

Acute and follow-up results of complete aortoiliac obstructions (Leriche syndrome) – The Leipzig experience

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Disclosure

Speaker name: Madeleine Luther

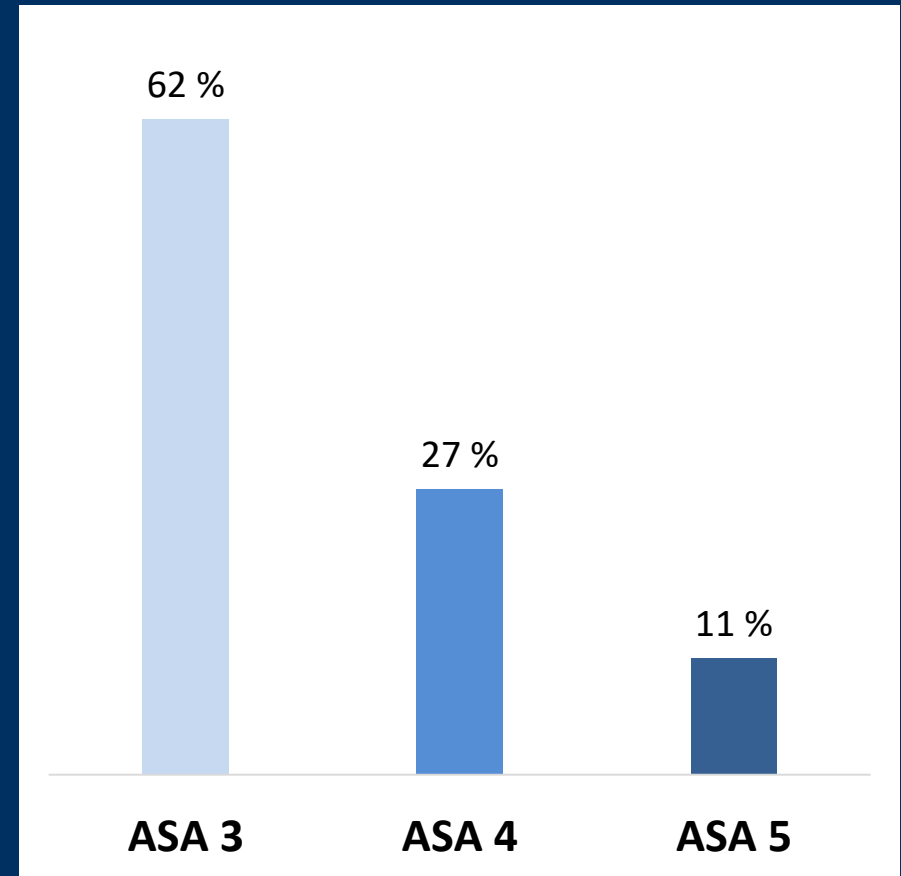
I do not have any potential conflict of interest.

Study design

- Retrospective cohort study of patients with Leriche syndrome undergoing endovascular reconstruction of the aortoiliac system using covered stents
- 12/2007 – 12/2017
- 53 patients treated, 3 lost to follow-up (5.7%)
- Mean follow-up time: 38.3 months
(range 0-132 months)

Patient demographics

	n = 53
Age (years), mean	60.0 (range 31-89)
Female, %	41.5
Arterial Hypertension, %	73.6
Hyperlipidemia, %	56.6
Diabetes, %	22.6
Current/former smoking, %	73.6
Coronary heart disease, %	28.3
Renal insufficiency, %	24.5
Cerebrovascular disease, %	11.3



