Aortic dissection “the great and deadly mimicker”: A case report

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ABSTRACT

Introduction: Acute aortic dissection (AAD) is one of the most challenging cardiovascular emergencies presenting to the Emergency Department (ED). Prompt diagnosis and treatment is the key to patient survival. Though most AADs present with typical symptoms, it has been reported to present with a myriad of symptoms. We report a case of an AAD, which presented to our ED with predominant neurological symptoms.

Case description: A 47-year-old male was brought to our ED with acute confusion and history of seizure. He did not have any history of trauma or report any chest pain, headache or fever. He was vitally stable except for slight tachycardia and his physical examination was unremarkable. All investigations including a CT head were reported normal except leukocytosis (27 $\times$ $10^9$/L). A few hours after admission, he started deteriorating, developed hypotension and became more agitated. Resuscitative measures were started. Ultrasound scan of the heart was performed to confirm central venous access showed a pericardial effusion and a flap in the ascending aorta. A diagnosis of AAD was made. An urgent CT was performed, which showed an extensive Type A aortic dissection extending into the branches, with rupture into pericardial cavity. During transportation for surgery, the patient had a cardiac arrest from which he could not be resuscitated.

Conclusion: AADs may present in an unusual manner with predominantly neurological manifestations such as acute confusion and seizure. In patients with unexplained acute confusional state the possibility of an AAD should be considered in the differential diagnosis. Bedside TTE has a limited sensitivity but high specificity in diagnosis of Type A AD and its early utilization may facilitate timely diagnosis improving outcome. Given the high specificity of TTE and time-dependent survival in Type A AD, institutional protocols to expedite the transfer to the operating room without waiting for CT confirmation might be considered.