Chylothorax complicating pulmonary resection.

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Abstract:

Background. Chylothorax complicating pulmonary resection (CCPR) is infrequent and surgical treatment is for the most part avoided. The purpose of this study is to analyze the clinical and therapeutic characteristics of this complication. Methods. From March 1981 to June 2001, 26 cases of CCPR (24 men and 2 women; mean age 57 years) were treated in two departments of thoracic surgery. Twenty-five cases complicated lung resection for lung cancer (lobectomy n = 14, bilobectomy n = 3, pneumonectomy n = 8) and 1 case followed lobectomy for a benign lesion. Medical history, location, and characteristics of the chylothorax, lymphography, and clinical evolution after medical or surgical therapy were studied. Results. Medical history was never predictive of CCPR. Chylothorax was right sided in 18 cases and left sided in 8 cases. The total amount of chyle ranged from 1.9 L to 27.9 L per patient with a mean of 7.9 L (pneumonectomy 12.3 L and lobectomy 6.3 L). In 15 patients (pneumonectomy n = 2 and lobectomy n = 13) mean quantity of daily chyle was 0.3 L. All these patients recovered with conservative therapy except for 2 patients who underwent drainage and talc slurry (n = 1) and video-assisted lysis of adhesions (n = 1). In the remaining 11 patients (pneumonectomy n = 6 and lobectomy n = 5) mean quantity of daily chyle was 1 L. The chylous leak was seen at lymphography (n = 4), during reoperation (n = 2), or at lymphography and reoperation (n = 3). The location was clearly identified at the level of thoracic duct tributaries in all cases. In 4 postlobectomy cases (4 of 7), surgery was not performed because of the therapeutic usefulness of lymphography. Reoperation was necessary in 6 cases (postpneumonectomy n = 5, postlobectomy n = 1) and consisted of duct ligation (n = 2), leak suture (n = 3), and fibrin glue (n = 1). Conclusions. CCPR is rare and appears to respond well to medical

treatment owing to the fact that the thoracic duct is generally patent as the leak is due to injury of its tributaries. When surgery is considered, lymphography may help to select cases in which conservative medical therapy should be continued. However, in a small number of cases, usually after pneumonectomy, surgery remains mandatory.