

Tracheoesophageal Fistula (TEF)

A tracheoesophageal fistula (TEF) occurs when there is an abnormal connection between the trachea and esophagus. This condition is often associated with esophageal atresia, a birth defect in which the esophagus ends in a blind pouch, rather than connecting to the stomach. Newborns with a tracheoesophageal fistula may present with cyanosis, choking, coughing, and excessive drooling. Emergency surgery is needed to correct the abnormality between trachea and the esophagus. Newborns suspected of having this condition are immediately made NPO to prevent aspiration and to ensure that the patient's airway remains patent. Because there is an abnormal connection between the trachea and esophagus, aspiration of food or fluids into the lungs may cause aspiration pneumonia.



PLAY PICMONIC

Cause

Esophageal Atresia

[Esophagus-sarcophagus Atresia-tree](#)

Esophageal atresia is a birth defect in which the esophagus does not develop properly, causing the esophagus to end in a blind pouch, rather than connecting to the stomach. Esophageal atresia can occur with or without a tracheoesophageal fistula.

Ends in Blind Pouch

[Ends in Blindfolded Pouch](#)

Although there are several different types of esophageal atresia and tracheoesophageal fistula, the most common form occurs when the esophagus ends in a blind pouch instead of the stomach.

Assessment

Coughing

[Coughing-coffee](#)

A newborn with this condition may cough frequently as secretions from the esophagus enter the trachea through the fistula or abnormal connection.

Choking

[Choking](#)

Newborns with a tracheoesophageal fistula have an abnormal connection between the trachea and esophagus, which allows food or liquid from the esophagus to enter the newborn's airway. This malformation can cause choking.

Cyanosis

[Cyan-crayon](#)

A newborn with a tracheoesophageal fistula may become cyanotic, especially during/after a feeding due to aspiration of fluid into the lungs.

Drooling

[Drooling](#)

A newborn that presents with large amounts of frothy sputum, or drool, are suspected of having this condition.

Considerations

NPO

[NPO-zipper-mouth](#)

Newborns who are suspected of having this condition are immediately made NPO, meaning that they cannot take anything by mouth - no breastfeeding and no formula. NPO precautions are initiated to prevent aspiration and to ensure that the newborn's airway remains patent. Anticipate intravenous therapy to be initiated promptly.

Surgical Emergency

[Emergency Surgeon](#)

Surgery is needed to correct the abnormality between the trachea and the esophagus. This is imminently needed in order for proper respiration and GI function.

Aspiration Pneumonia

[Aspirating-ass Spraying Water on Nude-Mona](#)

Because there is an abnormal connection between the trachea and esophagus, food or liquids from the esophagus can enter the patient's airway.

Aspiration of food or fluids into the lungs may lead to aspiration pneumonia. Position infant supine with the head of the bed elevated on an inclined plane of at least 30 degrees.