ENDOVASCULAR AND OPEN RESCUE INTERVENTIONS IN A CASE OF INADVERTENT FALSE LUMEN STENTGRAFT IMPLANTATION

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Disclosure

Speaker name:
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I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☒ I do not have any potential conflict of interest
MALE 72 Y.O., 85 kg, 182 cm

RISK FACTORS:
- Smoker
- Hypertension
- Dyslipidemia

CLINICAL HISTORY
- Chronic obstructive pulmonary disease
- Suspect myodystrophia (chronic increase of CK)

CARDIOLOGICAL HISTORY
- 2002: ECG alterations (negative T), negative coronaryography
- 2010: paroxysmal atrial fibrillation in antihypertensive therapy (only Amiodarone, no oral anticoagulants)
- 2014: ECG Holter: episodes of paroxysmal supraventricular tachycardia
- 2016: TTE: normal left ventricle, normal ejection fraction, dilatation of ascending aorta (documentation not available)
- 2018: ECG Holter: left branch block
MEDICAL THERAPY:

- Urapidil and labetalol
- Fentanyl and Morphine for pain control
- Hospitalization in Emergency Medicine
- Persistence of pain in the lumbar and retro-sternal sites not responsive to therapy despite optimal pressure control
- On 23.03.2018 the patient underwent a CT-angiography
CT ANGIOGRAPHY 23.03.2018
26.03.2018: onset of intense interscapular and mid-dorsal pain

CT-ANGIOGRAPHY 26.03.2018

Endoprosthesis positioned between the true and false lumen confirmed by the transesophageal ECD control (distal endoprosthesis in the false lumen)
Admission 2 days in IT
29/3 transferred to the department of Emergency Medicine

30.03.2018: reappearance of intense interscapular and mid-dorsal pain

CT-ANGIOGRAPHY 30.03.2018: TEVAR in place but proximal endoleak

EMERGENCY INTERVENTION
Thoracotomy left V intercostal space

- Cannulation of left femoral artery and left upper pulmonary vein
- Left-to-left assistance
- Clamping of the aortic arch between the left carotid artery and the left subclavian
- Clamping of the left subclavian and the distal descending thoracic aorta
- Aortotomy

**Impossibility to remove endoprosthesis and absence of neck for anastomosis packaging**

- Cannulation of the distal ascending aorta (near the clamp) and left femoral vein
- Starting ECC and cooling
- Circle stop (20°)
- Declamping (proximal), removal of endoprosthesis and selective cerebral perfusion (Kazui) and abdominal viscera (from left femoral)
- Fixation of the false lumen and proximal anastomosis between the distal arch (immediately downstream of the left subclavian) and Hemashield 26 mm tubular prosthesis (lateral branch 10 mm) in 3/0 prothene with Teflon reinforcement
- Removal of the cannula in ascending aorta, clamping of the tubular prosthesis and restarting of the perfusion from the lateral branch with systemic heating
- Distal anastomosis between prosthesis tube and descending thoracic aorta in prothene 3/0 with reinforced Teflon
- Removal of the cannula from the left femoral artery left and only anterograde ECC (from the lateral branch)
- Weaning ECC, haemostasis
- Good post-operative course
- RX-chest on discharge
TAKE-HOME MESSAGE

TEVAR is becoming the gold standard for type B TAD. Despite all the advantages of TEVAR over conventional open surgery, and acute or delayed complications may occur.

The reduction of these complications could be achieved only by optimal evaluation of the patients and planning of the procedure, selection of the best stentgraft, and specialized endovascular manipulation.
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