Advances In Stent Treatment For Aorto-Iliac Occlusive Disease
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Conflict of interest
• No disclosures

History
• Palmaz-XL
  – Cumbersome
  • Not pre-mounted
  • Risk of loss of stent
  – Large profile
• Wallstent
  – Foreshortening
  – Jumping

New developments
• Additional availability of various new designs
  – Co-Cr balloon-expandable
  – Co-Cr covered balloon-expandable
  – Self-expandable

‘Old approach’
• Displacing bifurcation cranially
• Parallel stents
• Nowadays ‘bifurcation reconstruction’
‘Old approach’

New developments

Balloon-expandable covered stents

- Advantages
  - Potentially better patency
  - Reduces risk of distal embolization
- Disadvantages
  - Foreshortening
  - Placement close to bifurcation problematic (shoulder of balloon may rupture CIA)
  - Loss of collaterals (lumbar arteries/IMA)

Currently available technologies

Self-expandable stents

- Advantages
  - No fore-shortening
  - No forward jumping
  - Some repositionable
  - Continuous outward force
  - 6F compatible devices (sizes sufficient for steno-occlusive disease; 6-16 mm); allows out-patient setting
- Disadvantages
  - Post-dilation close to bifurcation still problematic, but feasible with kissing balloons or very short shouldered balloons
Conclusions

• Aortic stenting with low-profile self-expandable stents is feasible and safe
• Aortic stenting with low-profile self-expandable stents does not compromise collaterals and allows stenting close to the aortic bifurcation