

Introduction

Aortic dissection is a rare but life threatening disease in Malaysia with an incidence of 6 per 100,000 population and a mortality of 5.2 per 100,000.

Unfortunately diagnosis can be delayed due to variable clinical presentation, requiring a high suspicion index and early recognition to adequately manage this condition.

If left untreated, aortic dissection may lead to potential complications such as cardiovascular or respiratory collapse or end organ ischaemia.

Case Description

A 59 year old male presented to the emergency department with a one week history of transient right eye vision impairment, left leg weakness and occasional chest discomfort radiating to the back.

Upon review he was alert, but had left leg weakness and a weak femoral pulse.

Immediate point-of-care ultrasonography revealed a wide aortic root and an intimal flap over the ascending aorta, right carotid and at the abdominal aorta. Subsequent computed tomography (CT) angiography revealed he had a Stanford Type A aortic dissection from the aortic root extending into both common iliac arteries.

He was then referred to the surgical team and planned for transfer to a cardiothoracic centre for definitive operative management.

Discussion

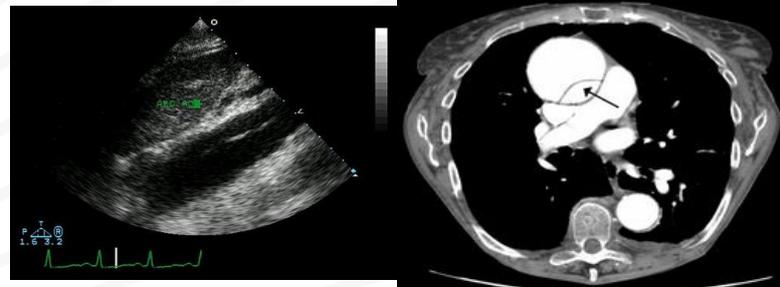
Identifying an aortic dissection in the emergency department can be challenging due to its variable clinical presentation upon admission. Patients may present with stroke-like symptoms or the chest pain may be misidentified as an acute coronary syndrome.

This will delay diagnosis and may lead to further complications. In the emergency department, bedside ultrasonography is a convenient imaging modality with a sensitivity of 67-80% and specificity of 99-100% upon visualisation of an intimal flap. This highlights the importance of adequate training to ensure skilled ultrasound operators in the emergency department to recognise such findings.

Conclusion

Aortic dissection is a condition with high morbidity and mortality, hence this case was reported to reinforce the importance of clinical suspicion and early bedside ultrasonography to aid in detection of such patients.

This enables early definitive imaging and management hence improving clinical outcome.



References

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2. Williams J, Heiner JD, Perreault MD, McArthur TJ. Aortic dissection diagnosed by ultrasound. *West J Emerg Med.* 2010 Feb;11(1):98-9. PMID: 20411092; PMCID: PMC2850870.