The presence of polyhydramnios (accumulation of 2000 mls of amniotic fluid) prenatally is a clue to the possibility of EA in the unborn infant, especially with defect type A, B, or C. With these types of EA/TEF, amniotic fluid normally swallowed by the fetus is unable to reach the GI tract to be absorbed and excreted by the kidneys. The result is an abnormal accumulation of amniotic fluid, or polyhydramnios.

Therapeutic Management

The treatment of patients with EA and TEF includes maintenance of a patent airway, prevention of pneumonia, gastric or blind pouch decompression, supportive therapy, and surgical repair of the anomaly.

When EA with a TEF is suspected, the infant is immediately deprived of oral intake, IV fluids are initiated, and the infant is positioned to facilitate drainage of secretions and decrease the likelihood of aspiration. Accumulated secretions are suctioned frequently from the mouth and pharynx. A double-lumen catheter should be placed into the upper esophageal pouch and attached to intermittent or continuous low suction. The infant's head is kept upright to facilitate removal of fluid collected in the pouch and to prevent aspiration of gastric contents. Broad-spectrum antibiotic therapy is often instituted if there is a concern about aspiration of gastric contents.

The surgery consists of a thoracotomy with division and ligation of the TEF and an end-to-end or end-to-side anastomosis of the esophagus. A chest tube may be inserted to drain intrapleural air and fluid. For infants who are not stable enough to undergo definitive repair or those with a lengthy gap (>3 to 4 cm) between the proximal and distal esophagus, a staged operation is preferred that involves gastrostomy, ligation of the TEF, and constant drainage of the esophageal pouch. A delayed esophageal anastomosis is usually attempted after several weeks to months. Thoracoscopic repair of EA/TEF is being used successfully, thus negating the need for a thoracotomy and minimizing associated postoperative complications and morbidities (Guidry and McGahren, 2012; Kunisaki and Foker, 2012).

If an esophageal anastomosis cannot be accomplished, a gastrostomy is recommended; a cervical esophagostomy (to allow