

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 haem-

optysis 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 fibre-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 life-saving 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 to access the pulmonary artery trans-sternal-transpericardially during the operation. Before entering into the

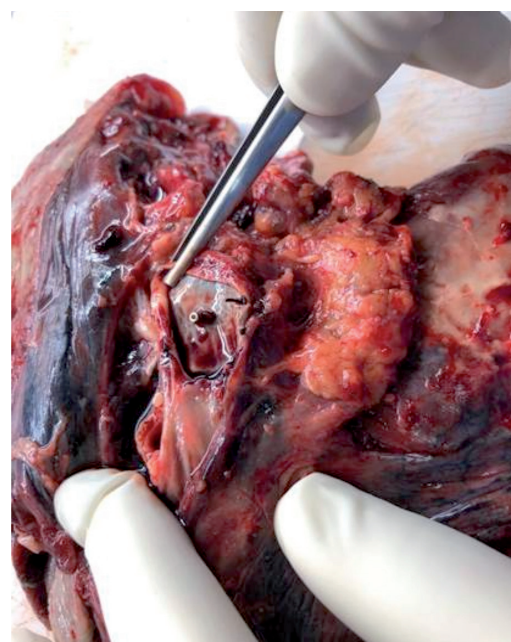
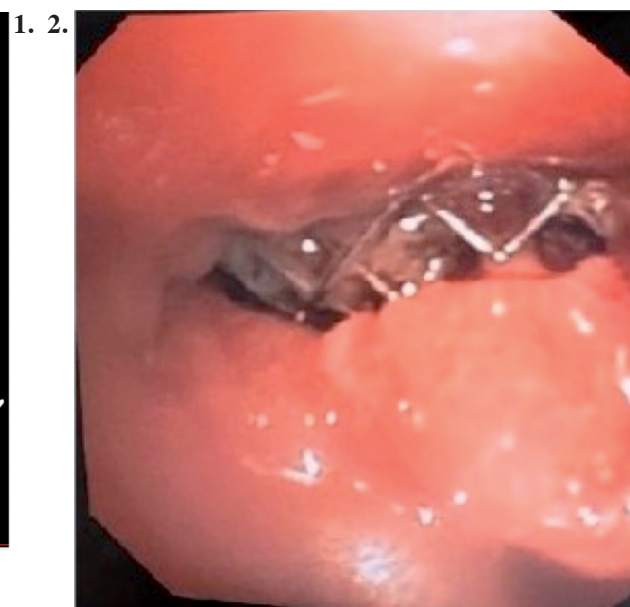
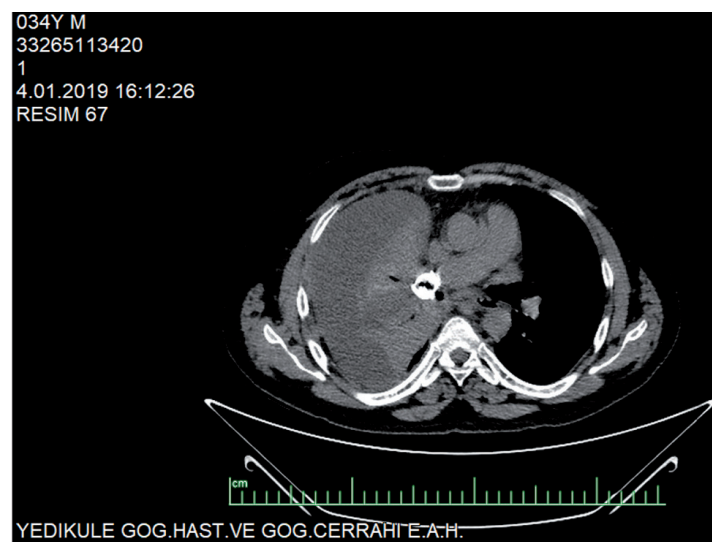


Fig. 1. Computed tomography taken at admission of the patient to our hospital. **Fig. 2.** Endo vascular plug in the middle lobe at the bronchoscopic examination. **Fig. 3.** Stent-bronchus association on the removed specimen. **Fig. 4.** Current PA radiography of the patient.

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 litre 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).

F. KOŞAR¹, MD, Prof
V. ERDOĞDU², MD
B.A. YİĞİTBAŞ¹, MD
G. YEŞİLMEN¹, Student
Ö. SAYDAM², MD, Assoc. Prof
M. METİN², MD, Prof

¹Department of Chest Diseases,
²Department of Chest Surgery, University
of Health Sciences, Yedikule Research and
Training Hospital, Zeytinburnu, Turkey.

Please address correspondence to:
Filiz Koşar,
Department of Chest Diseases,
University of Health Sciences,
Yedikule Research and Training Hospital,
34020 Zeytinburnu, Istanbul, Turkey.
E-mail: filizkosar@gmail.com

Competing interests: none declared.

© Copyright CLINICAL AND
EXPERIMENTAL RHEUMATOLOGY 2020.

References

1. ALPAY-KANITEZ N, ÇELİK S, BALTACIOĞLU F, İÇAÇAN OC, BES C, YILDIZELİ B: Endovascular embolisation with Amplatzer vascular plug of ruptured pulmonary artery aneurism in Behçet's disease. *Clin Exp Rheumatol* 2019; 37 (Suppl. 121): S152-3.
2. TZILALIS VD, VOURLIOTAKIS G, TSIRONIS IA, TSILIGIRIS VD, BROUNTZOS EN: Use of an Amplatzer Vascular Plug in embolization of a pulmonary artery aneurysm in a case of Hughes-Stovin syndrome: a case report. *J Med Case Rep* 2011; 5: 425.

3. TAMURA T, YABUKI T, KAWAJIRI T, NISHI T, KUDO K, SHOICHI K: Transcatheter embolization for idiopathic peripheral pulmonary arterial aneurysm: A case report. *Clin Case Rep* 2019; 7: 1021-4.
4. AHMAD M, VATISH J, WILLIS A, JONES R, MELHADO R: Embolisation of an acute inflammatory pulmonary artery aneurysm using an Amplatzer® vascular plug. *J Surg Case Rep* 2012; 8:15.
5. IANNIELLO A, CARRAFIELLO G, NICOTERA P, VAGHI A, CAZZULANI A: Endovascular treatment of a ruptured pulmonary artery aneurysm in a patient with Behçet's disease using the Amplatzer vascular plug 4 Korean. *J Radiol* 2013; 14: 283-6.