TEVAR for Treatment of Late Undiscovered Post Traumatic Aortic Pseudo-Aneurysm

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**INTRODUCTION:** TEVAR has become the rescue clue for most of thoracic aorta aneurysms due to high technical success and lower morbidity and mortality. 

**Background:** False aneurysm can be a consequence of blunt high energy chest trauma. Its presentation is mostly early but in our experience we reported two consecutive cases of late post traumatic presentation.

**Case1:**

40 years old male patient with history of RTA 10 years ago treated with abdominal exploration, splenectomy and inter-costal tube insertion for treatment of hem thorax presented to us with upper back pain which was investigated by high quality CT angiography for the aorta which revealed descending thoracic aortic saccular pseudo-aneurysm with 38 mm diameter.

**Procedure:**

Patient underwent TEVAR using (Cook Zenith Alpha ® tapered stent graft, proximal diameter 30mm, distal diameter 26mm and length covered 108mm ) under general anesthesia in the angio suite, right groin cut down with exposure of common femoral artery and left femoral retrograde puncture. The device delivered through the right femoral cut down and control angiography by pigtail through a left femoral sheath.

**Follow up:**

One month follow up CT angiography had been done for both patient showing no endoleak and good sealing of pseudo aneurysm.

**Conclusion:**

- The diagnosis of chronic traumatic aortic pseudo-aneurysm requires a high index of suspicion.
- Probably the most important step is questioning the patient about a history of prior trauma.
- The aortic isthmus (between the left subclavian & the third intercostal artery) is the commonest injury site.
- We report in our cases with late discovery of post traumatic pseudo-aneurysm following initial old (7 to 10 years old) trauma and successfully treated with TEVAR.

**Case2:**

47 years old male who had history of RTA 7 years ago presented to us with chest pain which was investigated by high quality CT angiography for the aorta which revealed descending thoracic aortic saccular pseudo-aneurysm with 76 mm diameter its main entry point is less than 2cm from the left subclavian artery origin.

**Procedure:**

Patient underwent Chimney TEVAR using (Cook Zenith TX2® TAA Endovascular Graft 36 mm proximal diameter, 32mm distal diameter & 197mm length with Lifesent ® BARD 9mm*58mm) under general anesthesia in the angio suite, right groin cut down with exposure of common femoral artery, left femoral retrograde puncture and left brachial cut down. The device delivered through the right femoral cut down, the covered chimney stent delivered through the left brachial cut down and control angiography with pigtail through the left femoral sheath.

**Follow up:**

2nd case follow up CT

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