

# Endovascular Treatment of a CLI-Patient with BTK-Disease

Andrej Schmidt

Department for Interventional Angiology

University-Clinic Leipzig, Germany



#### Disclosure of Interest

Speaker name: Andrej Schmidt

I have the following potential conflicts of interest to report:

Consulting:

Medtronic, Abbott, Boston Scientific, Cook, Cordis,

C.R.Bard, Intactvascular, ReFlow Medical, Spectranetics,

**Upstream Peripheral** 



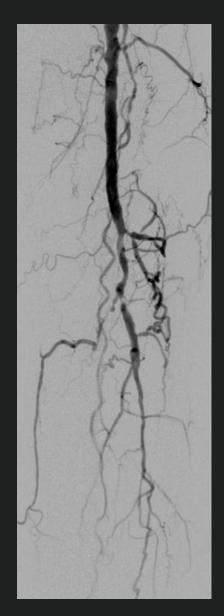
#### **Case-Presentation**

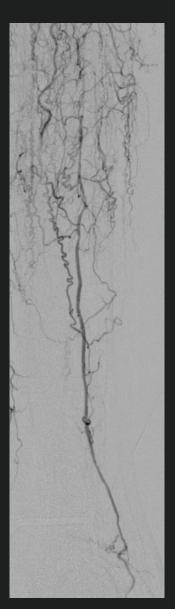
- 52 years male patient
- Diabetes mellitus type 2
- Heavy smoker
- Severe restpain dig I left and gangrene since 4 weeks

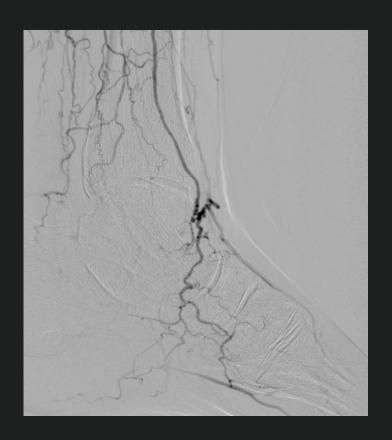




#### **Rutherford 5 left**







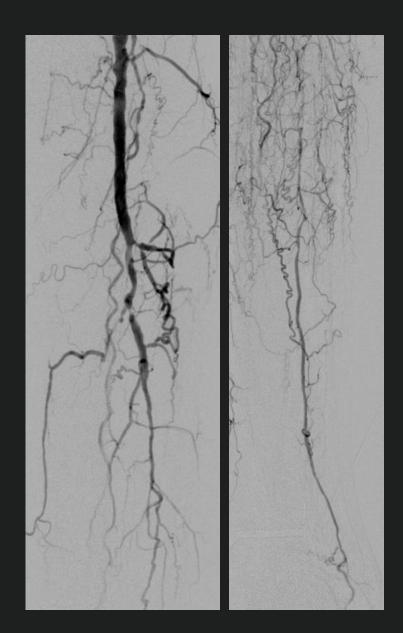
Pedal arch occluded

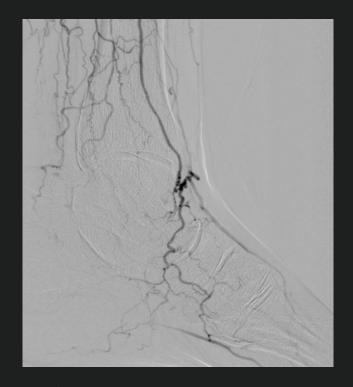
Typical disease-pattern for DM?

Buerger's disease?



#### **Recanalization Treatment**





Endo / bypass ? (long lesion)

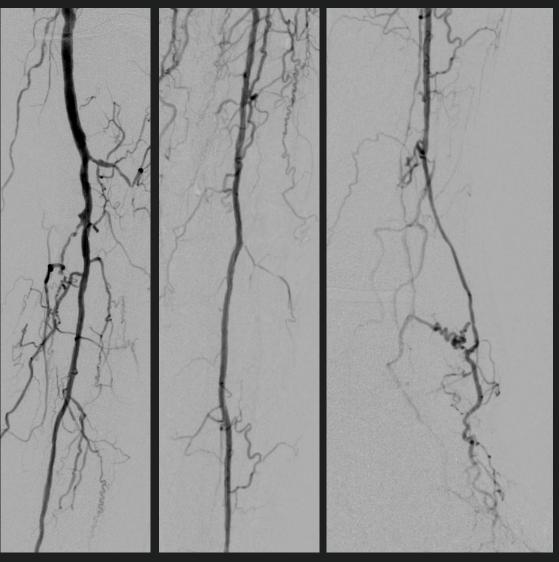
Peroneal or anterior / posterior tib. ?

