patients was 14%. There was no evidence of stent migration.

Conclusion: We observed stent fractures in 13.6% of the nitinol SFA stents at 18 mos.
mean follow-up. Restenosis defined by arterial duplex-doppler occurred in 14% of all
stents and in 7% of fractured stents. Fluoroscopic and arterial duplex-doppler follow-up
of the entire 78 patient cohort (105 stents) is ongoing. Presently, the clinical significance
of the observed stent fracture is uncertain.

9:30 a.m.

885-6

Long-Term Outcome of Superficial Femoral Artery Stenting Using Self-Expandable Nitinol Stents Compared to Stainless Steel Stents: A Retrospective Multicenter Study


Background: With the aim to establish the long-term value of stenting long superficial femoral artery (SFA) lesions, the data of four German high-volume centers were retro-
spectively evaluated.

Methods: Among consecutive SFA stenting procedures in our centers during 1999-
2000, 163 SFA stenting procedures using self-expanding nitinol stent (SMART stent, Cordis; Group E) were compared with 166 implantation procedures using self-expand-
able stainless steel stent (Wallstent, Boston Scientific) in the same time window (Group W). Patients with in-stent stenting and multiple stent types in the same vessel were excluded.

Results: Patients' mean age was 68±10.1 and 32% were females without statistically
significant difference between the two groups. Diabetes included 21% of the S group
randomizing 40% in the W group (p=0.001). Clinical symptoms based on Rutherford crite-
rion were: (II: S: 19% vs W: 10%; III: 5.72% vs 77%; IV: 5.5% vs W: 10%; V: 3.3% vs W:2.3%: p=NS). 18% of the Smart Group had previous target lesion angioplasty compared
23% in the wallstent group (p=NS). There was no difference between the two groups
comparing lesion length (S: 78.0±110 vs W: 197±101 mm p=NS), percent stenosis (S:
97.4±1.8% vs W: 97.2±1.9% ) and number of stents (S: 1.81±1.0). Overall stented
length was longer in the wallstent group (S: 120±78 vs W: 143±28 mm p=0.04).

Mean follow-up period was 16.9±8.8 months. Using Kaplan-Meier analysis, one-year primary patency in the smart group was significantly higher compared to the wallstent
group: (S: 61±5% vs W: 30±5%, p=0.0000). One-year assisted primary patency
increased to 75±4% in the S group and 53±5% in the W group (p=0.0000). Secondary
patency at one-year was 79±4% in the S group vs 64±6% in the W group (p=0.007).

Conclusion: - Stenting long SFA lesions with nitinol stents is associated with a signifi-
cantly better outcome comparing self-expandable stainless steel stents.

- The long-term secondary patency of about 80% using nitinol stents demonstrates that
this technology is safe, clinically very effective and comparable with reported surgical
results.

9:45 a.m.

885-7

Renal Angioplasty and Stenting Under Distal Protection

Michel Henry, Isabelle Henry, Christine Knoesen, Michel Iugei, L.H., I.M.D.T., Nancy, France

Purpose: Renal artery stenting is safe & efficient but at least 20% of the patients have a
deterioration of the renal function after the procedure. We evaluate feasibility and safety
of renal artery angioplasty and stenting using a distal protection device to reduce the risk
of intraprocedural artery embolism and to avoid deterioration of the renal function.

Methods: 46 Hypertensive patients (26 men of renal artery angioplasty and stenting using a distal protection device to reduce the risk
of intraprocedural artery embolism and to avoid deterioration of the renal function. Yeth-
obds: 46 Hypertensive patients (26 men

Results: Patients' mean age was 67.7 + 6.3 years, range (22-67) with
atherosclerotic renal artery stenosis (6 bilateral) underwent angioplasty & stenting with

mean time in situ (filters): 4.2 * 1.1 mn.

Mean follow-up period was 16.9±8.8 months. Using Kaplan-Meier analysis, one-year primary patency in the smart group was significantly higher compared to the wallstent
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