How the unique features of Tigris vascular stent relate to optimal clinical outcome

A review of case: fracture resistance

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I have the following potential conflicts of interest to report:

- Consulting: W.L. Gore, Abbott Vascular
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

☐ I do not have any potential conflict of interest
External mechanical forces in the SFA and popliteal artery
Standard nitinol stents changes the mechanical properties of the femoropopliteal artery.
Plaque Formation in the Femoral Artery Most Commonly Occurs in the Distal Portion of the Vessel

Adductor canal hiatus (= zero level)

Up to 70% of all femoropopliteal lesions are in the mid-distal SFA

The mid-distal portion of the SFA sees the greatest motions


Standard nitinol stents changes the mechanical properties of the femoropopliteal artery
Hybrid design of the Gore® Tigris® Vascular Stent

Nitionol wire – Stent frame
Flouropolymer Interconnections
CARMEDA® BioActive Surface

Image courtesy: Covidien/Medtronic
Tigris® – the Leipzig Experience

Piorkowski et al, J Cardiovasc Surg. 2015
Example Case 1

75 yrs old male patient
Claudicant (100m)
Diabetes mellitus
Former smoker

Image courtesy Dr. Piorkowski
Example Case 2

90 yrs old female patient
Rest pain
Walking capacity 10 m
Arterial hypertension

Image courtesy Dr. Piorkowski
Example Case 3

87 yrs old female patient
Walking capacity 50 m
Intermittent Rest pain
Arterial hypertension
Former Smoker

Image courtesy Dr. Piorkowski
Example Case 3
3 month later
GORE® Tigris® Vascular Stent

- innovative hybrid stent design, less nitinol
- ePTFE for intersegmental connections
- mimics the natural course of the vessel
- prevent stent fracture