

## PP50 CASE REPORT: EXTENSIVE AORTIC DISSECTION

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### INTRODUCTION

Aortic dissection resulted from aortic wall degenerative changes because of chronic hypertension. However, it can also occur among younger patients with Marfan's syndrome, Ehlers-Danlos syndrome or chronic cocaine or amphetamine usage.

### CASE DESCRIPTION

A 40-year-old Indonesian male with no background medical illness presented tearing epigastric pain, which radiated to the back for two days. Concurrently, the patient had right upper limb weakness and intermittent sharp left-sided chest pain for one month. The patient was tachypneic with a weak right radial pulse and radio-radio delay. Systolic blood pressure (SBP) of the bilateral upper limb had a discrepancy >20mmHg with lower blood pressure at the right upper limb. Immediate chest radiograph showed widened mediastinum. The bedside transthoracic ultrasound indicated intimal dissection flaps in the ascending aorta, bilateral common carotid artery, descending and abdominal aorta. Subsequently, the *Computed Tomography* Angiography (CTA) confirmed the ultrasound findings. The patient was given intravenous opiates for analgesia and beta-blockers with a target heart rate of fewer than 60 beats per minute and systolic blood pressure of less than 120. The patient was planned for

urgent vascular repair but opted to do the surgery in his native country. Unfortunately, the patient was brought in dead five hours after discharge from the surgical ward.

### DISCUSSION

Acute aortic dissection poses a diagnostic dilemma, for it has a myriad of presentations. A diagnostic pearl to suspect aortic dissection is chest pain with other neurological or vascular symptoms. Bedside point of care ultrasound (POCUS) has high specificity to rule in aortic dissection when visualised intimal dissection flaps. Therefore, control of blood pressure and heart rate is paramount to reduce shearing forces which will worsen the aortic dissection. Emergent surgical repair is indicated for Stanford type A aortic dissection.

### CONCLUSION

In conclusion, extensive aortic dissection can happen in a young male with no risk factors for aortic dissection. A high index of suspicion is needed to rule out aortic dissection for a patient presenting with chest pain or epigastric pain with peripheral pulse deficits. Bedside POCUS can augment history and physical examination, thus expediting the patient's diagnosis and subsequent management.

Keywords: Aortic dissection, chest pain, POCUS