Ruptured Left Subclavian Artery Anastomotic Pseudaneurysm In Young patient with Blalock Taussig Fistula

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Disclosure

Speaker name: Claudia Quintero

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
INTRODUCTION

• Some congenital cyanotic heart defects require surgical repair at early age using pulmonary-systemic connections or fistulas, like Blalock Taussig (Subclavian-pulmonary artery fistula), which increase pulmonary blood flow.

• This kind of connections are the first step in a Fontan definitive surgery.

• Anastomotic pseudoaneurysms represent an infrequent and strange post-surgical complication in medium-long term.

• However, the risk of rupture and the high mortality that it associates, makes necessary an urgent surgical attitude.
CLINICAL CASE

- 29 years old female
- Congenital Trasposition of the Great Vessels and single ventricle heart disease submitted to Blalock Taussig fistula with PTFE prosthesis at age 4
- Massive and sudden hemoptisis
- Maintained tachycardia around 110 BPM
- Blood pressure values that do not exceed 90/60 mmHg
- 9 g / dl of Hb without others significant analytical findings
- EKG: sinus rhythm
- Chest X-ray without alterations
CLINICAL CASE: DIAGNOSIS

Angio CT:
- Large left subclavian artery (LSA) pseudoaneurysm (32.2mm x 27.2 mm x 23.4 mm)
- Immediately distal to Blalock Taussig fistula
- Artery-prosthesis anastomosis
- Surrounded by a large left para-mediastinal hematoma, existing communication with the airway
- Radiological signs were compatible with contained LSA pseudoaneurysm rupture
Urgent surgical intervention was decided:

- Endovascular repair was performed by left retrograde transfemoral puncture to achieve the left subclavian artery catheterization.
- First arteriography showed the presence of an anastomotic pseudoaneurysm in the prevertebral region of LSA, close to the vertebral artery ostium.
- Covered stent was our option to treat the lesion (8 x 27 mm Be-graft, Bentley)
Control Arteriography
- Pseudoaneurysm exclusión
- Vertebral artery patency
  - LSA patency
- Mamary artery patency
The postoperative period was uneventful and the patient was discharged 1 week after the intervention with a control AngioTAC which showed pseudoaneurysm exclusion from the arterial circulation with permeable LSA and the partial reabsorption of the paramediastinal hematoma.
CLINICAL CASE: RESULTS
DISCUSSION

- Endovascular surgery can be beneficial in emergency situations in critical patients, as well as in re-interventions.
- Reduces morbidity and mortality associated with open surgery.
- In this case we opted for an expandable balloon stent because of the greater control that offers.
- This kind of stents allow to preserve the vertebral artery, very close to the pseudoaneurysm due to its predictable behaviour.
THANK YOU SO MUCH
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