

Internal carotid pseudoaneurysm treated with diversor flow endograft

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Disclosure

Speaker name: Pablo Aragón

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

- Incidence : ICA pseudoaneurysms < 0.5%
- Origin: post-traumatic / post-surgical or atherosclerotic disease.
- Treatment: Those symptomatic or with a continuous exponential growth
 - **Conventional surgery** associated to a high morbidity/mortality
 - **Endovascular treatment** through the covered or bare stents implantation and / or embolization.

CLINICAL CASE

- 61years old female
- PA:
 - Hypertension
 - V Leyden factor
- Hard pulsatile mass in left cervical region with progressive growth during the last 2 months
 - No traumatic
 - No surgery history



CLINICAL CASE: DIAGNOSTIC



SAV ultrasound:

- ICA aneurysms sac
- 3 cm diameter
- Thrombus and flow inside
- Aneurysm ?
Pseudoaneurysm ?
Carotid dissection?

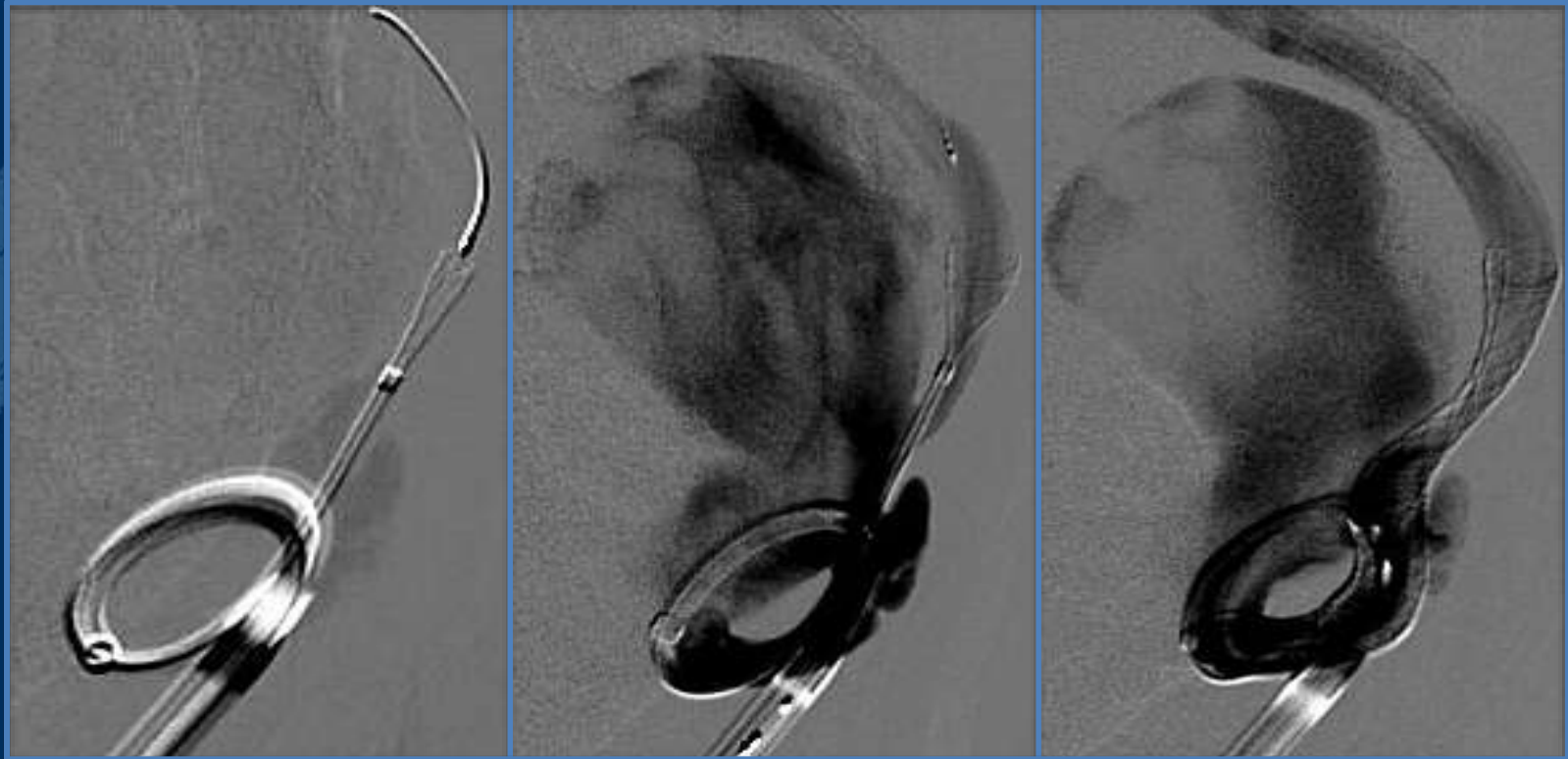
CLINICAL CASE. DIAGNOSTIC



Diagnostic angiography:

