# Symptomatic huge thrombus of the ascending aorta

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# Type I: Mural thrombus in ascending and arch of aorta ( up to origin of left SCA) Type Ia: Thrombus limited to ascending aorta Type Ib: Ascending aortic thrombus extending into arch or aortic arch thrombus. Type II: Mural thrombus descending thoracic aorta (distal to left subclavian artery up to coeliac artery. Type IIa: DTA thrombus above T8 Type IIb: DTA & supracoeliac aorta thrombus (T8-L1) Type III: Mural thrombus in aortic segment between coeliac artery to lowest renal artery Type IV: Thrombus between lowest renal artery to aortic bifurcation. \*Based on morphology of thrombus, each type of thrombus is further classified as 'S', 'P' or 'O' S(Sessile): Eccentric or concentric thrombus with no free floating component

**P** (Pedunculated): Pedunculated thrombus (Mural thrombus attached to a proximally with a distal free floating segment of variable length.)

Classification of primary aortic mural thrombus (PAMT). DTA, Descending thoracic aorta; SCA, subclavian artery. Verma et al. [

# Introduction

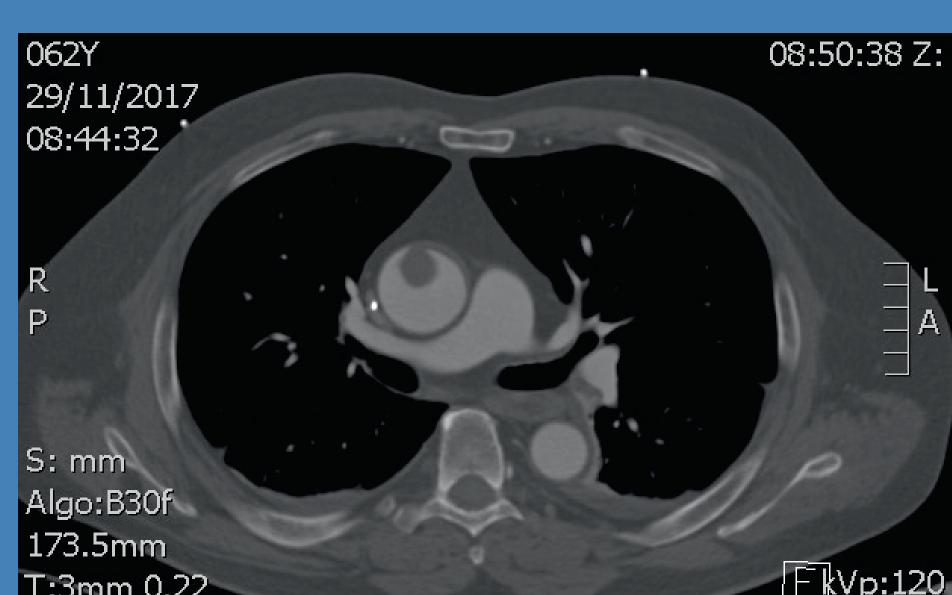
Primary aortic mural thrombus in the absence of atherosclerotic occlusive or aneurysmal disease is an uncommon pathology. Regarding the location of the aortic thrombus, Verma et al. classified primary aortic mural thrombus into types I to IV [1]. It is mostly asymptomatic but it might be a potential source of embolism and death.

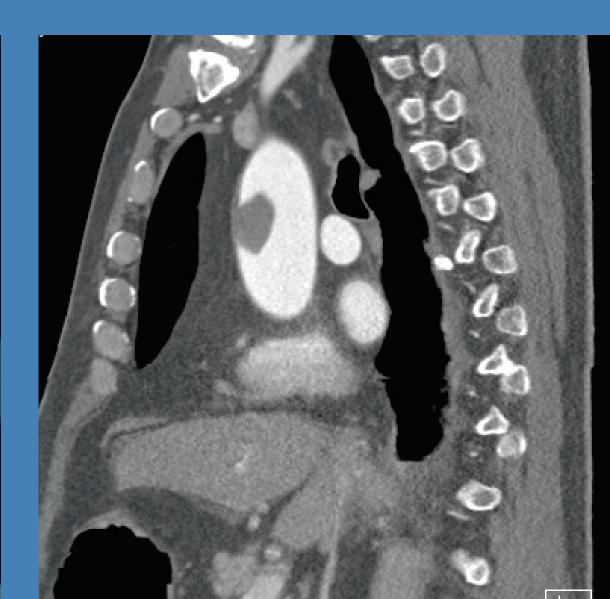
We report one case of symptomatic huge mural thrombus of the ascending aorta. Mode of presentation was acute mesenteric ischemia.

# Case Report



O (Occlusion): Complete thrombotic occlusion of aorta.

