

# Retrograde Angioplasty in Left Common Carotid Ostial Sub total Occlusion with type 1 and 5 Takayasu Arteritis in a young Lady

**Dr AM Thirugnanam, Senior Interventional Cardiologist,**

[www.cardiologycourse.com](http://www.cardiologycourse.com)

**Dr AM Thirugnanam, Senior  
Interventional Cardiologist,  
Ipcard Cardiac Care Center, Hyderabad,  
India.**

I have no relevant financial relationships

# Categories of Takayasu Arteritis

Type-1: Branches of the aortic arches.

Type-2a: Aortic arch and Ascending aorta.

Type-2b: Ascending aorta, aortic arch and descending aorta.

Type-3a: Thoracic descending, abdominal and renal arteries.

Type-4: Abdominal and renal arteries and both.

Type-5: Entire aorta and its branches.

# Takayasu Arteritis

- Name after Japan Ophthalmologist Mikito Takayasu.
- Commonly occurs in young women, as young as 6 months.
- It can manifest as isolated, atypical and catastrophic.
- It can involve any or all the major organs.
- Inflammation can be stenotic, occlusive or aneurysmal.
- Female/Male ratio= 1.6:1
- Age- 6-63yrs

# Symptoms

- Head ache= 50-70%
- Malaise= 35-65%
- Arthralgia= 28-75%
- Fever= 19-35%
- Weight Loss= 10-18%

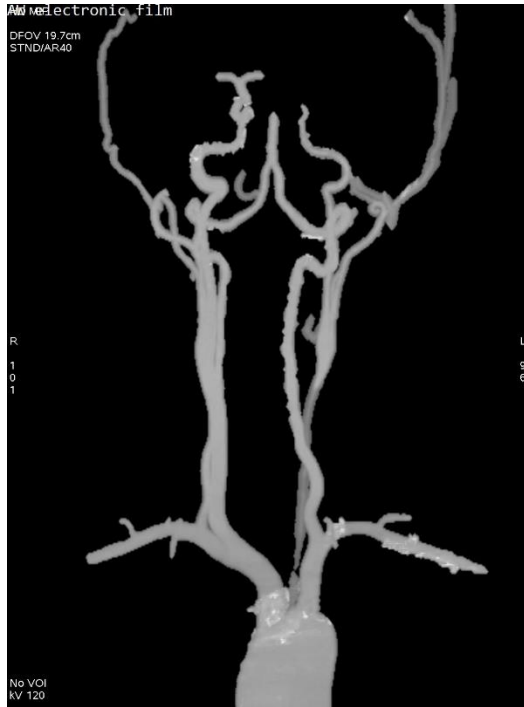
# Complications

- Stroke
- Intracranial hemorrhage
- Seizure, graft stenosis
- Ischemia, organ Failure
- Aortic dissection, Fetal injury
- Valvular heart diseases, retinopathy
- Neurovascular complications

# 23 yrs old lady with type 1 and 5 Takayasu arteritis

- A married young lady had complaints of neck swelling, occasional giddiness, and frequent numbness and pain in both the lower limbs with intermittent low grade fever for 6-7 years.
- Patient was treated symptomatically and not diagnosed TA.

Initial diagnostic CTA of Carotid arteries showed sub total occlusion of ostio proximal left common carotid up to bifurcation

