Successful Intraluminal Stenting Outside of the Subintimal Stent Occlusion in the Common Iliac Artery

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Case Presentation

- **Chief Complaint**
  - Intermittent Claudication (Rutherford 3)

- **Present Illness**
  - A 78 year-old-man suffered from intermittent claudication in his left leg.

- 2 months ago, he was referred to another hospital and endovascular therapy (EVT) was performed for the chronic total occlusion in the left common iliac artery.
Case Presentation

Risk Factor
- dyslipidemia(+), diabetes mellitus(+), hypertension(+)
- CKD(sCr:1.26 mg/dl, stage:3)
- Ex-smoking, 40/day x 30year
- coronary artery disease(-), hemodialysis(-)

Medication
- Aspirin (100mg)
- Amlodipine (5mg)
- Atrovastatin (5mg)
- Sitagliptin (50mg)
1st EVT Session
Initial Angiogram of 1st EVT Session
1st EVT Session for Common Iliac Artery

E-Luminexx 9 x 40 mm (BARD)

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Final Angiogram of 1st EVT Session

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Clinical Course

- 2 months after 1st EVT session, the patient still complained intermittent claudication.

\[\text{ABI} \ 1.04/0.65 \rightarrow 1.06/0.76\]

- He was referred to our hospital for a second opinion.
CT Angiography

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How to Treat?

- Open the occluded stent placed in subintimal area or
- Open the true lumen through the stent strut

- We tried to open the true lumen with bi-directional approach.
2\textsuperscript{nd} EVT Session
Strategies of 2nd EVT session

- Bi-directional Approach
  - Left brachial approach, JR 4.0 (6Fr.)
  - Left femoral approach, Multi Purpose Catheter (4Fr.)

- Guide Wire
  - Treasure XS (0.014 inch guide wire, St. Jude Medical)
  - Astato XS (0.014 inch guide wire, St. Jude Medical)
  - Chevalier Tapered 30 (0.014 inch guide wire, Cordis)

- IVUS
  - Eagle Eye Platinum (VOLCANO)

- Balloon Expandable Stent
  - Express LD 8 x 37mm (Boston Scientific)
Initial Angiogram & CTA of 2nd EVT Session
2nd EVT Session for In-stent Occlusion

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2nd EVT Session for In-stent Occlusion

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Final Angiogram of 2\textsuperscript{nd} EVT Session

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The patient has no complaint about his leg after 2\textsuperscript{nd} EVT session.

[ABI] $1.06/0.76 \rightarrow 1.08/1.10$
Follow-up CTA After 2\textsuperscript{nd} EVT Session

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Summary & Conclusion

1st EVT session
- A self-expanding stent did not cover the entry of subintimal lumen and it was the cause of stent occlusion.

2nd EVT session
- A balloon expandable stent crushed the self-expanding stent deployed in the subintimal space.
- CTA and IVUS guided bi-directional approach was effective for recanalization of stent occlusion.