18.9%
81.1%

acute onset
chronic course

Case example

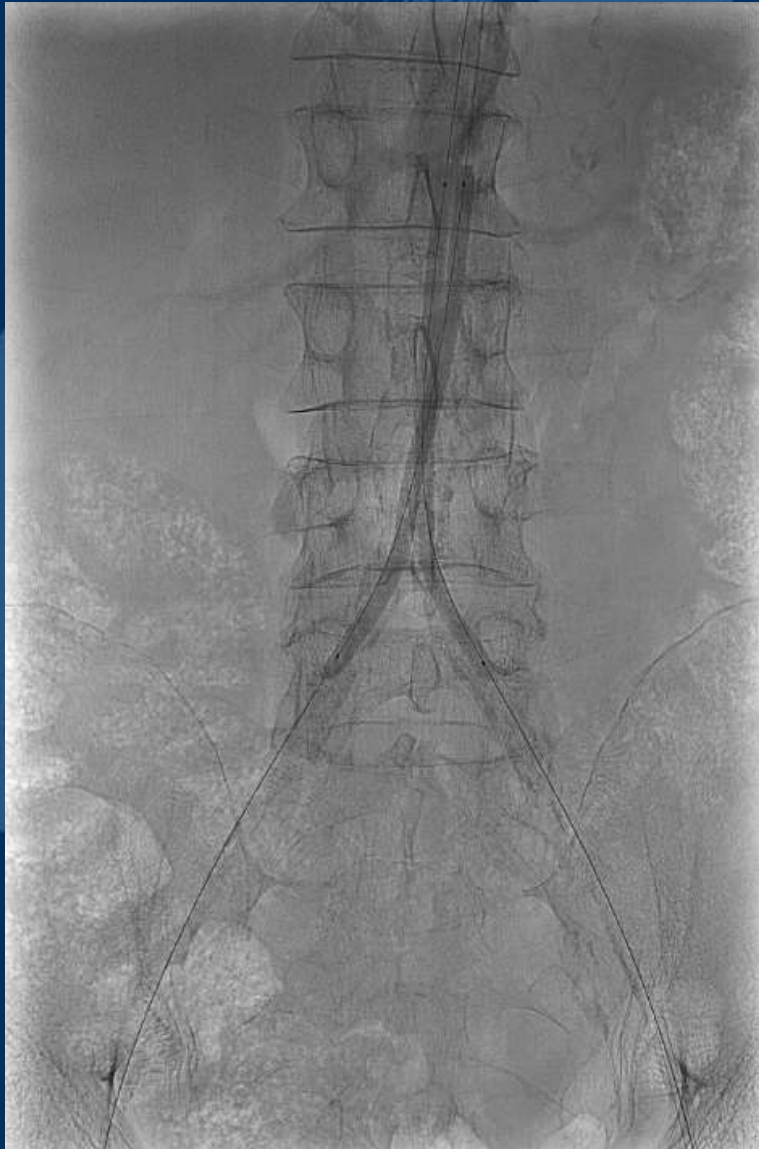
- Male
- 57 years old
- Acute Leriche syndrome with occlusion of:
 - Infrarenal aorta
 - Common iliac arteries
 - Right external iliac artery
- ASA 4
- Rutherford 4

