

10-2010

# A Case Of Aortic Dissection Diagnosed With Carotid Ultrasound During Internal Jugular Cannulation

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## Recommended Citation

D'Souza S, Gutta S. A Case Of Aortic Dissection Diagnosed With Carotid Ultrasound During Internal Jugular Cannulation. ASA Annual Meeting, October 2010.

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## INTRODUCTION

Stanford type A aortic dissection is a surgical emergency which requires early diagnosis and surgical management and is associated with high mortality. We present a case whereby visualization of carotid artery dissection during ultrasound guided central line placement led to the diagnosis of extensive aortic dissection.

## CASE DESCRIPTION

A 62 year old male in his usual state of health admitted to a peripheral hospital for stroke with right sided weakness, he was given tPA and transferred to our hospital. He was brought to the operating room for profuse gastrointestinal bleeding. While ultrasound scanning of the neck for central line placement the anesthesiologist noticed double lumen in the carotid artery (carotid dissection) which was bilateral. Subsequent transesophageal echocardiography revealed a Stanford A aortic dissection. CT angiography confirmed the diagnosis with extensive dissection of the aorta from its origin to common iliac artery involving all branches. Laparotomy revealed extensive multiorgan ischemia.



TEE : showing dissection of ascending aorta.

## CONCLUSION

One should have a high level of suspicion of aortic dissection when a patient presents with multiple symptoms ( chest pain, stroke or abdominal pain). While placing a central venous access one should carefully visualize the carotid artery for the presence of any abnormal features.

## REFERENCES

1. Circulation 2003;108: 628-635
2. JAMA 2000;283 (7): 893-903
3. N E JM 1993;328:1-9

## DISCUSSION

Though acute dissection presents commonly as chest pain, syncope, stroke or abdominal pain, diverse manifestations are likely and sometimes diagnosis may be missed<sup>1</sup>. Acute ascending aortic dissection may manifest as acute aortic regurgitation or may mimic acute myocardial infarction<sup>2</sup>. Even though both TEE and MRI have high degree of sensitivity compared to CT scan, CT scan is the most common initial modality used<sup>3</sup>. MRI has high sensitivity and specificity compared to TEE, but is rarely used as first imaging tool when aortic dissection is suspected<sup>3</sup>. As the condition is associated with high mortality early diagnosis and prompt surgical correction is essential<sup>2</sup>.

Our patient did not show classical chest x ray feature of widening of mediastinum and initial CT scan **without contrast** did not show aortic dissection and the diagnosis was completely missed until ultrasound scanning of the neck was done to place central venous access.