

# **CAROTID ANGIOPLASTY WITH MICRO NET-COVERED EMBOLIC PREVENTION STENT SYSTEM, C GUARD STENT IN A PATIENT WITH STROKE ASSOCIATED WITH LATE CAROTID STENT THROMBOSIS TO PREVENT MICRO-EMBOLISMS. FIRST CAROTID ANGIOPLASTY TREATED WITH C-GUARD STENT IN ARGENTINA.**

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## **CLINICAL CASE**

A 76-year-old male patient with a history of transient ischemic stroke with severe lesions of both carotid arteries treated percutaneously with stents a year ago. He has diabetes, ex-smoker, hypercholesterolemia and arterial hypertension. She had severe peripheral vascular disease treated with previous angioplasty.

He suspends dual antiplatelet therapy in pre-surgical dentistry. He presents dysarthria and hemiparesis of the right side, most signs and symptoms disappear within a 30 minutes.

## **IMAGING**

By doppler of neck shows images correlated with images of in-stent thrombosis

Weigh diffusion magnetic resonance image shows positive image in the left parietal frontal area. Fig 1.

## **INDICATION FOR INTERVENTION**

Sense of using a Micro Net – covered embolic prevention stent system technology, type C-Guard to prevent embolisms and micro-embolisms associated with this stent thrombosis, many of the embolisms occur between 24 to 48 hours they could be produced through the struts of stents.

## **INTERVENTION**

We used a femoral approach a guide catheter JR Boston Scientific , Boston, MA, USA. We performed angiography that evidences patency of right carotid stent without any complication and he presents left carotid stent with thrombotic intra-stent image Fig 2, therefore, a protective filter is placed with a FilterWire EZ™, Boston Scientific, Boston, MA , USA and later a C-guard stent 7.0 x 40 mm Inspired MD®, Boston, MA, USA, is implanted directly. Subsequently post dilation is performed with 5.0 X 20 mm compliant Rujin balloon. Terumo, Tokyo, Japan.

He did not present new neurological signs and he was discharge with clopidogrel, aspirin and rosuvastatin at 48 hours.

At 8 months of follow-up the patient is without new neurological events.

## **LEARNING POINTS OF THE PROCEDURE**

In high-experience centers carotid angioplasty is a safe alternative for symptomatic patients, including patients with stroke in evolution, as well as asymptomatic patients with indication for revascularization.

It is compatible for use of standard carotid angioplasty in all indications.

It is effective for the prevention of micro and macro emboli that occur during the procedure and in the first 48 hours.

The stent carotid thrombosis is a rare situation that can bring deleterious consequences.

The carotid disease is a situation of maximum complexity that requires the articulation of a team with high experience in its treatment and technology of innovation in material to be used for the performance of effective procedures.

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Figure 1. Several images of embolism are seen in MRI

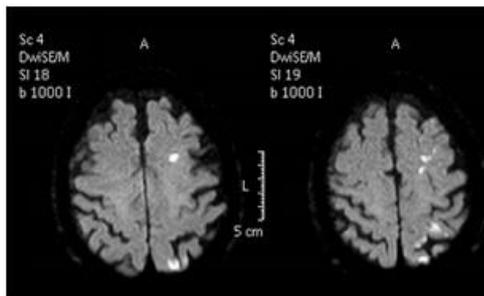


Figure 2. 2a. Thrombotic image is observed on the previous stent. 2b. Delivery of the C-guard stent directly over the thrombotic region. 3c. Dilatation with compliant balloon. . 4c. Adequate stent expansion is observed in angiographic imaging. 5c. Angiographic image of patency cerebral vessels.

