**LATE ISCHEMIC COMPLICATION OF ATYPICAL BENTALL PROCEDURE, LEADING TO ACUTE MYOCARDIAL ISCHEMIA**

**G. Jolly**, A. Haidry, S. Pal, M. Hasan Khan, W. Aronow

Westchester Medical Center, Valhalla, NY, USA.

**Background:** Bentall procedure with saphenous venous grafts (SVG) for coronary anastomosis is associated with complete thrombotic occlusion of the graft. We present a patient with prior Bentall procedure with aorta-SVG-left coronary artery anastomosis, who developed acute myocardial infarction in the setting of hemorrhagic shock.

**Case:** A 70-year-old male with Marfan syndrome presented with hemothorax and hemorrhagic shock after a motor vehicle collision. He underwent Bentall procedure 30 years ago for ascending aortic aneurysm with mechanical aortic valve replacement and was taking warfarin which was held during resuscitation. Electrocardiogram showed anterolateral T-wave inversions and echocardiogram showed a reduced ejection fraction of 45% with anterior wall hypokinesis. He was noted to have an acute drop in hemoglobin from 13g/dL to 6g/dL with a troponin-I peak of 90 ng/mL. CT angiogram was negative for acute aortic dissection. Coronary angiogram revealed normal right coronary circulation with collateral circulation to the left circumflex and left anterior descending arteries. The left main coronary ostium could not be engaged.

**Decision‐making:** Due to inability to engage the left coronary artery and well developed right-to-left collaterals, chronic total occlusion of the left main was suspected causing demand ischemia in the setting of hypotension and anemia. He underwent coronary artery bypass graft surgery with left internal mammary artery to left anterior descending artery anastomosis and good post-operative recovery.

**Conclusion:** This case reveals a late complication of using SVG for coronary anatomosis during Bentall procedure in a patient with Marfan syndrome and aortic pathology. While the newer modified Bentall procedure has eliminated such complications, we still encounter patients who underwent the original version in clinical practice and hence, knowledge of these complications is important.