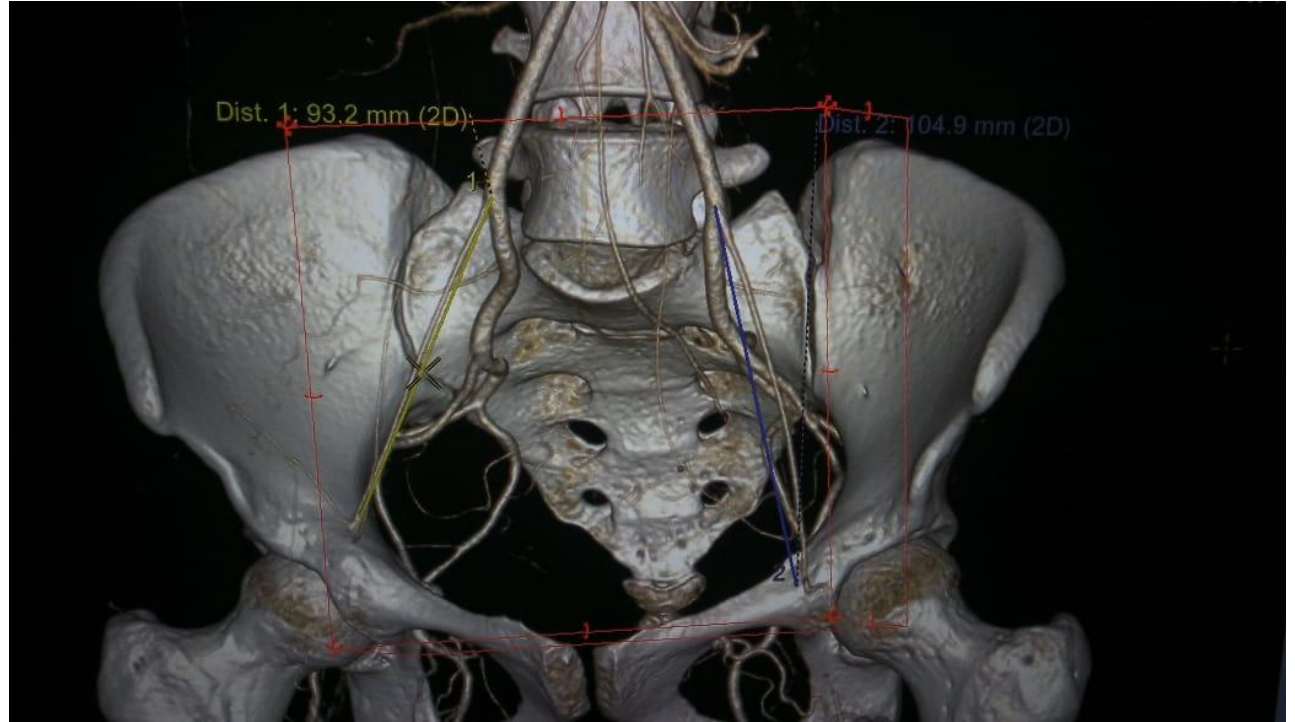
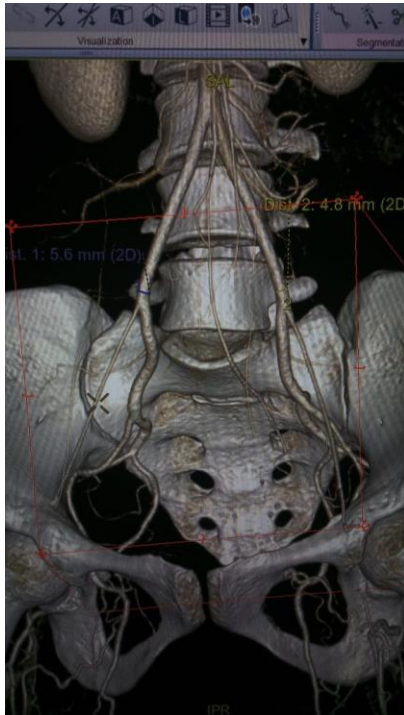


Total occlusion  
of LCCA





# Sub total occlusion of bilateral common femoral arteries



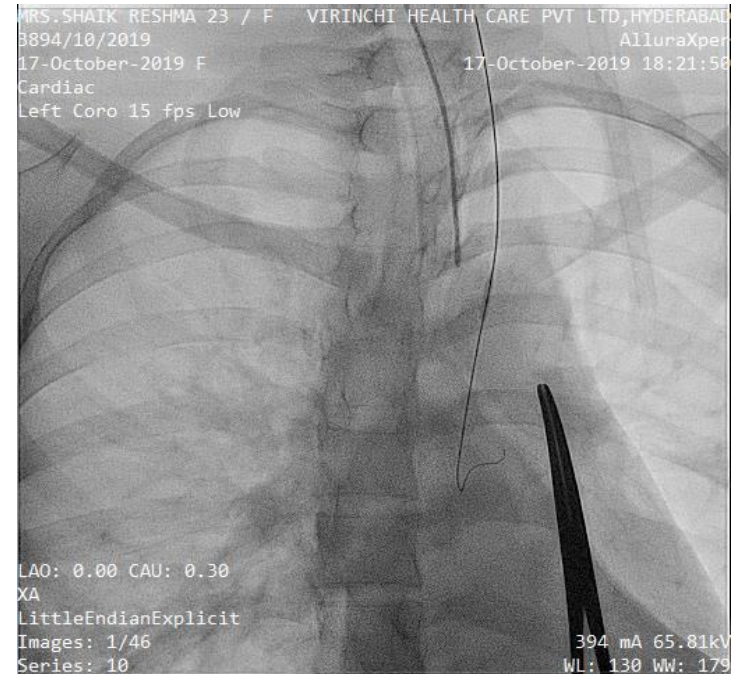
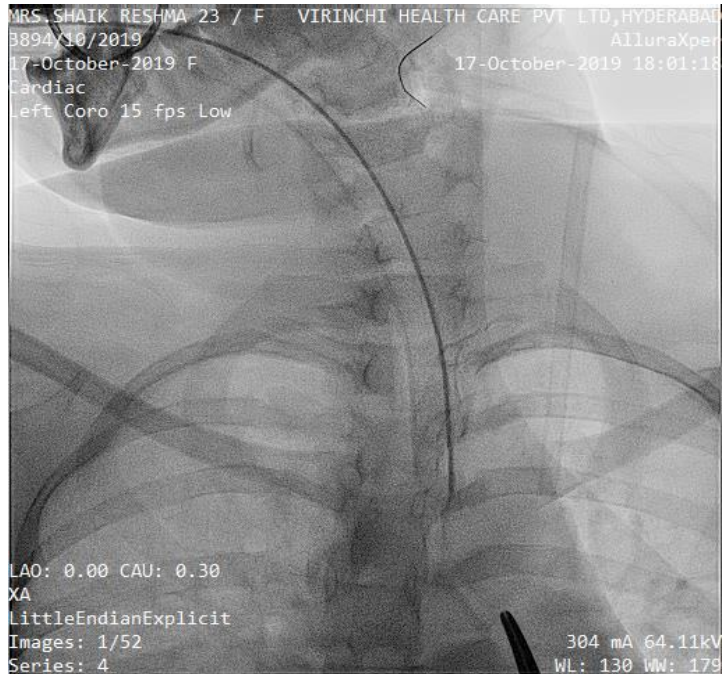
# First Staged Procedure for LCCA

