**WCC 2016-111: Ad ASCENDING AORTIC DISSECTION: INSIGHTS INTO AN OLD DISEASE- A CASE REPORT** Mohammed Abiduddin Arif

**Background** Aortic dissection is a relatively rare but dreadful illness, often presenting with tearing chest pain and acute hemodynamic compromise. Early and accurate diagnosis and treatment are essential for survival. The most important predisposing factor for acute aortic dissection is systemic hypertension. Other predisposing factors include disorders of collagen (Marfan syndrome, Ehlers-Danlos syndrome, annuloaortic ectasia), bicuspid aortic valve, aortic coarctation, Turner syndrome, coronary artery bypass graft surgery, previous aortic valve replacement, cocaine use, strenuous resistance training and trauma. In the present case an ascending aortic dissection is reported.

**Case report**

A 64-year-old woman presented to the emergency department with sudden onset severe sharp pain in the back since two days. Her medical history was significant for hypertension for over 30 years. She claimed compliance to medications. She had no previous cardiac catheterization, intra-aortic balloon pump or any cardiac surgery such as valve replacement. A physical examination was not different from her initial presentation. A contrast CT scan of the chest was performed that showed an aortic dissection extending from the aortic root. The ascending aorta measured 5.7 cm transversely. The descending aorta appeared normal, measuring 2.5 cm at its widest diameter. There was a small pericardial effusion. She was taken up for immediate surgery.

**Conclusion**

Diagnosis is difficult but mortality is high and increases by the hour. Rupture is catastrophic and aortic rupture has an 80% mortality. Up to 20% die before reaching hospital. The diagnosis is not made until postmortem in 15%. Early intervention and control of hypertension dramatically improve the prognosis. Survival has improved greatly over the years. Without surgery the prognosis for patients with involvement of the ascending aorta is poor; 40% die within 24 hours and 80% die within two weeks. Although successful surgery increases the chances of survival to about 80%, operative mortality is in the region of 25%. Late deaths are due to aortic rupture and so repeat surgery is required for: Secondary aneurysm in dissected aorta remote from initial repair.