

ABSTRACT

Aortic dissection presenting as stroke.

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Introduction:

Aortic dissection (AD) is a rare and life-threatening cardiac condition that affects the aorta. Typical symptoms are reported in more than 80% of cases and include the sudden onset of severe or tearing chest pain. Neurological symptoms also occur in 17% to 40% of cases, which can sometimes mimic stroke and contribute to delays in diagnosis. Therefore, understanding these acute dissection-induced neurological symptoms is crucial for timely and effective management.

Case report:

A 50-year-old male with multiple comorbidities presented with acute left-sided chest pain and right lower limb weakness. Neurological examination revealed reduced power (3/5) in the right lower limb, with normal tone and reflexes affected on the same side. Electrocardiogram (ECG) was noted sinus bradycardia and left ventricular hypertrophy (LVH), but no acute ischemic changes. Chest radiography demonstrated mediastinal widening, and Point-of-care ultrasound (POCUS) showed a 3.6cm aortic root with an intimal flap over the aortic arch. Computed tomographic angiography (CTA) confirmed a long segment Stanford type A aortic dissection. The patient was referred to Hospital Serdang for surgical intervention, but unfortunately, he passed away en route to the hospital.

Discussion:

AD is a rare condition, affecting between 5 to 30 cases per million people annually. Stroke induced by AD is relatively uncommon, observed in approximately 15.7% of patients with AD. However, the majority of patients experiencing neurological symptoms alongside AD initially present with tearing chest pain. Misdiagnosis or delayed diagnosis of AD can result in significant mortality and morbidity. Transthoracic Echocardiogram (TTE) is a reliable method for diagnosing AD. TTE can show aortic diameter, intimal flap, false lumen and pericardial effusion. Classical treatment recommendations include direct surgical intervention for type A aortic dissection, underscoring the urgency of accurate and timely diagnosis through modalities like POCUS to optimize patient outcomes.

Conclusion:

This case emphasizes the importance of considering AD in the differential diagnosis of stroke-like presentations, especially in patients presenting with acute chest pain and neurological deficits. Early recognition and timely intervention are crucial to improving outcomes in such complex clinical presentations.