Catamenially Recurring Pneumothorax with Partial Liver Herniation: A Particular View

S. Sanna a M. Taurchini a M. Monteverde a V. Agnoletti a G.L. Casoni b

a Thoracic Surgery Unit and b Pneumology Unit, ‘G.B. Morgagni’ Hospital, Forlì, Italy

A 38-year-old woman came to our institution with a recurrent episode of right spontaneous pneumothorax, which had previously been treated with pleural drainage at another hospital. Every episode was claimed to have occurred during menstrual periods. CT scan, completed with multiplanar reformatting (fig. 1a, b), revealed normal lung parenchyma and multiple diaphragmatic nodes suspected for endometrial implants. A right videothoracoscopy showed multiple perforations of the tendinous part of the diaphragm, and partial liver herniation was observed as well (fig. 2). Through a video-assisted procedure, we performed pleural biopsies, diaphragmatic plication containing the tendinous part with total pleural abrasion and talc pleurodesis. The postoperative period was uneventful. Over 4 months of follow-up, no recurrence was observed.

Catamenial pneumothorax is a rare spontaneous recurring pneumothorax that almost always affects the right side and whose pathogenesis is controversial. The two main hypotheses are (1) migration of air from the peritoneal cavity through pre-existing diaphragmatic defects [1] or (2) transperitoneal, lymphatic-hematogenous endometrial spreading on lung and pleura with tissue rupture and development of pneumothorax in menses [2]. During the diagnostic videothoracoscopic procedure, the pleural cavity should be explored for en-
dometrial implants and the diaphragm for multiple perforations, especially in its tendinous part with liver herniation [3], as in our case. The gold standard treatment is hormonal therapy (GnRH agonist) to treat endometrial implants [2] and video-assisted surgical plication of the diaphragm with mechanical or chemical pleurodesis [1, 3].

On the basis of the clinical data and endoscopic view, although without histologic confirmation of pleural endometriosis, we consider our case as catamenially recurring spontaneous pneumothorax.

References