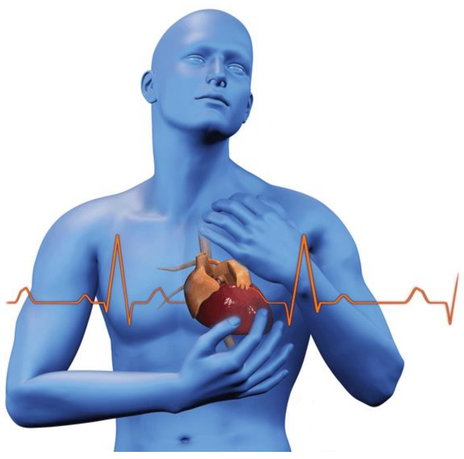

CHEST PAIN AND PARAPLEGIA – AN UNCOMMON PRESENTATION, A DIAGNOSTIC CHALLENGE

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INTRODUCTION

Chest pain is a common scenario at the Emergency Department (ED). However, the presentation of acute chest pain with sudden onset bilateral lower limb weakness is rare and usually is a diagnostic challenge.

CASE REPORT

We report a case of a 48-year-old male with no premorbid presented with acute onset left sided chest pain radiating to the neck, left upper limb and the back lasting for an hour. It was associated with nausea. No profuse sweating, palpitation or shortness of breath. He also complained of simultaneous sudden onset of bilateral lower limb weakness and loss of sensation over the bilateral lower limb. No recent history of fall and trauma to the spine.

On arrival, patient was alert, not tachypnoiec with normal vital signs. Physical examination revealed normal lungs, heart and abdomen. Neurology examination revealed bilateral upper limb power was normal 5/5 with normal tone and reflexes. However bilateral lower limb power was absent 0/5, with arreflexia and absent sensation with no sacral sparing. Anal tone was absent however bulbocavernous reflex is still present. There was no spinal step deformity or tenderness.

ECG was sinus rhythm and bedside echo and abdominal ultrasound was done which showed no abnormality. An urgent CTA of the thorax and abdomen was done and no evidence of aortic dissection or aneurysm was found. A MRI later revealed the cause of his symptoms

IMAGING

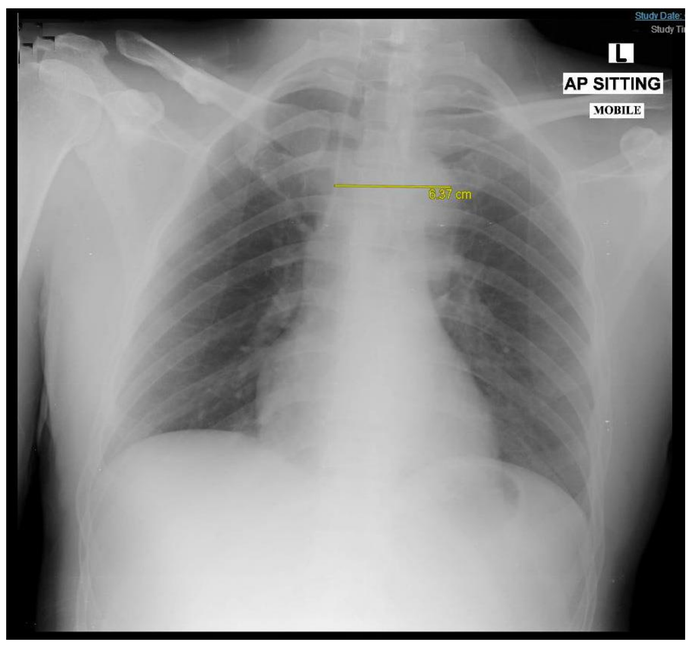

Figure 1
Chest X-Ray upon presentation

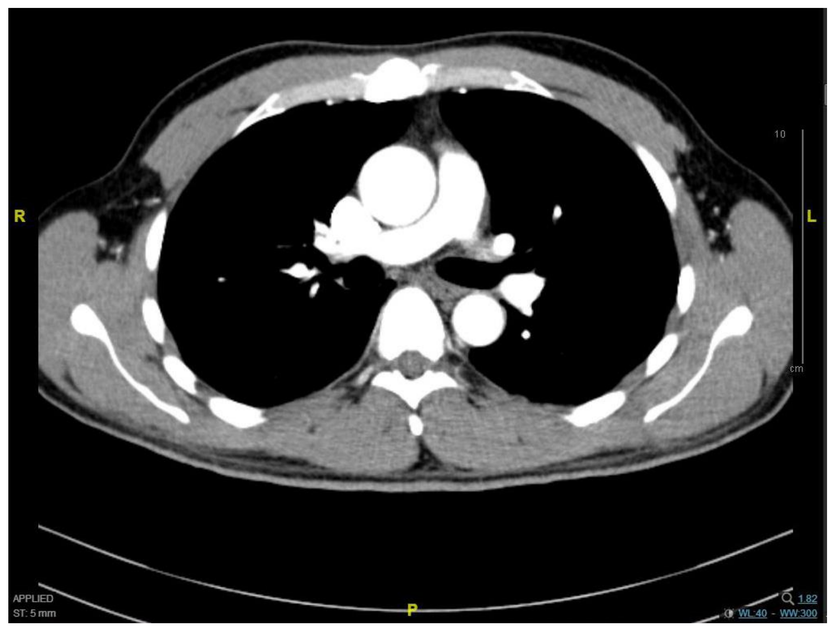

Figure 2
CT Thorax – Normal findings

DISCUSSION

At the ED, our priority is to determine a cardiac event. A history of typical chest pain, serial ECG's, bedside echo and cardiac biomarkers will assist us in ruling in or out a cardiac event. This patient had normal ECG and cardiac biomarkers, with no evidence of hypokinetic segments on echo.

The suspicion of a possible aortic dissection or aneurysm is usually of concern if a patient presented with chest pain and acute onset paraplegia. If an aneurysm is missed, it would be detrimental to the patient. Hence a CTA of the thorax was done which was also normal. This raised a diagnostic challenge and subsequently a MRI was done which revealed the cause of his symptoms. MRI showed degenerative cervical disc disease causing compression at C5-C6 exiting nerve root and central disc herniation at C6-C7 causing spinal cord stenosis with the narrowest diameter of 0.4cm.

There has been a case report of a similar presentation of sudden onset of chest pain with paraplegia, but however that patient had aortic coarctation causing spinal hematoma which was the cause of his symptoms.

CONCLUSION

We report an uncommon case of spinal cord injury with atypical presentation. This case suggests the need to increase awareness among the emergency doctors who may encounter similar cases of chest pain with atypical paraplegia. The CT Thorax and MRI spine was critical for timely diagnosis for this patients.

REFERENCES
1. Feng Han Chiu, Shih Hung Tsai, et al Chest Pain and Sudden-Onset Paraplegia at the Emergency Department: An Uncommon Presentation; The American Journal of Case Reports, 2017; 18: 728-732