PERCUTANEOUS TREATMENT OF GIANT LEFT MAIN ANEURYSM

THYAGO FURQUIM, MD
RODOLFO STAICO MD, ANTONIO KAMBARA MD, RENATO ARNONI MD, JOSE EDUARDO SOUSA MD, AMANDA SOUSA MD, ALEXANDRE ABIZAID MD

INSTITUTO DANTE PAZZANESE DE CARDIOLOGIA
SÃO PAULO - BRASIL
Speaker's name: Thyago Furquim

☐ I do not have any potential conflict of interest to report:
CASE PRESENTATION

- 48-years old male; former smoker (10 years) with a past history of meningioma resection in the previous year.
- Presented typical chest pain at rest on the morning of March 18th, 2016, seeking for medical attention at the ER of a primary care facility within 20 min of the angina onset. The patient was submitted to Thrombolysis with Alteplase (door-to-needle time: 20 min).
- After 90 min post-Alteplase administration there was no angina relief despite >50% reduction in the ST elevation.
- No cath lab at the primary care facility.
- Referred to our Institution for rescue angioplasty.
CORONARY ANGIOGRAM
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CASE PRESENTATION

- Transferred to the I.C.U
- Complete angina relief with I.V beta-blockers and nitroglycerin
- Patient kept under continuous infusion of unfractionated heparin.
- Echocardiogram: LVDFD: 56mm; EF 34%; anterior and apical wall akinesis. RV preserved.
- Heart Team meeting for decision
- Literature Review – Case Reports
  
  No Guideline Recommendations
- CT Scan – better spacial evaluation
  - Surgical point of view – Aneurismectomy (atypical location) + Bypass
  - Interventionist point of view - Bifurcation Technique + Coil embolization
- Option for percutaneous treatment - risk of new embolic events - Patient REFUSED surgery

Aggarwal V, Mishkel G, MD, Goswami N; Percutaneous Exclusion of a Rapidly Enlarging Left Main Coronary Artery Aneurysm Using Coils and an Amplatzer TM Septal Occluder; Catheterization and Cardiovascular Interventions 2016.
PERCUTANEOUS APPROACH

MICROCATHERETER PROGREAT 2,7F – TERUMO INTERVENTIONS
PERCUTANEOUS APPROACH

COMPLIANT TREK BALOON 3.5/20mm

PROMUS ELEMENT 4.0/32mm at 8 atm
PERCUTANEOUS APPROACH

Re-crossing guidewires

COMPLIANT MINI TREK BALOON 2.0/12mm, 2.5/12mm; 3.0/12mm
PERCUTANEOUS APPROACH

MICROCATHETER PROGREAT 2,7F – TERUMO INTERVENTIONS

FRAMING COIL AZUR 18mm/44cm
(Terumo Interventions)
PERCUTANEOUS APPROACH
Percutaneous Approach

Post dilatation Non Compliant Balloon NC Quantum Apex 3.5/20mm and 4.5/8mm at 25 atm
PERCUTANEOUS APPROACH

Xience Prime 4.0/18mm at 12 atm - TAP Technique

Kissing balloon
PERCUTANEOUS APPROACH
PERCUTANEOUS APPROACH
CASE PRESENTATION

- Procedure with light sedation

- Femoral route; 7F introducer sheath

- Intervention performed under ASA only. Prasugrel 90 mg POS load dosage in the cath lab at the end of the procedure.

- I.C.U with double antiplatelet therapy – ASA + Prasugrel recommended for 1 year
6-MONTH FOLLOW-UP

• ASYMPTOMATIC

• QUALITY OF LIFE EVALUATION – HIGH

• PROGRAMMED INVASIVE FOLLOW UP

• MEDICATION:
  CARVEDILOL 12,5MG 2X
  ENALAPRIL 10MG 2X
  ASA 100MG 1X
  PRASUGREL 10MG 1X
  ATORVASTATIN 40MG
6-MONTH INVASIVE FOLLOW UP
6-MONTH INVASIVE FOLLOW UP
6 MONTHS RESTUDY
6-MONTH INVASIVE FOLLOW UP
CONCLUSION

• FIRST CASE OF NON PROTECTED LEFT MAIN GIANT ANEURISM PERCUTANEOUS TREATMENT WITH COIL EMBOLIZATION

• THIS STRATEGY IS POSSIBLE AND FEASEBLE IN SELECTED CASES

• IT REPRESENTS AN OPTION FOR PATIENTS WITH HIGH SURGICAL RISK

• DURATION OF DAPT IS UNKNOWN