Case example



Bilateral transbrachial crossing

Case example

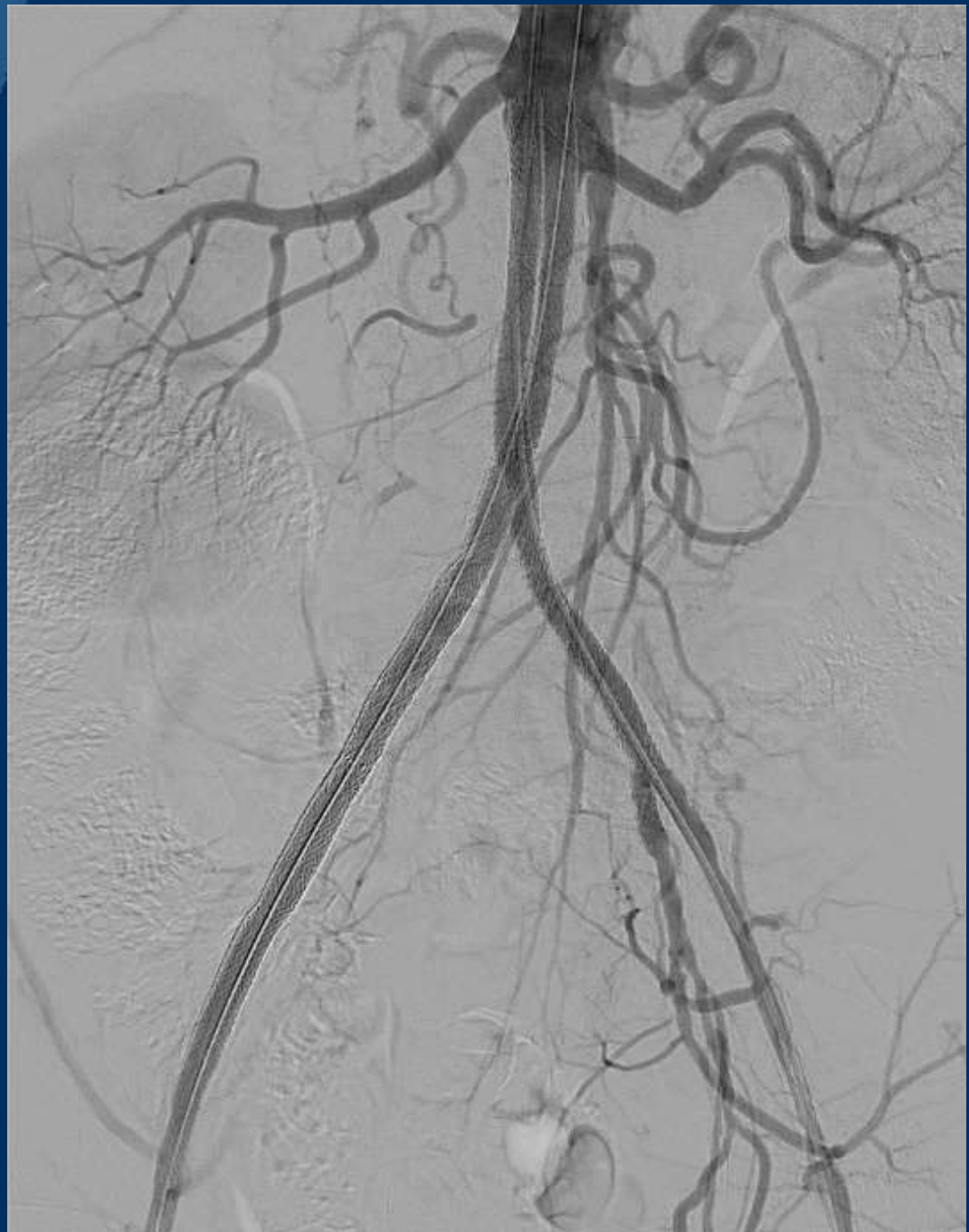


Reconstruction with two Viabahn grafts and an balloon-expandable Chimney stent-graft into the left renal artery



Case example

Reconstruction of the hypogastric artery origin with a balloon-expandable stentgraft



Technical success

- 51/53 (96.2%)
 - 2 cases with need for second dilatation of the stentgraft
- Median length of intervention: 66,0 minutes
- Median length of hospital stay: 4 days

