Images in cardio-thoracic surgery

Ascending aortic pseudoaneurysm following open heart surgery

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A 25-year-old female presented with hemoptysis one year after ASD closure. Chest radiograph revealed large mediastinal opacity (Fig. 1b) not present immediately after the previous surgery (Fig. 1a). Multislice CT (Fig. 2) revealed two ascending aortic pseudoaneurysms. Resection and homograft patch reconstruction of ascending aorta was successfully performed.

Fig. 1. (a) Chest radiograph immediately after the ASD closure shows no mediastinal shadow. (b) Chest radiograph one year after the first surgery showing a large mediastinal shadow merging with the aortic silhouette.

Fig. 2. (a) Axial CT image showing pseudoaneurysm with thrombosis. (b) Reconstructed CT image showing the pseudoaneurysms (arrows), the larger one from aortic cannulation site and the smaller one from the cardioplegia needle insertion site.