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VASCULAR IMAGES

An unusual presentation of pedunculated thrombus in the distal arch of the aorta after splenectomy for B-cell lymphoma

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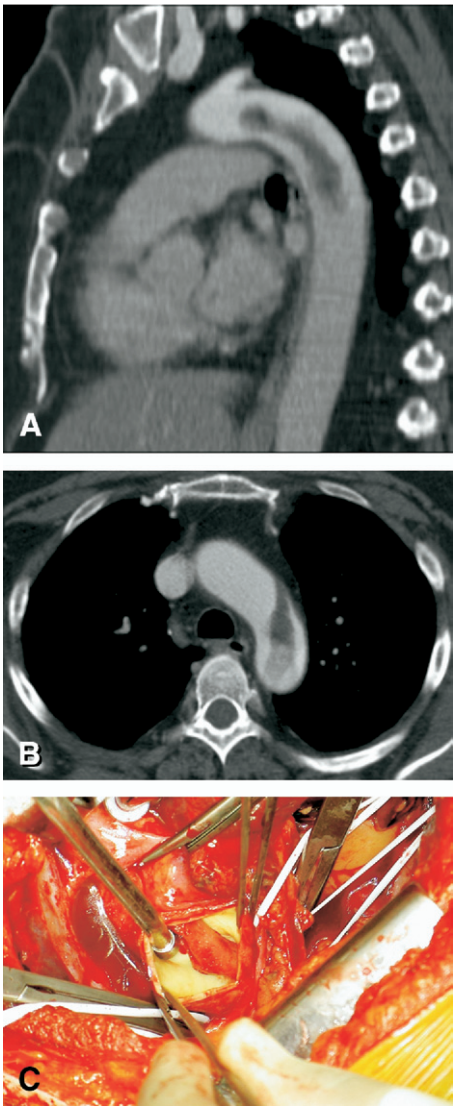
A 59-year-old woman who was asymptomatic after a splenectomy for B-cell lymphoma was found to have a pedunculated mass filling 50% of the aortic lumen within the distal aortic arch on a routine follow-up computed tomographic scan of the chest (A/cover image, and B). She was referred to us with a differential diagnosis of tumor originating from the aortic wall. On transesophageal echocardiogram it seemed to be a solid mass rather than a floating thrombus. With suspicion of malignancy, it was decided to remove the mass surgically.

Left thoracotomy was performed, and a 4-cm mass originating from the inner aspect of the distal aortic arch just above the remnant of the ductus arteriosus was excised on partial left heart bypass (C). The histology report showed a cylinder of pale hemorrhagic tissue, 4.0 × 1.0 × 0.8 cm, consisting of fibrin thrombus with a few atypical lymphoid cells present at one edge. However, this was insufficient for a firm diagnosis of malignancy.

After surgery she received anticoagulant medication for 6 months. She remains well, with no evidence of recurrent thrombus after 3 years of follow-up.

Nonaneurysmal aortic arch lesions are a frequent and a still-underestimated source of stroke and peripheral embolization (in 10% of patients, the source of peripheral embolism cannot be identified). A floating thrombus in an apparently normal aortic arch is considered a life-threatening condition. Although rare, this diagnosis must not be overlooked in the search for etiology of recurrent and disseminated peripheral ischemic events, because of the significant morbidity and mortality related to a delayed diagnosis. Coagulopathies, atherosclerosis, trauma, malignancy, pregnancy, and previous aortic surgery are a few common causes of thrombus formation in this rare condition. There are various treatment options available, such as anticoagulation, balloon thrombectomy, stenting, and surgery. All these therapeutic modalities have their limitations; nonsurgical treatment involves high risk of embolism (reported as a 73% incidence of embolic events for highly mobile aortic thrombi as compared with 12% for immobile ones),[1] ischemia, and stroke, whereas surgery has been reported with high mortality and morbidity. Complicated vascular surgical procedures have been performed for definitive treatment. Primary tumors of the aorta are rare, and only a few cases are reported in the literature; as a result of our suspicion of tumor, we aimed to remove the lesion in a controlled manner under bypass, because no standard approach



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exists for these unusual cases. The histologic examination of specimen was not conclusive of malignancy.

In conclusion, we present a case of management for the removal of an aortic floating lesion as a definitive therapeutic modality with lower risks of complication. Surgery with circulatory support could be recommended in patients at risk of developing recurrent embolic events.[1,2]

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