- LCCA was unable to access through femoral arteries.
- LCCA can not be approached through radial arteries because of positioning of distal protection device and almost like CTO lesion at ostio proximal segment.
- No guide catheter would support in this anatomy.
- Lesion length is 130mm from LCCA ostial to bifurcation.

# Retrograde Carotid Angioplasty under GA via external carotid

- Patient was given general anesthesia.
- External carotid arteriotomy done and connected with a graft. 7Fr sheath kept just proximally in the graft.
- Through the sheath with the most toughest situation stented entire left common carotid artery with 3 stents.

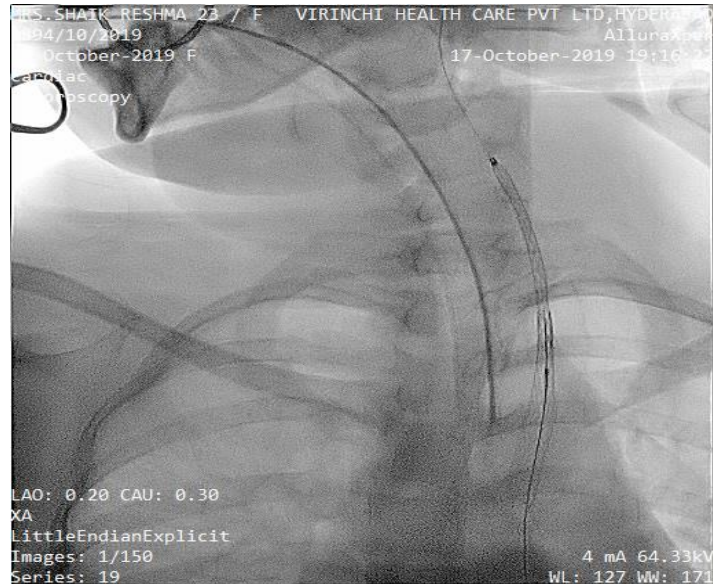
# Wiring with Gia 2 under balloon anchoring



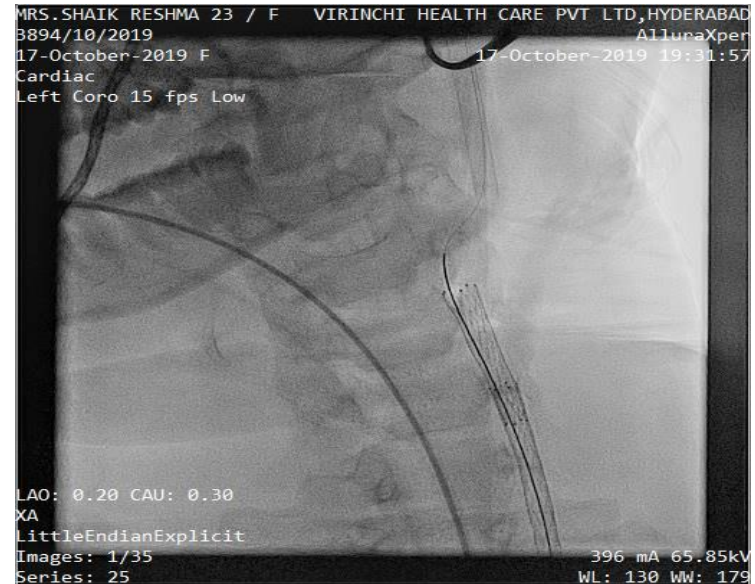


# EV3 open cell stents, because it's non athero-thrombotic physiology

## 3 stents were deployed



## Final result



# Drugs during the Procedure

- Internal carotid was not banded.
- Bivalirudin bolus and infusion based on body weight.
- Loading dose of Aspirin 325mg, Clopidogrel 300mg.
- Bivalirudin infusion continued for 6 hrs after procedure.