POBA, atherectomy, stenting?

Reconstruction of forefoot-arteries?

#### **Endovascular Treatment**



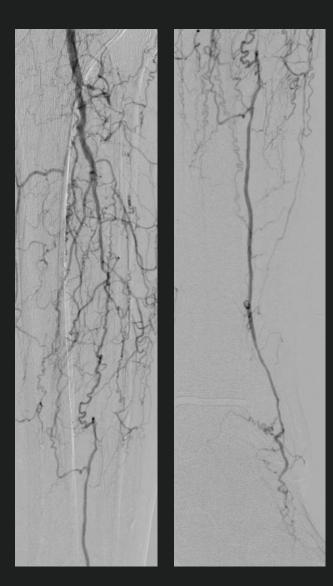


- Slow healing
- Restpain resolves slowly during healing-process
- At 6 weeks toe still ischemic
- Repeat angio?

PTA with a low profile 2.5/150 balloon



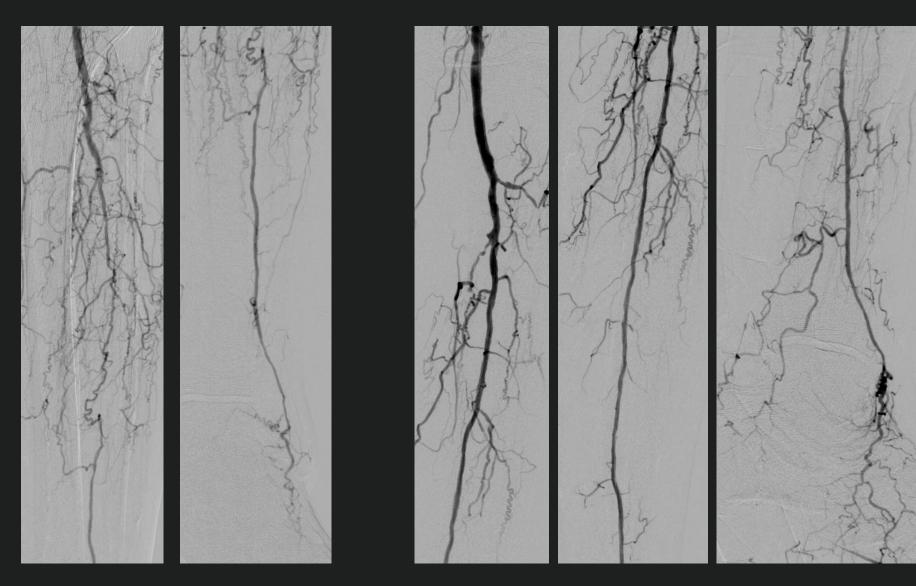




- Repeat PTA?
- Peroneal bypass ?
- Conservative treatment ? (toe-amputation not necessary)
- Endo: some different technique?





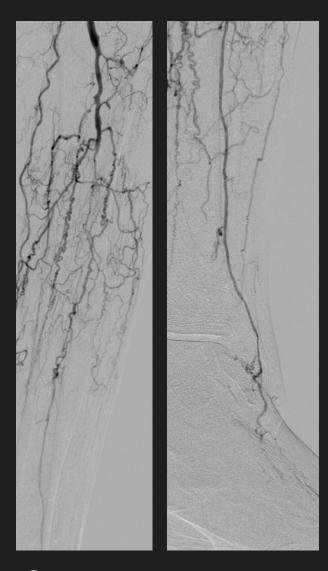


Re-occlusion

Second treatment with POBA



#### **Second Re-occlusion after 4 Months**



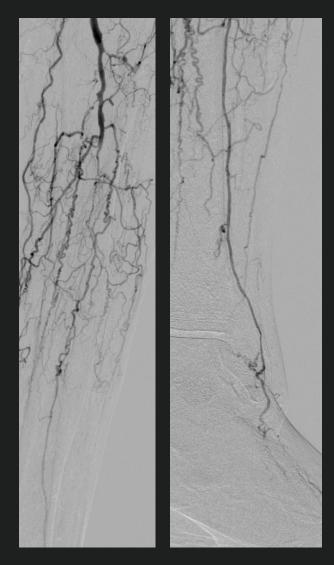
Recurrence of ischemia at toes,
 but no ulcer / gangrene

- Continues to smoke
- Bypass?
- Endo?
- Different techniques ?

