

Dept of Neonatology

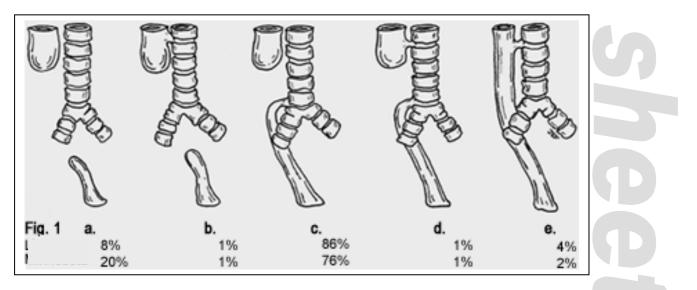
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TRACHEOESOPHAGEAL FISTULA (TOF)

What is oesophageal atresia and/or tracheoesophageal fistula (TOF)?

This is where a portion of the oesophagus (tube that goes from the mouth to the stomach) is absent or has an abnormal connection to the trachea (large airway or windpipe). As there is a part of the oesophagus missing or abnormally connected the baby cannot swallow fluid or saliva. This is an abnormality that has occurred from very early in pregnancy.

There are 5 main types of oesophageal atresias, these are pictured below. The medical and nursing staff will indicate the type that your child has.



http://www1.umn.edu/eatef/whatis.html

Can there be other problems that may affect my baby?

TOF may be associated with a number of other problems involving the heart, spine, kidneys, anus, and limbs. These other organs and bones will be checked by using ultrasound and x-rays. If other abnormalities are found they will be discussed with you.

What needs to be done for my baby?

As the baby is unable to swallow any milk or saliva, a tube will be placed via the nose or mouth into the oesophagus. This is then attached to very low suction that will continually clear the saliva away. This is called a "Replogle" tube. Your baby will have an intravenous line inserted, often into the umbilical vein, to provide fluids and nutrition. One of the paediatric surgeons will then come and assess your baby and discuss with you the surgery that will be required.

What will the surgery involve?

The surgery depends on how wide the gap is between the two portions of the oesophagus. The aim of surgery is to join the two blind ends of the oesophagus together.

If the gap is not too wide the two ends will be joined together and is best done in the first few days after birth. This will involve an incision on the right side of the chest (called a thoracotomy) to gain access to the oesophagus. Several small tubes will be in place when your baby comes back from surgery. One tube will drain the chest incision area. The Replogle tube will often still be in place, along with another tube which now goes all the way from the nose down the oesophagus into the stomach (naso-gastric tube).

Sometimes the gap is too wide for the two ends to be stretched to join each other. If this is the case, a tube will be placed into the stomach through the abdominal wall. This tube is called a gastrostomy tube. Your baby will then be able to be fed milk through this tube. The baby is then fed and allowed to grow for some weeks to months. During this time the gap between the two ends of the oesophagus will decrease, so that eventually the two ends will be able to be joined together.

When will my baby be fed after surgery?

The area where the oesophagus has been repaired may be slow to heal. Five to seven days after the surgery has been performed a radio-opaque dye (fluid that shows up on x-ray) will be put down the Replogle tube to see whether there are any leaks in the join of the oesophagus. If there is no leak your baby will start to have feeds placed down the naso-gastric tube. Once your baby is tolerating feeds he/she will be offered milk.

Are there any problems my baby may have following the surgery?

There are several problems that may occur following surgery. These include:

- 1) A leak from the join of the two ends of the oesophagus. If this occurs your baby will be fed via the naso-gastric tube, but will not be allowed to have suck feeds until the leak has healed. Your baby may need to have a second operation to have this leak closed.
- 2) A narrowing (stricture) where the two ends have been joined together. If this occurs your baby will not be able to have suck feeds, as milk will not be able to pass the narrowed area. This will require dilation of the stricture. The surgeons will discuss this with you if this should occur.
- 3) Damage to the thoracic duct. The thoracic duct is a small vessel which carries lymphatic fluid from the gut to the major blood vessels in the chest. Damage to this very small vessel can occur at the time of surgery. This may result in a condition called a chylothorax where lymphatic fluid from the gut collects in the chest. This will require insertion of tubes into the chest to drain the fluid until the thoracic duct heals. The medical staff will discuss this with you if this should occur.

Will my baby have any long-term problems?

There are several problems that are common in children with a TOF.

- Gastrooesophageal reflux is very common in children with a TOF. Many babies will be placed on medication to help control the symptoms of reflux. This is when the stomach contents easily come back into the oesophagus, and can cause vomiting or "heartburn" (pain).
- 2) Some babies have tracheomalacia. This is when the airway (trachea) is softer than normal. This allows the trachea to partially collapse under exertion. This will account for noisy breathing called a stridor and a barky cough. This usually improves as the child gets older.

If you have any further questions please ask the medical or nursing staff.