ACUTE AORTIC SYNDROME A CASE REPORT

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Abstract: 50 year old man presented with acute chest pain, clinical examination and investigation-ECG and Ct angiogram were helpful in making the diagnosis of Acute Aortic Syndrome Aortic Dissection. This case is presented to emphasise the need for awareness among the physicians for early diagnosis of aortic dissection.

Keyword: Aortic Dissection, Multi slice CT, Beta Blockers

Introduction
Aortic Dissection is a medical emergency. Aortic Dissection resulting to rupture have an 80% mortality rate and 50% of the patients die before they even reach the hospital. Aortic Dissection is caused by a circumferential or transverse tear of intima. Case Description 50 year old known hypertensive male patient admitted with complains of sudden onset of back pain which is severe and tearing associated with diaphoresis. The patient had no significant family history. The patient is having coronary artery heart disease and hypertension for past 6 years. Known pulmonary tuberculosis patient completed ATT 20 years back.

On examination patient had pulse rate of 98/minute regular in rhythm, relatively low volume in lower limbs, normal character and had a BP of 190/110 in right upper limb, 180/110 in left upper limb and 180/100 in both lower limbs. Cardiac auscultation was normal except loud A2 and did not reveal any murmurs. Other systems within normal limits. Investigation wise ECG revealed old inferior wall myocardial infarction, Chest X ray revealed mediastinal widening, both costophrenic angles blunted due to pleural effusion. Multislice CT pulmonary and aortic angiogram showed dissecting aneurysm of distal arch, descending thoracic aorta and aortic angiogram showed dissecting aneurysm of distal arch, descending thoracic aorta and proximal abdominal aorta (Stanford type B/Debekey type III) and left hemothorax. Other blood investigations were within normal limits. Auscultation was normal except loud A2 and did not reveal any murmurs. Other systems within normal limits. Investigation wise ECG revealed old inferior wall myocardial infarction, Chest X ray revealed mediastinal widening, both costophrenic angles blunted due to pleural effusion. Multislice CT pulmonary and aortic angiogram showed dissecting aneurysm of distal arch,
descending thoracic aorta and proximal abdominal aorta (Stanford type B/Debekey type III) and left hemothorax. Other blood investigations were within normal limits.

MDCT AORTOGRAM
Discussion The four major acute aortic syndromes are aortic rupture, aortic dissection, intramural hematoma, and penetrating atherosclerotic ulcer. Aortic dissection is associated with hypertension and many connective tissue disorders, vasculitis. It can also be associated with chest trauma, bicuspid aortic valve, Marfan’s syndrome, Turner’s syndrome, tertiary syphilis. It’s incidence is high in individuals who are 50-70 years old. The incidence is twice as high in males as in females. In aortic dissection blood penetrates the intima and enters the media layer. The vast majority originate as intimal tear in either the ascending aorta (65%) aortic arch (10%) or descending aorta (20%). Classification: DeBakey classification Type I - in which an intimal tear occurs in the ascending aorta but involves the descending aorta as well. Type II - in which the dissection is limited to the ascending aorta. Type III - in which the intimal tear is located in the descending aorta with distal propagation of the dissection. Stanford classification Type A - in which the dissection involves the ascending aorta. Type B - in which it is limited to the descending aorta. Diagnosis of aortic dissection cannot always be made by history and physical signs alone. The diagnosis of aortic dissection can be established by non invasive techniques such as echocardiography, CT or MRI. Computed tomography angiography has a sensitivity of 96 to 100% and a specificity of 96 to 100%. MRI also has a sensitivity and specificity of 98%. From a management point of view, Stanford classification is more practical and useful. Emergent surgical correction is the preferred treatment for acute ascending aortic dissections and intramural hematomas (type A) and for complicated type B dissections, including those characterized by propagation, compromise of major aortic branches, impending rupture, or continued pain. Surgery involves excision of the intimal flap, obliteration of the false lumen, and placement of an interposition graft. For uncomplicated and stable distal dissections and intramural hematomas (type B), medical therapy is the preferred treatment. Long-term therapy for patients with aortic dissection and intramural hematomas (with or without surgery) consists of control of hypertension and reduction of cardiac contractility with the use of beta blockers plus other antihypertensive agents, such as ACE inhibitors or calcium antagonists. Patients with chronic type B dissection and intramural hematomas should be followed on an outpatient basis every 6–12 months with contrast-enhanced CT or MRI to detect propagation or expansion. The long-term prognosis for patients with treated dissections is generally good with careful follow-up; the 10-year survival rate is approximately 60%. Conclusion So if a known hypertensive patient coming with severe back pain and high BP we have to suspect aortic dissection. And in this patient since he is having
Type B(Stanford) aortic dissection we have given medical treatment for this patient

References:


