Mural thrombus and thoracic aortic aneurysm: An unusual association

Trombo mural e aorta torácica aneurismática – uma associação rara

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A 72-year-old woman was referred for surgery following fracture of the humerus in a fall, without syncope. She had a history of dementia, hypertension and aortic aneurysm with mural thrombus diagnosed eight years previously, not referred for surgical treatment due to the patient’s refusal. On preoperative cardiovascular assessment, she was asymptomatic, with controlled blood pressure and no pressure difference between limbs. The transthoracic echocardiogram showed mild dilatation of the ascending aorta (36 mm) and aneurysm of the aortic arch (69 mm) and the descending aorta (43 mm), with what appeared to be a large (35 mm) organized mural thrombus on the aortic wall. Computed tomography angiography confirmed an aneurysm of the aortic arch and descending aorta (maximum diameter 7 cm) and a large mural thrombus, with no signs of rupture, dissection or hematoma of the wall (Figure 1). Surgery to repair the aortic aneurysm was thus indicated and proposed to the patient and her family, but was again refused because of her frailty. The aneurysm and thrombus had moreover been diagnosed eight years previously and had not caused any complications.

Oral anticoagulation is the first option in cases of thoracic aortic aneurysm and mural thrombus complicated by embolization, but when asymptomatic there is no agreed treatment; few cases have been reported and the risks of anticoagulation and recurrent embolization are unknown. In this case it was therefore decided to maintain blood pressure control only. The patient underwent orthopedic surgery with regional blockade and the postoperative period was uneventful.
Figure 1  Chest X-ray showing marked mediastinal enlargement (A); transthoracic echocardiogram, suprasternal view (B) and short-axis view (C), showing aneurysm of the aortic arch and the proximal portion of the descending aorta, with what appears to be a large organized mural thrombus; and thoracic computed tomography angiography (D) showing an aneurysm of the aortic arch and descending aorta, maximum diameter 7 cm, and a large mural thrombus, without signs of acute aortic syndrome.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

Conflicts of interest

The authors have no conflicts of interest to declare.