Recurrent Pulmonary Artery Stump Thrombosis Developed after Right Pleuropneumonectomy

Hideki Negishi, Hiroyoshi Tsubochi, Shinichi Otani and Shunsuke Endo*
Department of Thoracic Surgery, Jichi Medical University, Saitama Medical Center, Japan

Clinical Image
A 59-year-old woman underwent right extended pleuropneumonectomy for malignant mesothelioma 5 years earlier. A thrombus was detected in the right pulmonary artery stump 4 months after surgery (Figure 1). Blood examination tests including coagulation study showed no abnormal findings. Oral anticoagulant treatment was successful for 4 years (Figure 2). The follow-up chest CT examination 6 months after discontinuation of therapy, however, revealed recurrent thrombus (Figure 3). The patient received anticoagulant therapy again thereafter. The thrombus formation may be related to hemodynamic condition within the long surgical stump of the right pulmonary artery after pneumonectomy.

Figure 1: Enhanced chest Computed Tomography (CT) showing thrombus formation within the surgical stump of the right main pulmonary artery 4 months after right pleuropneumonectomy.

Figure 2: Enhanced chest CT showing disappearance of thrombus within the surgical stump by oral anticoagulant therapy.

Figure 3: Enhanced chest CT showing recurrent thrombus within the surgical stump 6 months after discontinuation of anticoagulant therapy.