SUBCLAVIAN ARTERY-
CHRONIC TOTAL OCCLUSION
STENTING

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Clinical History

- Mr RK
- 60/M
- Hypertension
- Left UL claudication X 6 months
- Sub Clavian steal phenomenon
CT angiogram of Aorta and arch vessels

- Left Subclavian Artery 100% occlusion
- B/L Internal carotid artery 50% stenosis
Tortuous Iliac arteries
Right common Iliac 50% stenosis and diffuse plaque
Interventional Strategy

- Dual route approach
- Left radial and Left femoral approach
- Left radial is absent and brachial artery feeble
- Use CTO wires
- Placement of stent from femoral route
Left Radial 6F radial sheath, JL 3.5, 6F guiding catheter
Left femoral 7 F sheath, RCA diagnostic catheter
Stride microcatheter 2.2 F
Miracle 4.5, 0.014” guide wire
Lesion crossed with the miracle wire
Pre dilatation with Sprinter legend
2.5x20 mm balloon (medtronic)
Cook ATB balloon 5.0x20mm
Multiple inflations given
lesion pre dilated with Cook ATB balloon 6.0x40mm
Shuttle sheath 7F, from left femoral route
Road runner 0.018” guidewire crossed the lesion
Thrombus and plaque
Aspiration done with guiding catheter from radial route
Eptifibatide (Integrillin) infusion
SMART control Nitinol self expanding
9.0x60mm stent deployed
Post dilatation done with 8.0x40 mm Cook ATB balloon
Final Result
Discussion

- Atherosclerotic subclavian artery stenosis in 17%
- Angiographic flow reversal with subclavian steal phenomenon in 2.5% in proximal SCA occlusion
- Endovascular approach safe and high technical success rate-87%
- 1 year primary patency and secondary patency are 83% and 100% respectively
Take Home message...

- Dual route approach useful in CTOs
- CTO wires for crossing the lesions
- Gp IIIb IIIa Inhibitors in thrombus containing lesions