Nursing interventions include respiratory assessment, airway management, thermoregulation, fluid and electrolyte management, and parenteral nutrition (PN) support.

Often the infant must be transferred to a hospital with a specialized care unit and pediatric surgical team. The nurse advises the parents of the infant's condition and provides them with necessary support and information.

Postoperative Care

Postoperative care for these infants is the same as for any high-risk newborn. Adequate thermoregulation is provided, the double-lumen NG catheter is attached to low-suction or gravity drainage, PN is provided, and the gastrostomy tube (if applicable) is returned to gravity drainage until feedings are tolerated. If a thoracotomy is performed and a chest tube is inserted, attention to the appropriate function of the closed drainage system is imperative. Pain management in the postoperative period is important even if only a thoracoscopic approach is used. In the first 24 to 36 hours, the nurse should provide pain management for the neonate just as for an adult undergoing a similar procedure (see Pain in Neonates, Chapter 5). Tracheal suction should only be done using a premeasured catheter and with extreme caution to avoid injury to the suture line.

If tolerated, gastrostomy feedings may be initiated and continued until the esophageal anastomosis is healed. Before oral feedings are initiated and the chest tube (if applicable) is removed, a contrast study or esophagram will verify the integrity of the esophageal anastomosis.

The nurse must carefully observe the initial attempt at oral feeding to make certain the infant is able to swallow without choking. Oral feedings are begun with sterile water, followed by frequent small feedings of breast milk or formula. Until the infant is able to take a sufficient amount by mouth, oral intake may need to be supplemented by bolus or continuous gastrostomy feedings. Ordinarily, infants are not discharged until they can take oral fluids well. The gastrostomy tube may be removed before discharge or maintained for supplemental feedings at home.

Special Problems