Peri-interventional complications

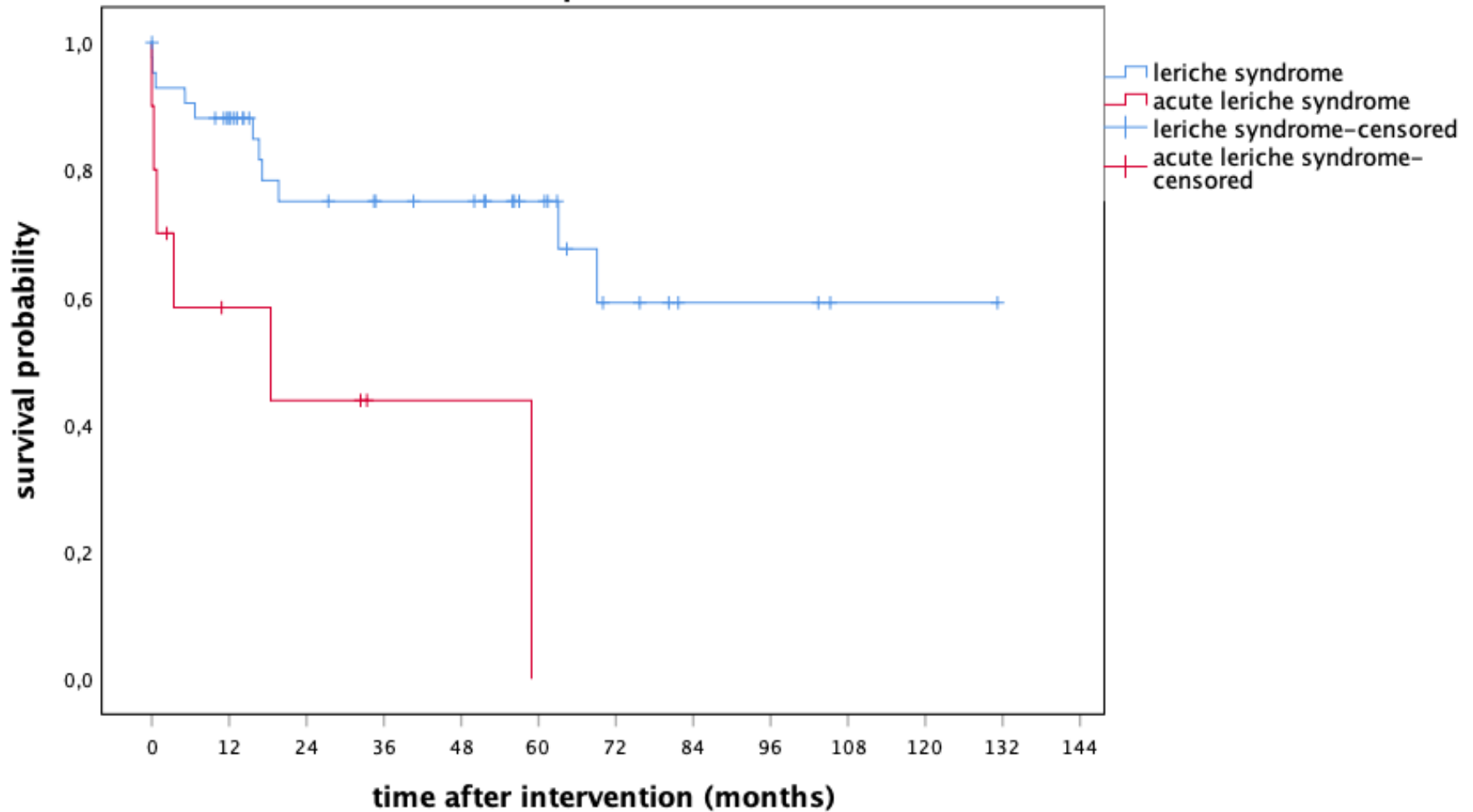
- **7/53 (13.2%)**
- **Access site complications** **6/7**
 - Perforation 2
 - Local bleeding /retroperitoneal hematoma requiring transfusion 1
 - AV fistula 1
 - not requiring intervention
 - Pseudoaneurysm 1
 - requiring intervention
 - Compartment syndrome 1
 - requiring fasciotomy
- **Systemic complications** **1/7**
 - Cardiac decompensation 1
 - resolved with diuretics

Follow-up - Death

- **17/53 (32.1%)**
- 30 day mortality **6/53 (11.3%)** mean 9.3d
 - In hospital
 - Technical failure 1 (1.9%)
 - Multimorbidity 3
 - After discharge 2
- >30 day mortality **11/53 (20.8%)** mean 26.7m

