the tube that takes food from the back of the mouth to the stomach. It contains muscles which squeeze rhythmically to push food downwards. If the foodpipe becomes blocked or narrowed, food cannot pass into the stomach to be digested.

What causes a blockage or narrowing of the oesophagus?

The oesophagus can be temporarily blocked by a piece of food or other foreign object. In most cases, this can be removed by coughing or slapping the child hard between the shoulder blades using first aid techniques. Occasionally, the object might not be able to be removed easily so your child would need to go to hospital to have it removed under general anaesthetic.

Narrowing can happen when scars develop following surgery to the foodpipe, but it can also occur when the foodpipe is burnt, for instance after swallowing a dangerous chemical. Narrowing can also develop as a side effect of some illnesses, for instance, epidermolysis bullosa (EB).
What are the signs and symptoms of a blocked or narrowed oesophagus?

If the oesophagus becomes blocked, the body will try to get rid of it by coughing – this is a built in self defence mechanism, but it can be scary for the child and anyone near them.

The main symptom of narrowing is a feeling of a lump in the foodpipe, particularly when swallowing. If the foodpipe becomes narrowed, swallowing can become more difficult and painful, leading to a loss of appetite and often vomiting.

How is a blocked or narrowed oesophagus diagnosed?

If it is an acute blockage, such as food or a foreign object, emergency treatment using an endoscope or surgery will be required to remove the blockage. Usually a scan called a contrast scan show a narrowed area of the foodpipe. Contrast scans usually use a thick, white liquid called barium that shows up well on x-rays. Sometimes, we use a clear liquid instead that looks like water but tastes a bit like peppermint instead. This also shows up on the X-rays. We will ask your child to lie down on the examination bed and drink all the solution while we take some x-ray pictures.

Occasionally an endoscope – thin flexible tube containing a light and a camera – can be passed into the foodpipe to show the narrowing. This is often suggested to confirm a diagnosis from a contrast scan or evaluate the narrowed oesophagus further if there is doubt about the blockage and can be combined with treatment during the same procedure.

How is a blocked or narrowed oesophagus treated?

Narrowing of the oesophagus is usually treated with a procedure called oesophageal dilatation, which is always carried out while your child is under a general anaesthetic. Once your child is under general anaesthetic, the doctor passes a catheter (soft plastic tube) containing a balloon down the back of your child's mouth into their foodpipe. They watch where the catheter is by using X-rays and continue to pass it down the foodpipe until it reaches the narrowed section. Once it is in place, the doctor inflates the balloon so that it stretches the narrowed section. Further X-rays are taken to check how much the balloon is inflated. At the end of the procedure, the balloon is deflated and with the catheter is brought back up the foodpipe and out of your child's mouth.

What happens next?

Depending on the cause, quite often, the affected section of the foodpipe narrows again, but oesophageal dilatation can be repeated as many times as needed. The doctors may suggest a series of dilatations so that the foodpipe is gradually widened as this often gives the best long-term results. Depending on the cause, anti-acid or anti-reflux medicines might be prescribed to prevent further damage. If your child's oesophagus is severely damaged, they need a series of operations or procedures.