

Phoenix with IVUS case review

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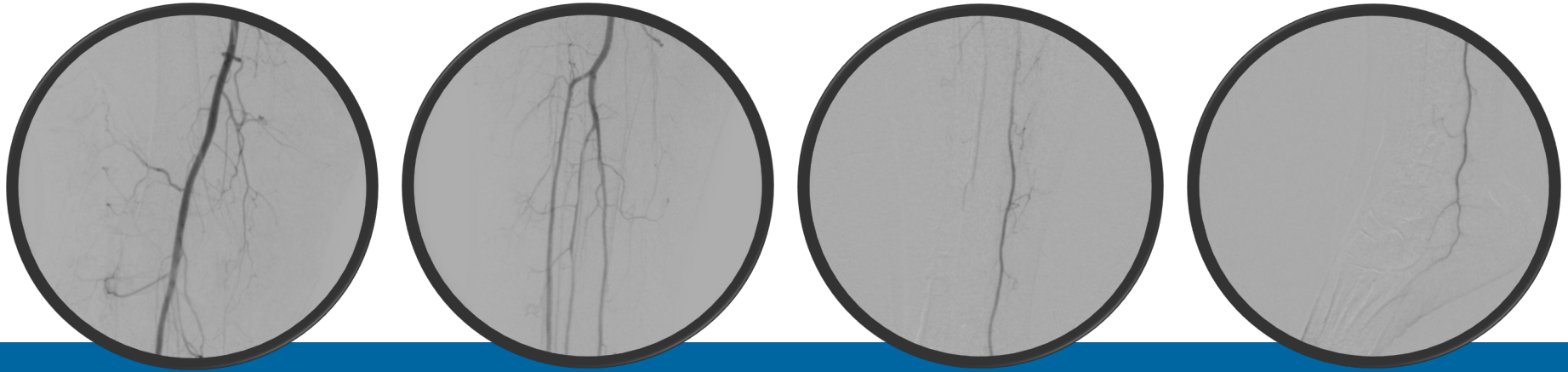
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Patient presentation

65-year-old female referred due to life-style limiting claudication with a history of:

- Diabetes
 - Hypertension
 - Renal insufficiency
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- Referred due to life-style limiting claudication
 - Had resting pain
 - Underwent non-invasive peripheral arterial assessment that demonstrated a stenosis in the pedal plantar region

Initial angiogram

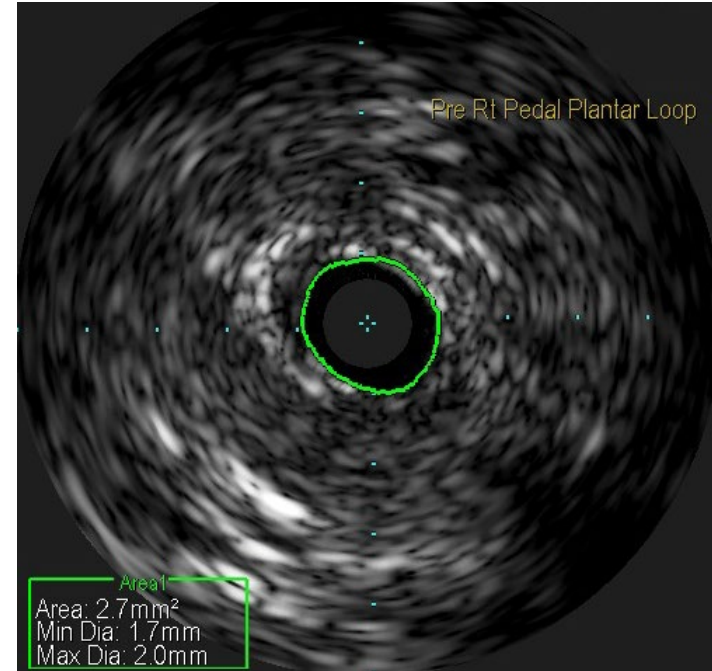


- Initial angiogram demonstrated patent SFA with three vessel runoff and a CTO in the pedal plantar loop.
- Based off the angiogram and the patient's clinical presentation what should we do?
- What is the size of the vessel and how long is the lesion?
- What type of disease does the patient have? Is it highly calcified? If there is calcium where is it located in the vessel? Is the calcium superficial or deep?
- My initial strategy was to cross the lesion with a wire and perform a balloon angioplasty with a 2.0 x 100 mm balloon.

