Hand Salvage Through Catheter Directed Thrombolysis With Injection Reteplase (rt-PA) & Heparin
And
Drug Coated Balloon (DCB) Angioplasty For Athero-matous Plaques In Upper Extremity Arteries
Disclosure

Speaker name: .................................................................

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
Specific Object & Purpose of study

Catheter directed Thrombolysis and Drug coated balloon angioplasty in the Modern management of Upper extremity (Hand) Extensive Peripheral Arterial thrombosis with long segment Athero-matous plaques causing Acute critical limb ischemia (CLI) & Dangerous changes in hand.
84 year old female

- Known Atrial fibrillation, Cardiac (LVF) failure.
- Sudden onset of Left hand coldness, severe ischemic resting pains.
- Absent Brachial & Radial arterial pulsations.
- No blood pressure recorded in Left hand.
- Poor Oxygen saturation on (SPO2)
Subacute stage extensive Left hand Arterial thrombosis without any collateral arteries.
Impending dry gangrene.

Contrast Angiography DSA Shoots
Thrombosis at atherosclerotic stenosis at Distal brachial- Radio-Ulnar arterial segment.
Patient was at the danger of "Hand Amputation".

Atherosclerotic stenosis at Distal brachial- Radio-Ulnar arterial segment.
Double length 0.035 Terumo guide wire passed smoothly till distal Radio-Ulnar artery.
Catheter directed Thrombolysis with Inj. Reteplase & Heparin in bolus dose
(Inj. Rt-PA=9 mg in 10cc NS & Inj. Heparin=5000 Units)
24hrs Systemic local infusion done through Multi-sidehole, Fountain catheter (5Fr-20cm infusion length)
(Infusion dose: Inj. Rt-PA=0.5 mg/Hr & Inj. Heparin = 1000 U/Hr)
Post Thrombolysis check shoots revealed almost complete revascularisation & perfusion of Left hand arteries with weekly palpable distal pulsations at Wrist joint.
However "Residual Atheromatous plaques" seen at distal brachial till Radio-ulnar bifurcation obstructing distal arterial run off.
5x40mm In.Pact Admiral drug coated balloon used for PTA Plasty and dissolving "Atheromatous Plaques"
Case No.02 - 60 yrs/Female (Hand Salvage case)

- Left hand Blackening of Index, middle, ring fingers since 3 weeks (Dry gangrene of fingers).
- Ischemic pains, tingling, numbness, loss of sensation below elbow increasing.
- Moderate pulsations of distal branchial artery in Cubital fossa.
- Blood pressure recordable (150/100 mm of Hg)
- Pulse oxygen saturation (SPO2) not recordable.
Subacute to chronic ‘Radio-Ulnar arterial bifurcation’ Athero-thrombotic occlusion.
Catheter directed Thrombolysis with Inj. Reteplase & Heparin in bolus dose

(Inj. Rt-PA=9 mg in 10cc NS & Inj. Heparin=5000 Units)
Results

- Post Thrombolysis check shoots revealed almost complete revascularisation & perfusion of upper limb (Hand) arteries.
- Well palpable distal pulsations at Wrist joint (Distal Radial artery)
- "Residual Atheromatous plaques" are vanished (Dissolved) after inflating In.Pact Admiral drug coated balloon (Medtronic Inc. USA).
- Good distal run off seen from brachial till distal Radio-ulnar arteries & palmar arch.
Case No.03 - 38 yrs/Female (Hand Salvage case)
Conclusion

• Excellent results of hand salvage through Catheter Directed Thrombolysis & Drug Coated Balloon Angioplasty.

• Entire Hand Arteries are well recanalised with good pulsations, BP Recordable, Warm extremity, No ischemic pains, Pulse Oxygen saturation above 95%.

• No need of Subclavian or Brachial arterial stenting required.

Old age female's Hand is Saved from Amputation.
THANK YOU

NAMASTE