Solution of stent-jailing in the inferior vena cava incurred in the endovascular treatment of May-Thurner syndrome

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Aims
May-Thurner syndrome (MTS) was first reported in 1957 describing compression of left iliac vein by the overriding right iliac artery causing pain and swelling in lower extremity. Not until 1995, the endovascular treatment for MTS was emerged. Achieving skillful technique for iliac vein stenting requires a learning curve. Within a period of 6 years we have treated 156 cases of MTS with endovascular methods.

Stent-jailing in the IVC would progressively impede the venous flow causing in-stent thrombosis ensuing recurrent leg swelling.

Conversion of the single oblique stent to double barrel kissing stents alternates the turbulent flow to laminar flow in the distal IVC avoiding formation of in-stent thrombosis.

Clinical Experience
Jan 2008 ~ Dec 2013

156 cases of MTS verified by IVDSA with MDCT
156 cases -
- angioplasty with stenting 119 cases
- angioplasty alone 37 cases

Results: 28/119 (23.5%) stent jailing in IVC with late development of in-stent thrombosis. Immediate conversion to kissing stents in the same setting - 18 cases. Delayed conversion to kissing stents - 10 cases

Conclusion: Endovascular stenting for May-Thurner syndrome is effective and safe. The mid-term and long-term follow up results are promising.