Follow-up - Death

Kaplan-Meier survival curve



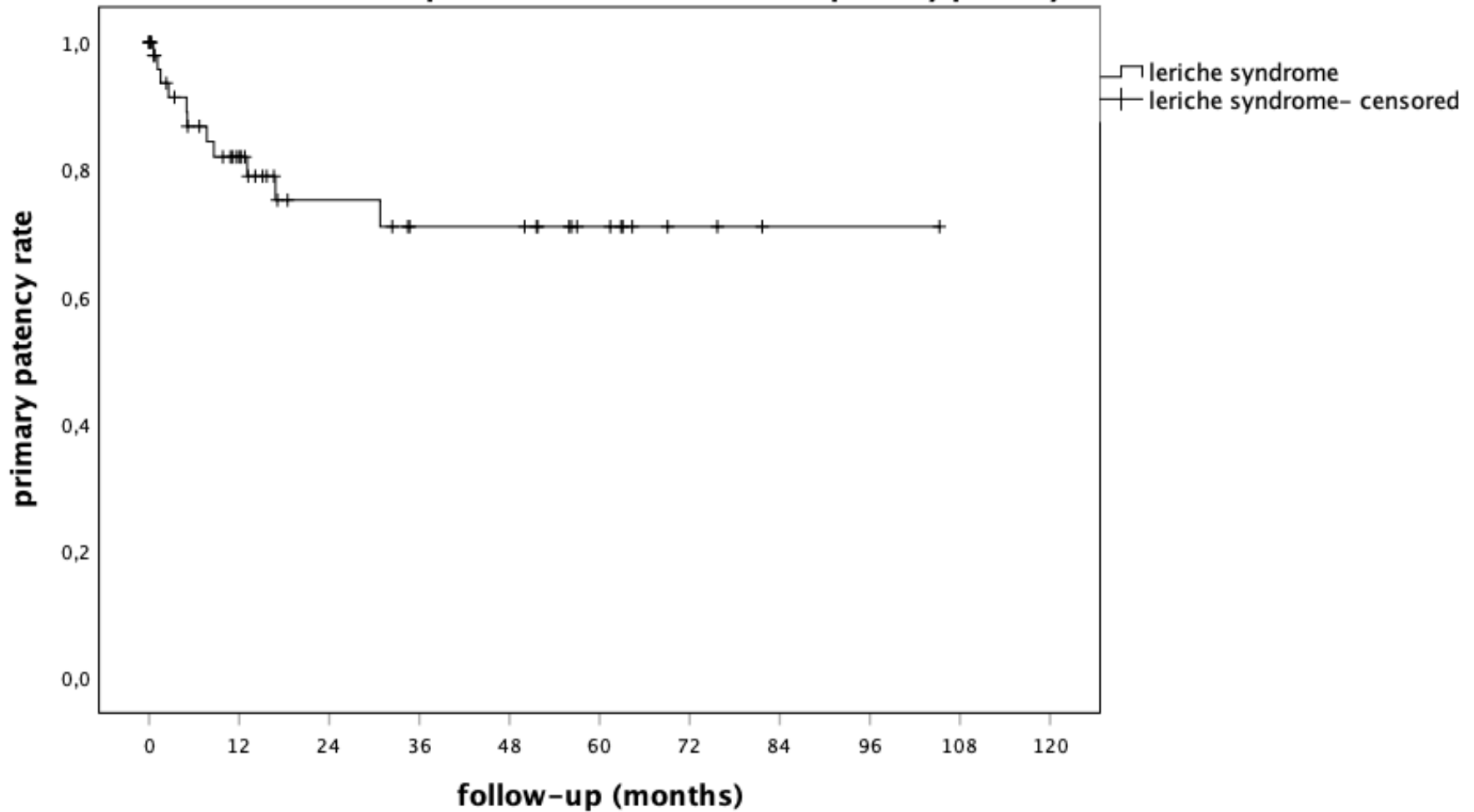
Follow-up – Primary patency rate

- **Rate of re-occlusion** **11/46 (23.9%)**
after 8,5 months (range 1-31)
 - Reintervention 9
 - Surgery 2

