Present Status of The Use of EVAR Devices for the Treatment of Aorto-Iliac Occlusive Disease

Jonathan A. Cardella
Assistant Professor
Program Director
Section of Vascular Surgery
Yale University

Objectives - Talk

• Old Devices - New Results
  – Covered Stents
• New Devices – Better results
  – EVAR-like devices
• Everything old is new again
  – Surgical importance

Objectives – Endo Surgery

• Smaller Incisions
• Same results?

Aorto-Iliac Interventions

A comparison of covered vs bare expandable stents for the treatment of aortoiliac occlusive disease

• Randomized Trial
  – 168 limbs Randomized
  – Covered vs Bare Metal (50/50)
  – Binary restenosis (≥ 50% lumen diameter)
  – Subgroup Analysis by TASC

COBEST Trial

ALL Lesions Superior
TASC C/D Superior
COVERED STENTS ARE SUPERIOR TO BMS
Gold Standard?

- NOT Equal
- Flow disturbances at the Neo-Bifurcation

New Use/Old Concept

- Covered Endovascular Reconstruction of the Aortic Bifurcation CERAB

Improved Flow Dynamics

- Kissing stents = Size mismatch
  - Flow stagnation
  - High Stress at mismatch points

Patency

- 130 Patients (32% CLI)
- 89% TASC D lesions
- At 3 years
  - PP = 87%
  - CD-TLR – 87%

End of Aorto-Bifem?

- Have we compared apples to apples?

Importance of Outflow

- Profunda outflow!
- Absolutely critical
Apples to Apples

The management of severe aortoiliac occlusive disease: Endovascular therapy rivals open reconstruction

- 127 limbs – 40% CLI
- >70% of lesions TASC C&D
- Retrospective Review

Aorto-iliac Interventions

Open and Endo Similar

- NO Difference (3 year)
  - Post procedure ABI
  - 2° Patency, limb salvage or survival (3 years)
- High percentage of CFA/outflow treatment
  - >20% had out flow procedure
  - Mostly profunda

So What’s New?

- Covered stents are superior!
- Covered Endovascular Reconstruction of the Aortic Bifurcation CERAB
  - Seems superior to kissing stents
  - Hemodynamic Advantage

Everything Old is New Again

- 2018 - 40 the anniversary of the Profunda!
- When considering any AIOD stenting procedure:
  - First principle — inflow + outflow = Bloodflow
  - The outflow of Iliacs!
  - Studies from 1978 and 2008 show the importance of the profunda!
  - Liberal use of CFA repair
  - CERAB – Here to stay!