- Pseudoaneurysm distal to ICA origin
- 33mm in maximum diameter

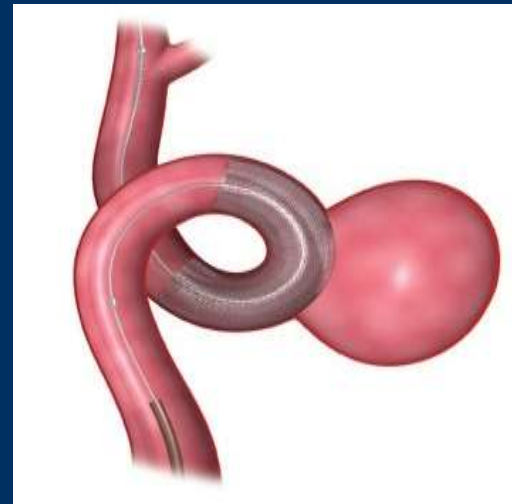
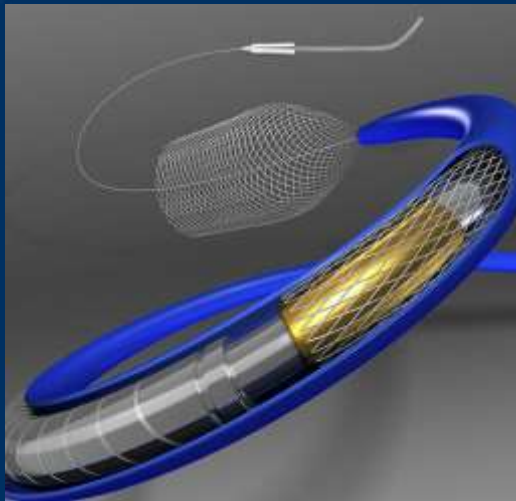
CLINICAL CASE. TREATMENT



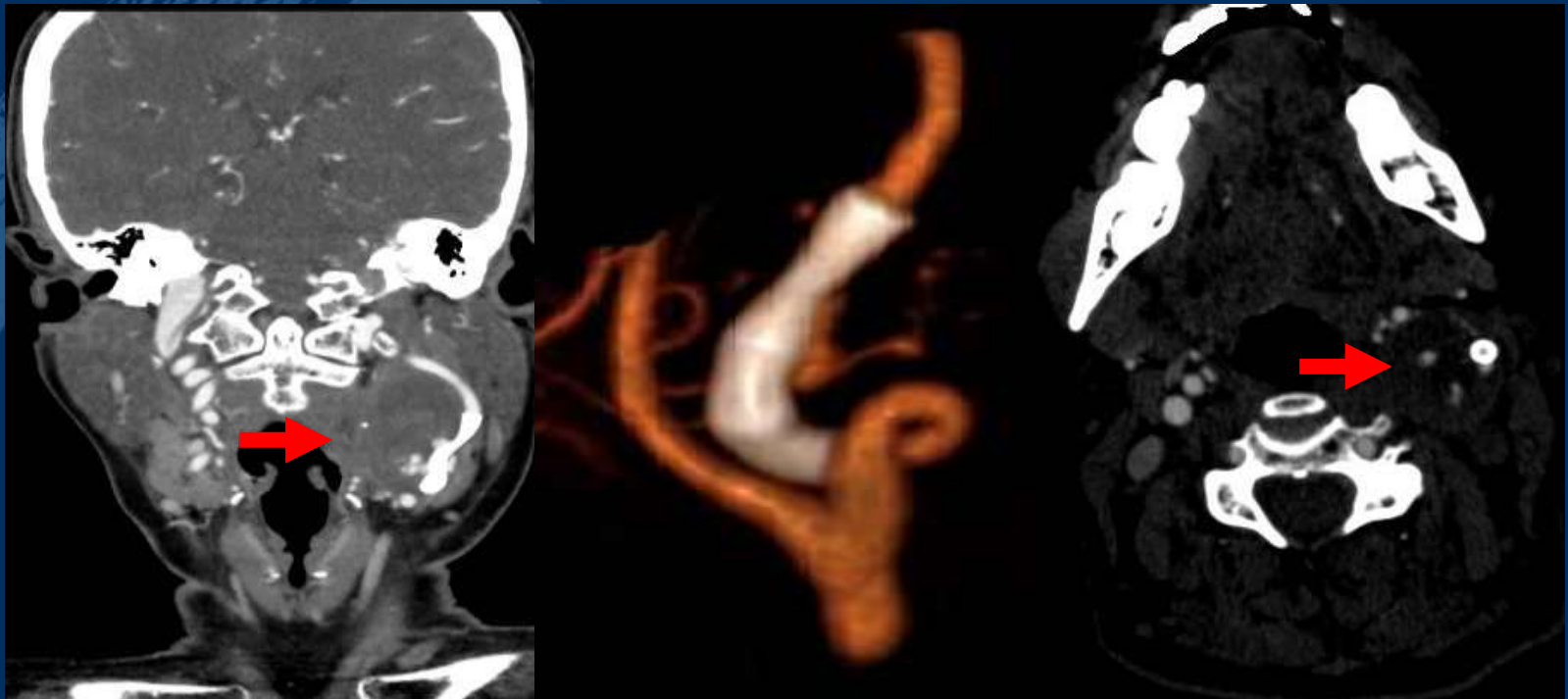
PIPELINE (Medtronic. Santa Rosa. CA) 4.5 x 35 mm flow diverter endoprosthesis implantation
Clopidogrel load (300 mg)
Double antiplatelet therapy after intervention

