

Patient Care > Esophageal Atresia with and without Tracheoesophageal Fistula

Definition

Esophageal atresia is a congenital abnormality characterized by a gap in the esophagus. Most commonly, this is associated with a communication between the lower esophagus and the airway (a distal tracheoesophageal fistula). Less commonly, the ends of the esophagus do not communicate with anything (pure esophageal atresia) and tend to be further apart.

Esophageal atresia with and without tracheoesophageal fistula may be suspected on prenatal ultrasound but not always. For many babies the diagnosis is suspected soon after birth by excessive salivation and noisy breathing made worse by attempts at feeding. Attempts to pass a small tube from the mouth or nose into the stomach are met with resistance.

A tube is placed in the upper esophagus to clear out secretions and antibiotics are started. A good physical examination of the baby and some tests are done to look for any other potential abnormalities. These include plain x-rays to help determine whether a communication exists between the esophagus and airway, and to look for any malformations of the bony spine. An ultrasound of the heart (echocardiogram) is always performed before surgery to look for any heart problems. An ultrasound of the kidneys, performed either before or more commonly after surgery, will detect any kidney abnormalities. Physical examination helps determine the condition of the lungs, the limbs and the anus.

Most babies with esophageal atresia also have acid reflux and are kept on medications to help control this. Noisy breathing and/or a barking cough are symptoms of a floppy airway (tracheomalacia) that most children outgrow by age 7.

Surgery

Esophageal Atresia with Tracheoesophageal Fistula

Babies are brought to the operating room generally on the 1st or 2nd day of life. To access the right chest, either 3 small incisions are made to perform the surgery by thoracoscopy (introducing a camera and instruments) or a single larger incision is made to perform the operation open. (This depends largely on the size of the baby.) Once inside the chest, the communication between the lower esophagus and airway is divided and the ends of the esophagus are brought together. A tube is often left in the chest to act as a drain. 5-7 days after the operation, a special x-ray (UGI/esophagogram) is done to be sure that there is no leak at the repair site. If all is well, the baby can start feeding.

Pure Esophageal Atresia

Babies are generally brought to the operating room on the 1st or 2nd day of life for placement of a special feeding tube directly in the stomach (see info on gastrostomy tubes). The baby is then often allowed to grow for 2-3 months with a tube in the upper esophagus to drain the secretions. The gap between the ends of the esophagus is monitored with special x-rays, and once the ends are close enough, an attempt can be made to bring the ends together (as described above). Sometimes, it is not possible to bring the ends together and either stomach or intestine must be used to replace the esophagus.

***Disclaimer:** Your child's condition is unique. The information contained on this web site is not intended to substitute for advice from a doctor or nurse. If you are unsure about any aspect of your patient's care, please contact us at 303-839-6001, or talk to your pediatrician.*

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