

effusion is present on the chest radiograph. Thoracentesis reveals milky fluid, and biochemical analysis reveals a triglyceride level that exceeds 1.2 mmol/L (110 mg/dL). Patients with chylothorax and no obvious trauma should have a lymphangiogram and a mediastinal CT scan to assess the mediastinum for lymph nodes. The treatment of choice for most chylothoraces is insertion of a chest tube plus the administration of octreotide. If these modalities fail, percutaneous transabdominal thoracic duct blockage effectively controls most chylothoraces. An alternative treatment is ligation of the thoracic duct. Patients with chylothoraces should not undergo prolonged tube thoracostomy with chest tube drainage because this will lead to malnutrition and immunologic incompetence.

Hemothorax When a diagnostic thoracentesis reveals bloody pleural fluid, a hematocrit should be obtained on the pleural fluid. If the hematocrit is more than one-half of that in the peripheral blood, the patient is considered to have a hemothorax. Most hemothoraces are the result of trauma; other causes include rupture of a blood vessel or tumor. Most patients with hemothorax should be treated with tube thoracostomy, which allows continuous quantification of bleeding. If the bleeding emanates from a laceration of the pleura, apposition of the two pleural surfaces is likely to stop the bleeding. If the pleural hemorrhage exceeds 200 mL/h, consideration should be given to angiographic coil embolization, thoracoscopy, or thoracotomy.

Miscellaneous Causes of Pleural Effusion There are many other causes of pleural effusion ([Table 294-1](#)). Key features of some of these conditions are as follows: If the pleural fluid amylase level is elevated, the diagnosis of esophageal rupture or pancreatic disease is likely. If the patient is febrile, has predominantly polymorphonuclear cells in the pleural fluid, and has no pulmonary parenchymal abnormalities, an intraabdominal abscess should be considered.

TABLE 294-1 Differential Diagnoses of Pleural Effusions