

## LEARN NOT TO CONVERT A SIMPLE CASE INTO COMPLICATED ONE CAROTID INTERVENTION

Raman Chawla,<sup>1</sup>

<sup>1</sup> Caremax Superspeciality Hospital; Intervention Cardiologist; Cardiology

### History

- 85 yrs male
- Non – hypertensive, non – diabetic,
- Presented with complain of recurrent tia's as right hemiparesis from last two months

### Investigation

- Routine blood biochemistry normal
- Electrocardiogram normal
- Echocardiography essentially normal
- Carotid doplor study
  - Normal right sided carotid system
  - Significant increase in systolic and diasystolic velocity of left carotid system in both internal as well as external carotid areteries
- Ct head
  - Essentially normal

### Imaging



### Indication for Intervention

#### CAG

- Normal type-ii aortic arch
- Normal right carotid and vertebral system with normal intracranial vessel
- Normal left vertebral system
- Normal left common carotid artery
- 80% lesion of left internal carotid artery
- 99% lesion of left external artery

## Intervention

### Plan

- Carotid endarterectomy / carotid stenting
- stenting of left internal carotid artery

### Procedural step

- Wire in common carotid artery
- Usual telescoping method
- 7fr. Long sheath in left common carotid artery
- 6mm angio guard used
- Direct tapered closed cell stent
- 5mm balloon post-dilatation done
- Angio guard removed
- Check shot taken
- Good end result
- Patient started getting weakness of right upper limb
- What happened?????????
- Stent was put in external artery
- What options we had?
- Tried to cross angioguard into internal carotid artery through stent – failed
- Vessel re – crossed with 0.014 choice pt extra support
- Pre dilatation of lesion through the stent with 3.0 x 20 mm balloon done
- Unsuccessful crossing of self expanding stent through struts of stent
- Tried dilating stent struts with 5.0 x 20 mm balloon – but it ruptured
- Tried pushing 6f sheath through stent struts on 5f multipurpose catheter on long wire
- Tried guiding through the sheath across stent
- Tried dilater of the sheath to dilate stents struts
- Any suggestions
- Again tried self expandable stent through the self expandable ,stent – failed
- Any suggestions??????
- Then finally balloon mounted stent crossed through stent struts
- Post dilated with 5.0 x 20 mm balloon

### Sequels :

- Stable on table
- Night g.t.c
- Unconscious
- Quadriplegia
- Hypokalaemic paralysis
- Stable discharged after 3<sup>rd</sup> day

## Conclusions

- Exact anatomy to be analysed
- Self expandable stent struts cannot be dilated
- Crossing through self expandable stent very difficult
- **Option --1**
- to take the sheath or guiding across the stent struts into ica
- **Option--2**
- to dilate the stent struts with another cathater
- Methods
  - Cross over shaft of balloon in ica
  - Cross over diagnostic catheter in ica
  - Dilater of sheath through struts into ica
  - Mother daughter technique
  - Balloon expandable stent
- Balloon expandable stent although not a choice for carotid but can be helpful in rescue