Initial IVUS assessment

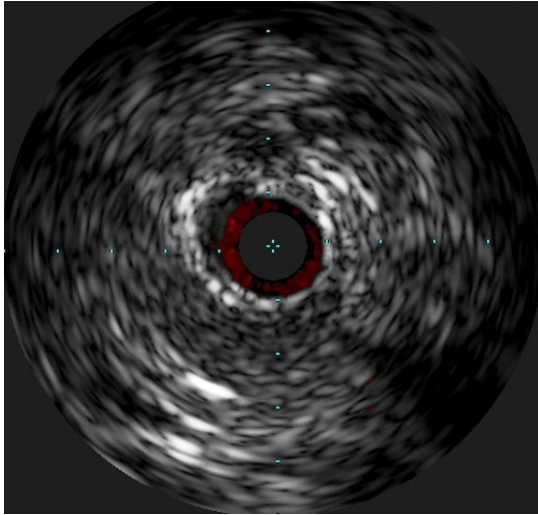
IVUS identified:

- The length of plaque and vessel diameter of 2.5 mm, thus aiding the physician in determining the appropriate sized and length of balloon to use
- The type of disease present and size of vessel was suitable for treatment with the Phoenix 1.8 mm atherectomy system
- Beginning lumen area before treatment is 2.7 mm²

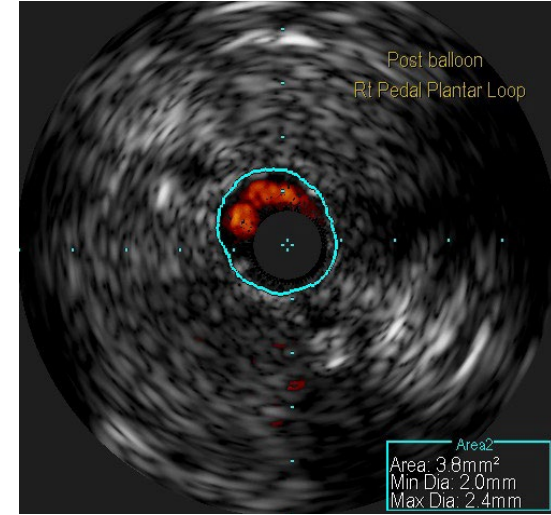


1.8 mm atherectomy device and angioplasty

Atherectomy performed by
Phoenix 1.8 mm x 149 cm



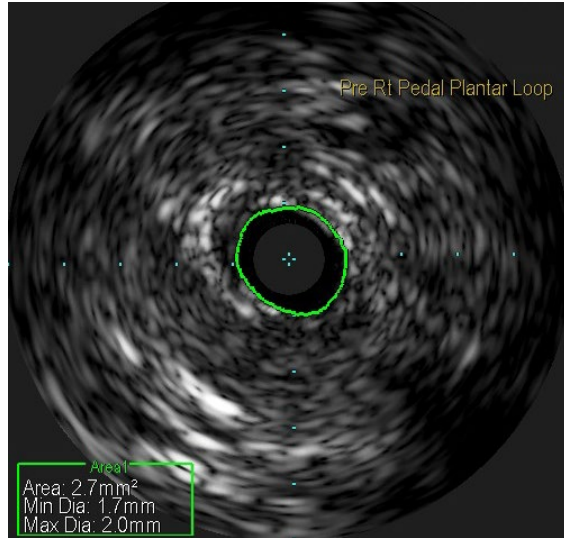
IVUS immediately post atherectomy and
angioplasty with 2.5 x 150 mm Sterling balloon



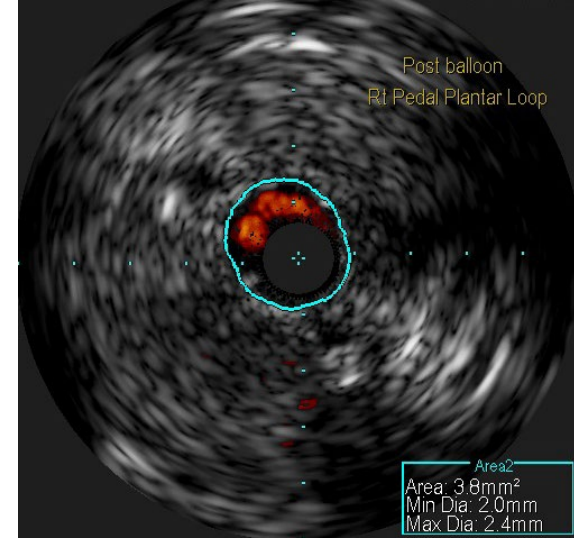
- IVUS performed directly after atherectomy and again post angioplasty to determine adequacy of therapy due to patient having renal insufficiency issues
- IVUS images showed no adventitial injury or flow-limiting dissections

