Unintentional May-Thurner Sd. After Iliac Artery PTAS

Amy L. Adams Sibley
Background

May-Thurner Sd. (MTS)

Iliac vein compression

● Usually of left iliac vein by right iliac artery

● Causes swelling of the left lower extremity (May and Thurner 1957)
Background

MTS caused from vein compression by aorto-iliac aneurysms (DaSilva-DeAbrau et al. 2017)

Background

MTS after abdominal hysterectomy and cystocele (Frenando et al. 2013)

Fig. 2 Magnetic resonance venogram shows compression of the left iliac vein (white arrow) and distal associated pelvic venous thrombosis (black arrow).
Background

MTS creation of occlusive thrombi complicating renal transplant (Campsen et al. 2010)

Background

MTS as unusual complication from bladder distension in stroke patient (Im et al. 2009)
Background

Vein compression with retroperitoneal hematoma associated with iliac vein rupture (Jiang et al. 2010)

Fig 1. Intraoperative venogram shows the left common iliac vein (arrow) is compressed by the right common iliac artery.
Problem

To our knowledge, MTS has not been reported in the setting of iliac percutaneous angioplasty and stenting (I-PAS).
Case Presentation

81 yo Male, EVAR (6/14/2012)

- Developed claudication symptoms
- CTA demonstrated stenosis of the distal aortic aneurysmal neck

Required Iliac PTAS Kissing

- Complicated by LLE Swelling
- Venous Duplex Neg x DVT
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Management

IVUS

- Demonstrating flat pattern

IVUS

- Satisfactory result
Management

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- Demonstrating flat pattern

IVUS

- Satisfactory result
Clinical Result

Conclusion

MTS may be an atypical complication of iliac PTAS and or aorto-iliac endografting.

High index of clinical suspicion is necessary in patients that develop unexplained unilateral swelling following I-PAS.

There may be radiographic predictor factors to help anticipate this complication.
Questions?
Radiographic Predictor