



## **ESOPHAGEAL ATRESIA/TRACHEOESOPHAGEAL FISTULA**

### **What is Esophageal Atresia**

The esophagus is a tube-like structure that connects the mouth to the stomach. Esophageal Atresia (EA) is a condition in which the esophagus is interrupted and does not develop as a tube. This usually results in the mouth being connected to a blind pouch from above, and the stomach being connected to a blind pouch from below. The condition is suspected soon after birth when the baby has difficulty swallowing his/her saliva. A simple x-ray can reveal the problem. Sometimes the problem is first diagnosed on prenatal ultrasound.

### **How will this affect my baby?**

Since there is no connection between the mouth and the stomach, your baby will not be able to eat or drink by mouth. Your baby will also not be able to swallow his/her saliva. Saliva and food will either spill out the mouth or be inhaled into the lungs.

### **What is Tracheoesophageal Fistula?**

Tracheoesophageal fistula (TEF) is an abnormal passage between the esophagus and trachea (windpipe). With this abnormality, formula, food and saliva that is swallowed can travel across the passage into the trachea and be inhaled into the lungs. Babies with TEF have episodes of choking and coughing, especially with feeding. These children may have repeated episodes of lung infections or pneumonia.

### **Are EA and TEF related?**

In most babies, the two conditions occur together, although they can occur separately.

### **How are EA and TEF treated?**

In most babies, these problems can be repaired with surgery. If your baby is otherwise healthy, s/he can go to the operating room shortly after birth. The type of surgery will depend on your baby's condition. If your baby has EA, the surgeon will try and sew the two ends of the esophagus together through an opening in the side of the chest. The area where the two ends are sewn together is called the anastomosis. If the two ends are too far apart to bring together, your baby will have a feeding tube put into his/her stomach so s/he can eat. This feeding tube is called a gastrostomy. Plans will be made to make a new esophagus for your baby later on. If your baby has a TEF, s/he will go to the operation room and have the abnormal passage, or fistula removed, so that there is no connection between the esophagus and trachea. If your baby has a combination of the two conditions, the surgeon will remove the fistula and try and bring the two ends of the esophagus together.

**What could prevent my baby from having surgery?**

Many of these babies are born prematurely and may be very small and have immature lungs. Their breathing must be stable prior to surgery. Often, there are other conditions associated with EA and TEF.

**What other conditions?**

Heart, kidney, anal and skeletal disorders have been found in babies with EA/TEF. Your baby will have x-rays and tests to make sure that s/he doesn't have these problems. Some infants have heart problems that may be fixed before the EA/TEF repair. Infants with anal problems may have these fixed at the same time as the EA/TEF surgery.

**What can I expect after surgery?**

Your baby may need help breathing with a mechanical ventilator. This machine will be stopped once your baby is able to breathe well on his/her own. Frequent suctioning will be done until your baby is able to swallow his/her own saliva. Gentle chest percussion will be done to keep the lungs clear. There may be a drain or chest tube coming out of his/her chest. This tube drains secretions away from the surgical site. This drain will be taken out at the bedside in approximately 1 week and after your baby's x-ray shows that there are no leaks.

**Are there other complications?**

In the days after surgery, the surgeons will be watching for leaks where the two ends of the esophagus were sewn together. In about a week, an x-ray study will be done to look for leaks. If there are no leaks, your baby can begin to eat. Although the surgeon may be able to repair the esophagus, it will never be as good as normal. Your baby may have difficulty learning to eat by mouth, and may have gastroesophageal reflux. Gastroesophageal Reflux (GER) is when the stomach contents (food and fluids) backwash into the esophagus. If the surgeon cannot get the two ends of the esophagus together, or has difficulty in getting the two ends together, your baby will have a gastrostomy. A gastrostomy is a tube that goes directly into the stomach. You will learn to feed your baby by gastrostomy. You will also need to take care of the gastrostomy.

**Can I breast feed?**

Your baby will not be able to eat by mouth for about 1 week after surgery. You will need to pump your breasts to keep the milk flowing. Even after the surgeon allows your baby to eat, s/he may have difficulty sucking. S/he may need to be fed through a gastrostomy for a while until s/he is able to eat by mouth well. Even if your baby is fed through a tube, we want you to provide breast milk for the feeding.

**What if the surgeon cannot bring the ends of the esophagus together?**

In this case, your baby will go home on gastrostomy feeds. Plans will be made to make your baby a new esophagus in the future. The stomach and/or the intestines can be used to make your baby a new esophagus.

**How long will my baby be in the hospital?**

This is a difficult question to answer. It depends on the type of EA/TEF that your baby has and if the baby has any other medical problems. If your child is healthy and has an EA that can be repaired, s/he may only be in the hospital about 1 week. If your baby has breathing and/or heart

problems, or is very premature and weak, the repair of the esophagus may need to be delayed. Your baby may then need to stay in the hospital several weeks to months. Each baby is different. Ask your surgeon, nurse or case manager to outline the plan of care for your baby.

**What if I can't take care of my baby at home?**

Your baby will not be sent home until you are able to take care of him/her. If possible, a visiting nurse will come out to assist you at home. You may also have a social worker, speech/physical/occupational therapist and dietitian available to assist you.

**What kind of follow up will my baby have after s/he goes home?**

Your baby will have frequent appointments with your surgeon to see how s/he is doing. Your surgeon may want your baby to have x-rays. If the surgeon is concerned about narrowing where the esophagus was sewn together, your baby may need dilatations (gentle stretching) of the area.

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