1.8 mm atherectomy device and angioplasty

Pre therapy IVUS



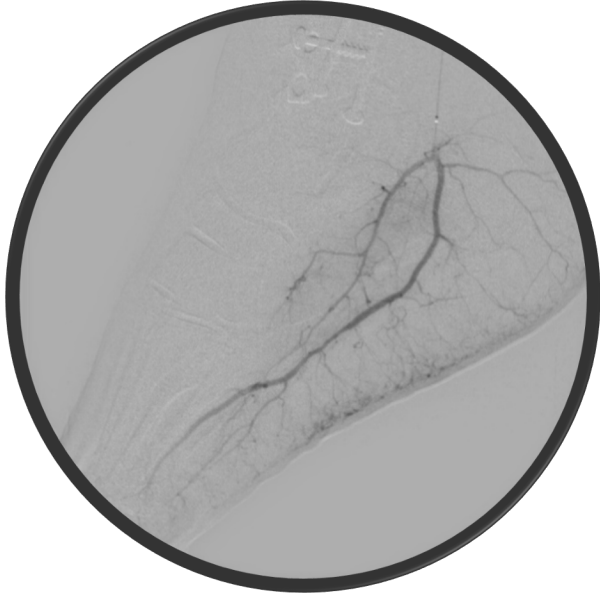
Final post therapy IVUS



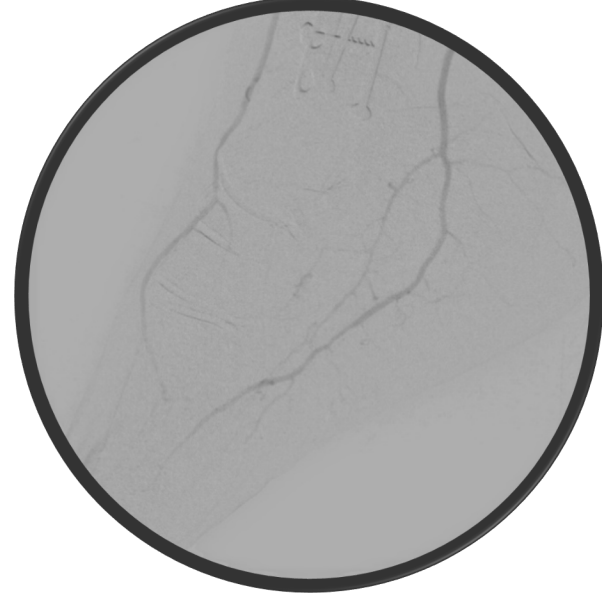
71% luminal gain post atherectomy and angioplasty

Final angiogram

Pre therapy angiogram



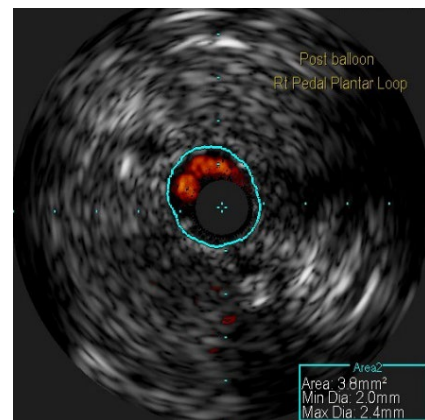
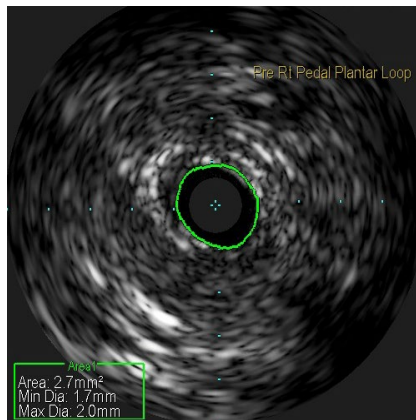
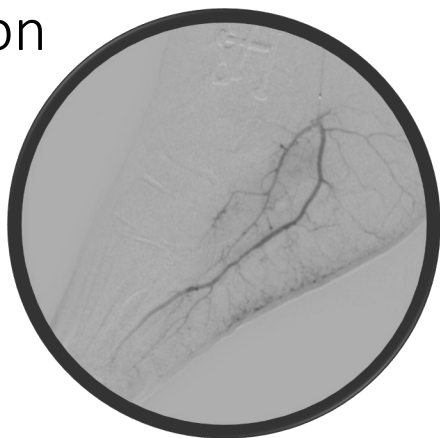
Post therapy angiogram



Case performed with 15 cc of contract and 12 minutes of fluoroscopy time

Conclusion

*Disclaimer:
Intraluminal crossing of the wire through the lesion was achieved first prior to therapy being delivered



- Angiogram demonstrated patent SFA with three vessel runoff and a CTO in the plantar arch.
- The initial IVUS assessment helped to determine the size of the vessel and plaque type was suitable for treatment with the 1.8 mm Phoenix device and a 2.5 x 150 mm Sterling balloon.
- 1.8 mm Phoenix atherectomy system was utilized to debulk the lesion prior to balloon angioplasty
- Post IVUS and angiogram confirmed adequacy of Phoenix with balloon angioplasty. Specifically, IVUS images showed a 71% increase in luminal gain achieved with no adventitial injury or major dissection.
- This case was performed with 15 cc of contrast and a final fluoroscopy time of 12 minutes.