CLINICAL CASE: TREATMENT

- ❖ Chromo-cobalt and platinum stent
- ❖ Able to be apathetic to any vessel morphology (flexibility)
- ❖ Acts by decreasing the flow into the aneurysmal sac and favoring reepithelialization of the vessel being immersed into the wall at the same time that induce the sac thrombosis



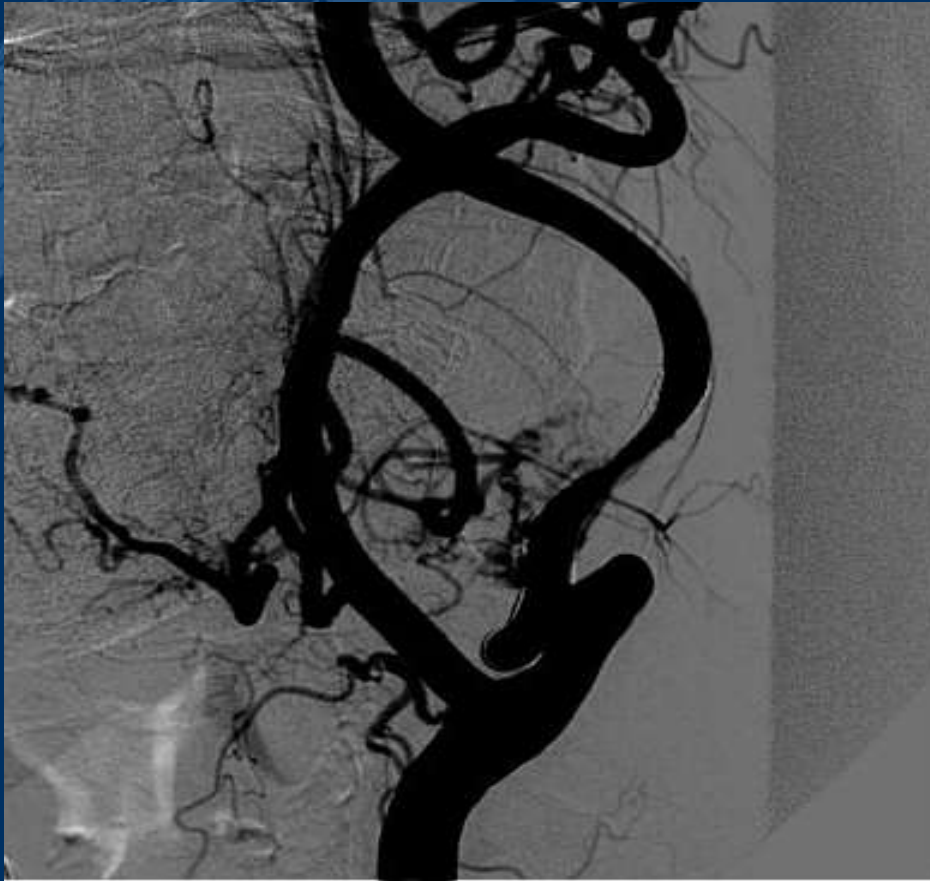
CLINICAL CASE: RESULTS



1 month angio-CT:

- ❖ Properly implanted Stent
- ❖ Stent patency
- ❖ Partially thrombosed pseudoaneurysmal
- ❖ Minimal endoleak.

CLINICAL CASE. RESULTS



3 months control
Arteriography:

- ❖ Stent patency
- ❖ Completely thrombosed sac
- ❖ No endoleaks

CLINICAL CASE. RESULTS



6-12-24 months SAV

Doppler ultrasound

control :

- ❖ Thrombosed
pseudoaneurysmal sac
- ❖ Diverter stent patency.

Progressive decrease in neck mass with totally disappeared 6 months later and continues double anti-platelet without other adverse events

DISCUSSION

- ❑ Flow diverter stents, used until now for cerebral aneurysms treatment in small size vessels ,could consolidate as a durable and curative option for the treatment of carotid pseudoaneurysms
- ❑ These grafts allow a progressive remodeling of the initial anatomy in the damaged vessel favoring the endothelialization of the same in addition to the thrombosis of the sac
- ❑ They offer a physiological alternative to conventional stents
- ❑ They allow a full coverage of the lesion without the need to apply other additional materials
- ❑ Should be an alternative to covered stents and bare stents plus embolization

LINC

THANK YOU SO MUCH



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