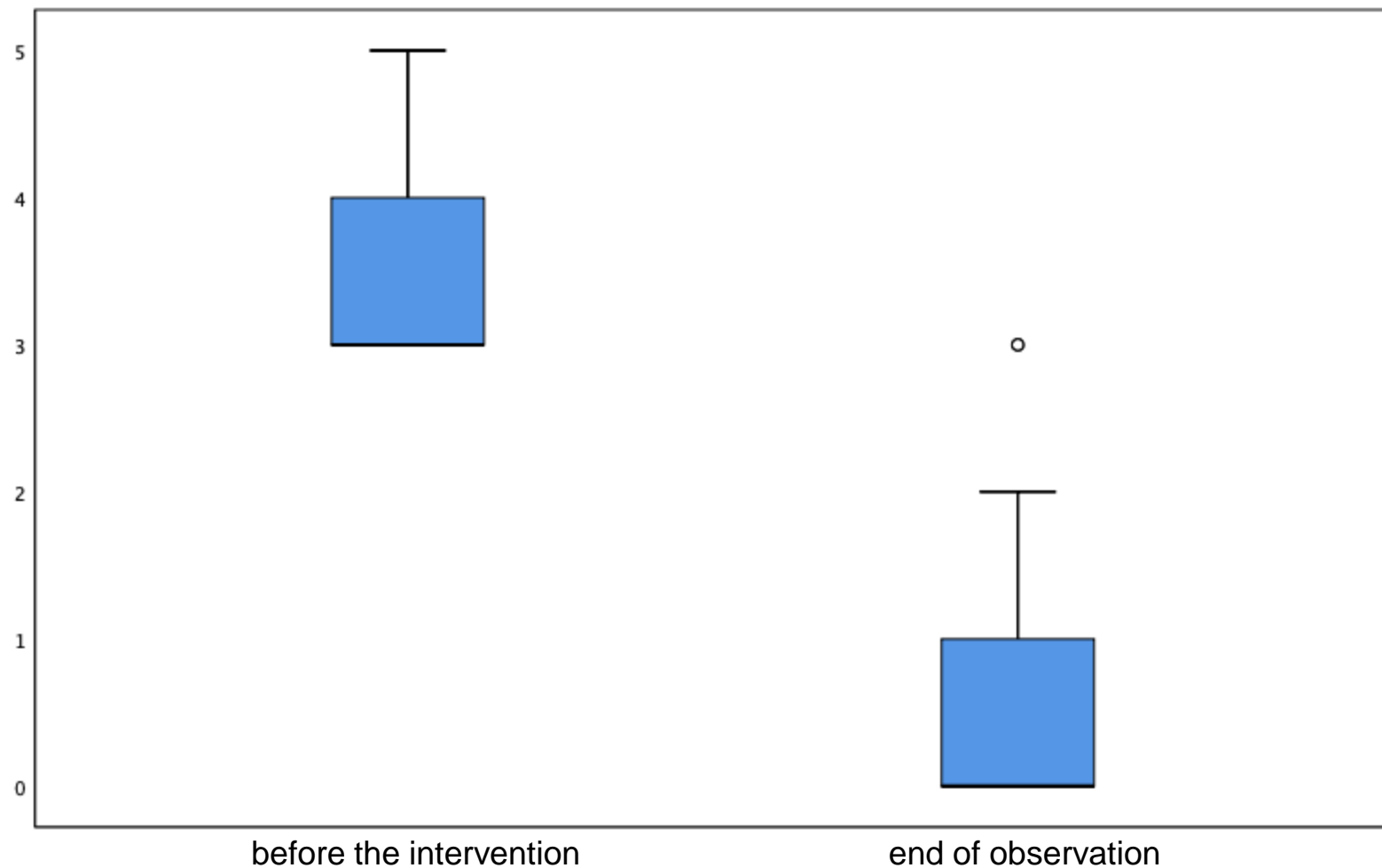
- **Primary patency**
 - After 6 months 87.0% (40/46)
 - After 12 months 82.6% (38/46)
 - After 24 months 78.3% (36/46)

Follow-up – Patency rate

Kaplan-Meier survival curve - primary patency



Clinical success mean Rutherford levels



Conclusions

Pros

- Minimal invasive
- Shorter length of stay in hospital
- Good short- and mid-term results
- **Lower peri-interventional morbidity and mortality**

Cons

- **Long-term patency?**

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