OCT GUIDED CTO CROSSING TO MINIMIZE STENTING DURING SFA RECANALIZATION:

OCHELOT CASES REVIEW

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The exemplary case described below demonstrates the value of real-time imaging to guide luminal crossing of a long CTO. OCT guidance during crossing confirmed the absence of dissections and eliminated the need for re-entry.

During the OCT-guided crossing, the navigation of the catheter relies on positioning the Middle Marker opposite to the EEL, which enabled boring through the stenotic plaque while maintaining consistent intravascular positioning (true lumen crossing).

CHRONIC TOTAL OCCLUSIONS IN SFA

- ~40% OF PATIENTS TREATED FOR PAD
- ANGIOGRAPHIC (2D) COMPLICATIONS:
  - PERFORATION
  - DISSECTION
  - EMBOLIZATION
- SPOT STENTING, WHEN COMPARED TO LONG STENTING, LEADS TO FAVORABLE PATENCY AND FREEDOM FROM TLR AT 2 YEARS

Past Medical History:
66 y.o. male, HTN, and DM

Diagnosis:
Severe claudication right leg - ABI 0.53

Procedure:
SFA CTO:290-mm. Intraluminal crossing: Ocelot 6 Fr, proximal CTO to distal cap. No fluoroscopy was used for the CTO segment crossing.
Therapy: 60mm spot stenting

Key Points:
1) OCT allowed precision spot stenting
2) Enabled No-radiation crossing

SUMMARY

- THIS CASE SERIES REPORTS ON A SINGLE CENTER EXPERIENCE USING OCT GUIDED CTO RECANALIZATION WITH THE OCELOT CATHETER FOR LUMINAL CROSSING IN ORDER TO REDUCE STENT LENGTH NECESSARY FOR THERAPY.
- BETWEEN JUNE 2013 AND MAY 2015, 37 LESIONS WERE CROSSED IN OUR CENTER, USING OCT GUIDANCE WITH THE OCELOT CATHETER. OCT DETERMINATION OF LESION MORPHOLOGY AND LOCATION DURING CTO CROSSING WAS ASSESSED TO DETERMINE OPTIMAL THERAPY, INCLUDING ZONES REQUIRING STENT PLACEMENT.
- 100% OF CTO’S (N=37) WERE CROSSED SUCCESSFULLY. OCT CONFIRMED LUMINAL CROSSING IN 97% OF CASES (N=36). MEAN LESION LENGTH TREATED WAS 26.5 ± 11.3 CM. MEAN STENT LENGTH WAS 13.3± 10 CM, APPROXIMATELY 50% OF TOTAL LESION LENGTH.

CONCLUSION

- OCT GUIDED CTO CROSSING USING OCELOT CATHETER PROVIDES SAFE AND EFFECTIVE CTO CROSSING WHILE ENABLING MINIMIZATION OF STENT PLACEMENT WITHIN LONG SFA CTO LESIONS.