A Case of Giant Subclavian Aneurysm

A 32 years male labourer with a past history of blunt trauma 2 years before suffered at work presented with the complaint of pain and swelling in the upper part of the chest rapidly expanding of 4 months duration along with the complaint of pain and absent pulse noted by his GP in the left hand of about 7-8 months and evidence of skin excoriations over the forearm. His x-ray showed a left sided mediastinal mass and contrast CT scan suggested a proximal left subclavian artery aneurysm (Figs. 1&2). Angiography was done for better delineation of the arterial anatomy and showed a giant aneurysm of intrathoracic subclavian artery but proper anatomical delineation was not possible as the aneurysm was very large (Fig. 3). A decision of open exploration was taken. While waiting for surgery the patient developed intense pain and collapsed inspite of all efforts at resuscitation.

Aneurysms of the subclavian artery represent about 1% of all peripheral arterial aneurysms. They fall into two distinct groups in terms of etiology, presentation, and treatment: those of the intrathoracic and those of the extrathoracic portion of the subclavian artery. Aneurysms of extrathoracic subclavian artery are related to thoracic outlet syndrome or to previous trauma, intrathoracic segmental involvement is mainly due to atherosclerosis but can be due to medial degeneration, trauma and infection. Intrathoracic aneurysms are most often asymptomatic but can present with symptoms caused by compression or acute aneurysm expansion such as upper chest or shoulder pain, Horner’s syndrome, venous congestion, and hoarseness. Symptoms due to distal embolization to the arm are unusual. Subclavian artery aneurysms are rare lesions that usually require treatment for an array of complications: distal embolization with digital artery occlusion and ischemia, neurological symptoms from brachial plexus stretching, thrombosis causing ischemia, or rupture. Hence, they should be considered for surgical repair. Current elective surgical treatment involves both resection of the aneurysm and reconstruction via an end-to-end anastomosis or an interposition bypass graft. In general, the associated surgical morbidity and mortality rates have approached 12%. Endovascular embolization techniques have been used to control small and medium size vessels and are appropriate for pseudoaneurysms in relatively inaccessible locations. Coil embolization and thrombin for the treatment of an expanding subclavian artery aneurysm in a patient considered too unstable for surgical repair.

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Received : 11.12.2006; Revised : 6.2.2007; Accepted : 1.3.2007

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