Endovascular embolisation with Amplatzer vascular plug of ruptured pulmonary artery aneurism in Behçet’s disease: a commentary

Sirs,

We read with interest the abstract of the article entitled “Endovascular embolisation with Amplatzer vascular plug of ruptured pulmonary artery aneurism in Behçet’s disease” (1). The Authors reported on a pulmonary artery aneurism that was unresponsive to immunosuppressive treatment in a 34-year-old male patient who was admitted to the emergency room with massive haemoptysis and was successfully embolised with an Amplatzer™ vascular plug (AVP-AGA Medical Corp., Plymouth, MN, USA) following diagnostic angiography (1). Literature contains a number of cases treated in this way (2-5). The patient applied to our hospital again with fever and haemoptysis one year after the endovascular intervention. A thoracic CT performed at this stage showed a 20-mm diameter of the right main pulmonary artery and a stent in the distal pulmonary artery, no contrast passing to the distal, and the presence of a multiloculated pleural effusion (Fig. 1). The laboratory results of the patient were as follows: WBC: 27 000/mm³, Hb 10.3 g/dl, Htc 33%, CRP: 415 mg/l. Upon a fiber-optic bronchoscopy examination, a vascular stent was observed in the right mid-lob lumen that did not allow distal passage (Fig. 2). In the light of these findings, it was concluded that the lifesaving treatment was surgical, even though it was at high risk. After observing fragility of the pulmonary artery during the surgical procedure, insufficient distance to divide the pulmonary artery, and a massive multiloculated effusion within the thorax and a severely adherent mediastinal area, the most appropriate resection approach to be performed on the patient was deemed to be a trans-sternal transpericardial pneumonectomy, and then

Fig. 1. Computed tomography taken at admission of the patient to our hospital. Fig. 2. Endo vascular plug in the middle lobe at the bronchoscopic examination. Fig. 3. Stent-bronchus association on the removed specimen. Fig. 4. Current PA radiography of the patient.
to access the pulmonary artery trans-sternal-transpericardially during the operation. Before entering into the thorax, the pulmonary artery was divided with a stapler. The incision was then extended as a right thoracotomy and proceeded into a right pneumonectomy. About one liter of fibrinopurulent fluid was drained from the thoracic cavity. It was seen that the parenchymal structured was destructed, and severe adherence was noted in the mediastinal area. A stent-bronchus association was seen on the removed specimen (Fig. 3). The patient was discharged with full recovery on day 10 following the successful operation. We consider this complication related to the use of an endovascular Amplatzer vascular plug to be suitable based on the previous case report accepted for publication in your journal. The patient is still healthy and is being controlled with medical treatment (Fig. 4).

References