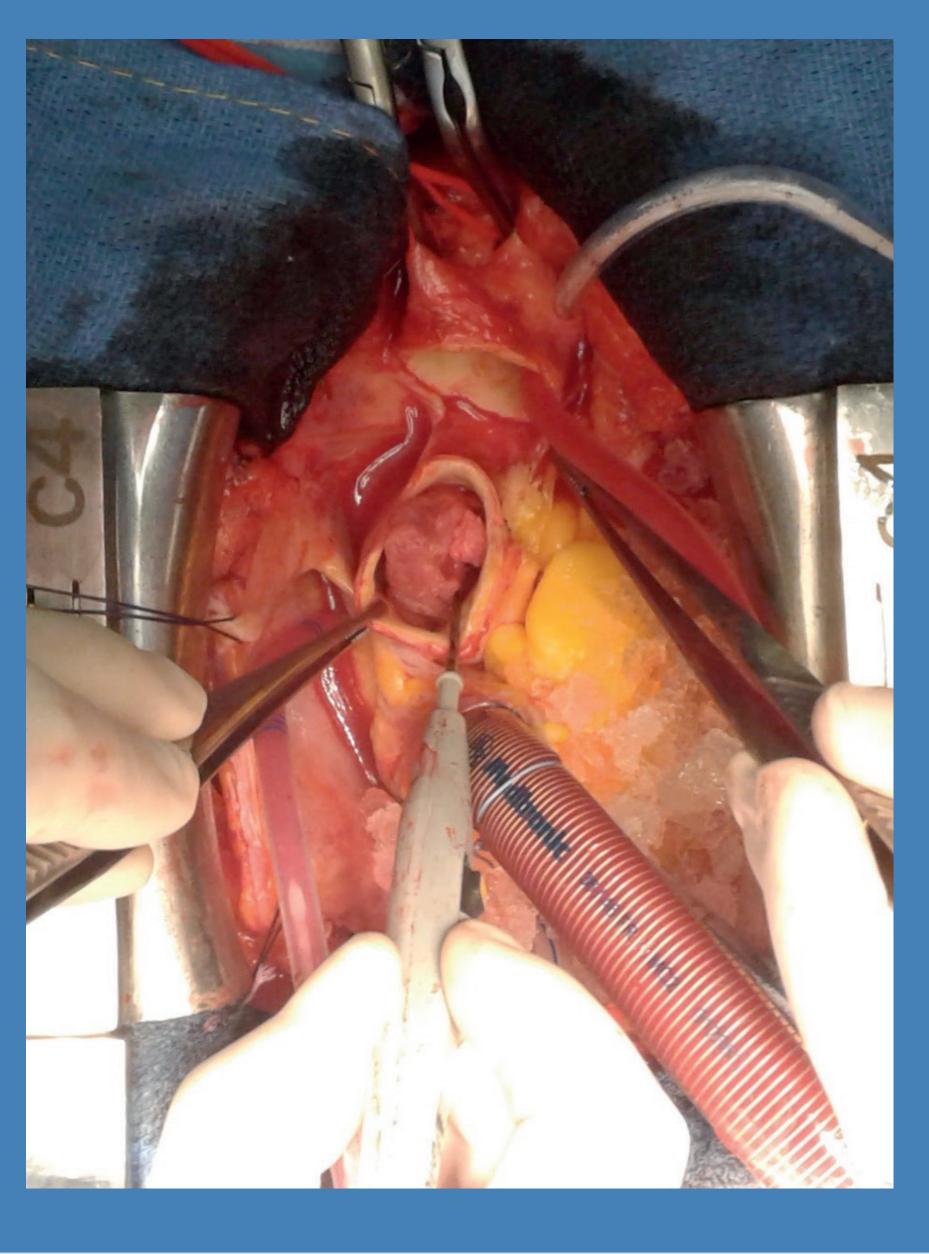




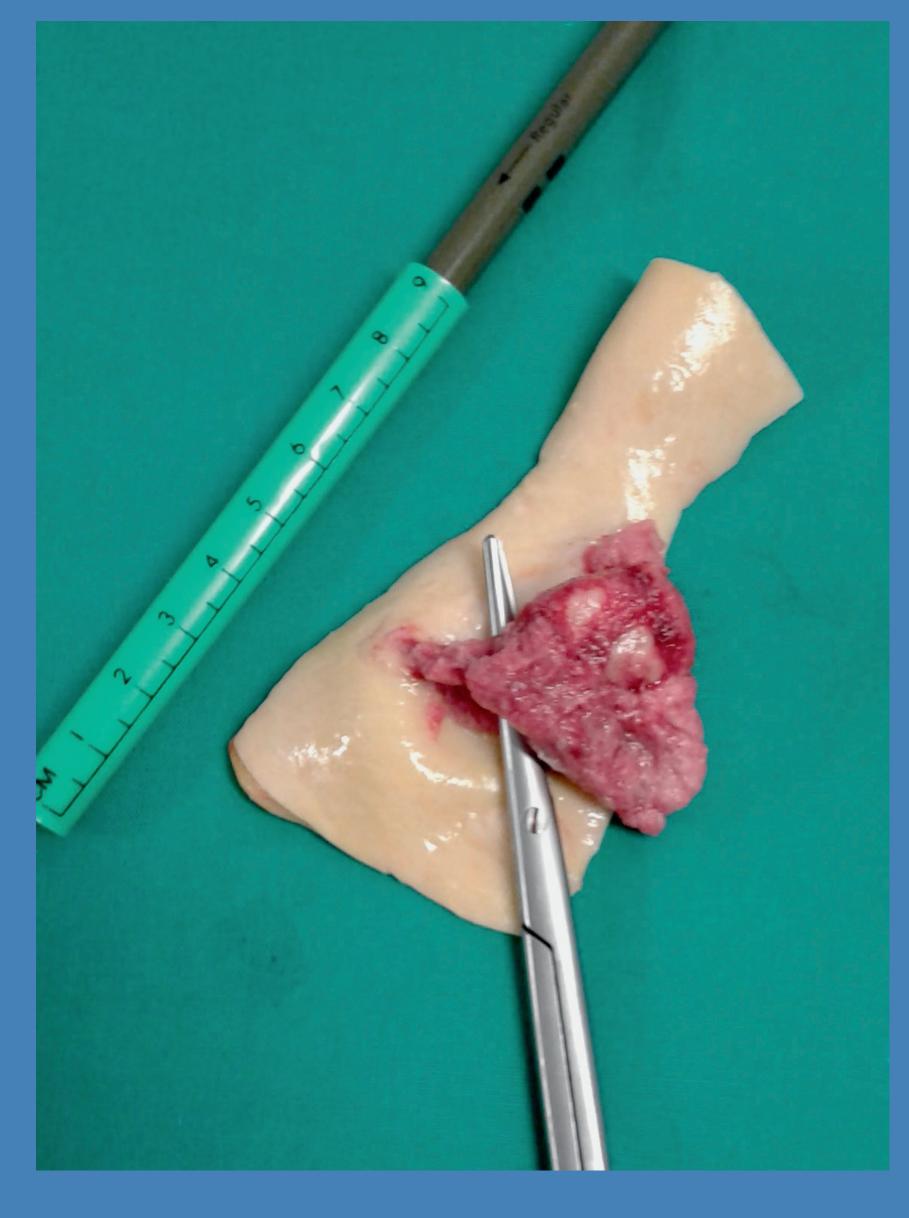
A 62 years old caucasian man was admitted to the emergency room for sudden abdominal pain. He had past history of arterial hypertension and myocardial infarction 16 years before.

Embolic occlusion of the superior mesenteric artery was revealed at the computed tomography. Laparotomy with embolectomy and small bowel resection was performed. 2 days after second look laparotomy was realized and small bowel continuity was restored. At the computed tomography there was also 29 millimeters pedunculated mural thrombus of the ascending aorta, type la from Verma et al. classification.

2 weeks later, under sternotomy, right axillary canulation, cardiopulmonary bypass, hypothermia and circulatory arrest to avoid aortic clamping, ascending aortic replacement was performed. 26 millimeters diameter dacron graft was implanted. There was no complication.







## Discussion

Computed tomography (CT) of the whole aorta is the best investigation to assess symptomatic aortic mural thrombus <sup>[2]</sup>. Because of the high mortality of this pathology, the CT has to be realized even in case of renal insufficiency or contrast media allergy.

Aortic mural thrombus might be sessile, pedunculated or occlude the aortic lumen<sup>[1]</sup>.

All large embolic primary aortic mural thrombi have to be treated. Therapeutic strategies depend on the localisation of the aortic thrombus, which gives meaning to Verma et al. classification into types I to IV  $^{[1]}$ . Our case was type Ia which is the least common site for aortic mural thrombus. Surgical thrombectomy is prefered for type I and III. Endovascular repair is prefered for type II and IV.



No conflict of interest

68th ESCVS, Groningen,

The Netherlands,

May 22-25, 2019

### References

- <sup>[1]</sup> Verma H, Meda N, Vora S, George RK, Tripathi RK. Contemporary management of symptomatic primary aortic mural thrombus. J Vasc Surg 2014;60(6):1524–34
- <sup>[2]</sup> Martens T, Van Herzeele I, Jacobs B, De Ryck F, Randon C, Vermassen F. Treatment of symptomatic mobile aortic thrombus. Acta Chir Belg 2010;110:361-64