**MEDIASTINAL HEMATOMA CAUSING SYNCOPE: AN EXTRA-PERICARDIAL CULPRIT FOR TAMPONADE**

**S.M. Dhannoon1**, A.A. Alsaad2

1. University of Central Florida, Orlando, Florida, USA

2. Mayo Clinic, Jacksonville, Florida, USA

Cardiac tamponade is commonly caused by fluid collection between the visceral and the parietal pericardium. However, extra-pericardial causes may contribute to the pathogenesis of this disease. We are reporting a patient with severe aortic valve stenosis who developed anterior mediastinal hematoma after mechanical aortic valve replacement. The hematoma formation in the anterior mediastinum was complicated by cardiac tamponade physiology. A 40-year-old male with a history of severe aortic valve stenosis had a mechanical valve replacement with no immediate post-operative complications and was discharged on warfarin treatment. Ten days after discharge the patient presented with an episode of syncope with cardiogenic features. He also had progressive shortness of breath, tiredness, and lower extremities edema since the surgery. Initial workup revealed supra-therapeutic INR of 8.9 and azotemia. Chest-X-ray revealed mild increase in cardiac silhouette. Bedside echocardiography identified a fluid collection below the mid-sternal area and revealed diastolic collapse of right ventricle. Computerized tomography of the chest with no contrast revealed a new retrosternal fluid collection measuring 6cm X 10cm X 13cm pushing the right ventricle; findings are suggestive of anterior mediastinal hematoma that is compromising the cardiac function and causing tamponade physiology. Patient was treated with fresh frozen plasma and prothrombin concentrate complex. He was taken to surgery. Hematoma was evacuated successfully. The culprit was the internal mammary artery which was repaired successfully with no complications.

*Conclusion*:

• Mass effect caused by fluid accumulation, hematoma or tumors in the mediastinum may be an uncommon culprit for cardiac tamponade.

• Close and strict monitoring of the international normalized ration is always recommended in patients with recent valve replacement to prevent hematoma formation in the mediastinum.