PICTORIAL 

CASE OF DEBAKEY CLASS I AORTIC DISSECTIO

Ahsan Zil-E-Ali, Marwa Shahid  
Fatima Memorial Hospital, Lahore-Pakistan

CAT scan showing an aortic dissection of both, ascending and descending aorta (Debakey I or Stanford A)

A 48 years old man presented in clinic with chest discomfort for last a week. The patient locates the pain in the middle of the chest which was episodic, with intensity of 7/10, shearing in quality and radiating to back. There were no radiating or relieving factors. The patient is a known hypertensive case for 18 years. Prior to arrival for this consult, the patient reported a loss of consciousness 5 days before after which he reported to ER with blood pressure of 155/90 mmHg and BSL of 88mg/dl. The patient was infused dextrose and was advised to maintain blood pressure. Also, the patient have not been compliant with anti-hypertensive medications. On detail history and physical exam, it was also known that patient was a smoker for past 30 years with an abnormal apex beat was noted as well. Patient also felt discomfort on deep abdominal palpation. Workups were carried, including the regular blood workup, complete metabolic profile, serum electrolyte levels with liver and renal function tests. ECG and cardiac enzymes were carries which were normal and echocardiogram was planned for the morning, when the patient had severe pain spell and was sent for the CAT scan to rule out the possibility of a mediastinal mass. On CAT scan, an aortic dissection was found. It was Debakey I/Stanford A type dissection.

Aortic dissection can be due to tear in the intima that extends forming a separate channel of blood following through it. If the disease is not addressed properly can be fatal. CAT scans can help make the diagnosis but MRI is considered the gold standard of investigation. Now aortograms, transesophageal echocardiograms are obsolete and are less popular. Ideally, the patient is kept on the drugs that can reduce the mean arterial pressure in the aorta. The best group for it is beta blockers. But if they are contraindicated due to any other comorbidity then calcium channel blockers are prescribed. This can reduce to extension of the dissection with decreasing the symptoms. Best treatment is to have a vascular intervention, either an open surgery graft or a more sophisticated endovascular aortic repair. At the dissection size of 4.5 cm, it is recommended to undergo the surgery. High blood pressure, smoking and connective tissues disorders are the contributory factors of this condition.

Address for Correspondence:  
Dr Ahsan Zil-E-Ali, Department of Surgery, Fatima Memorial Hospital, Lahore-Pakistan  
Email: ahsanzileali@gmail.com