Second re-occlusion



#### **Second Re-occlusion after 4 Months**



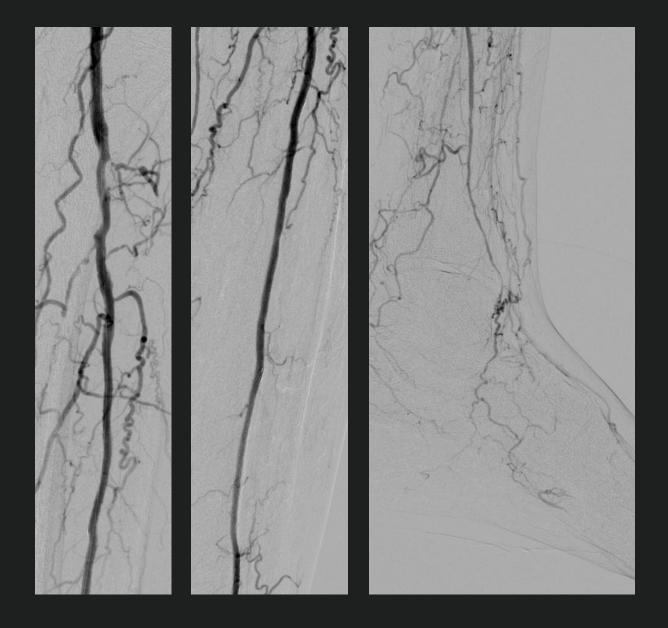
Second re-occlusion



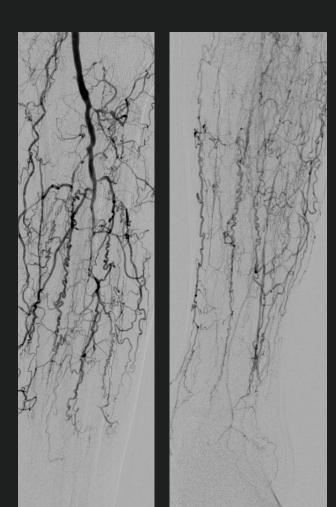
3 x 4/80mm self-expanding BMS

#### I-MEET NEXT GENERATION

## Result after 3. PTA and Stent-Implantation Result after 3. PTA and Stent-Implantation



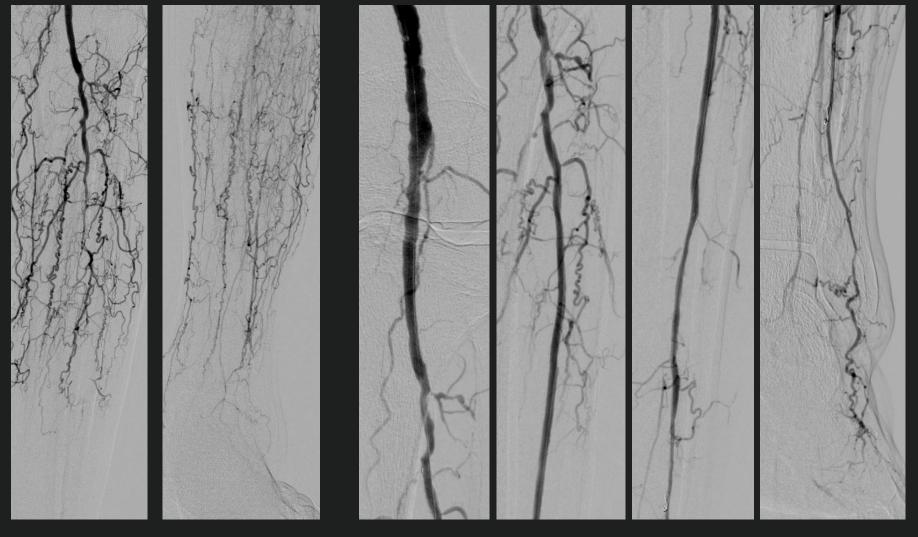
#### Third Re-Occlusion (in Stent) after 5 Months



- Recurrence of ischemia forefoot Swelling, restpain, discoloration
- Endo / Bypass still possible ?

Third re-occlusion

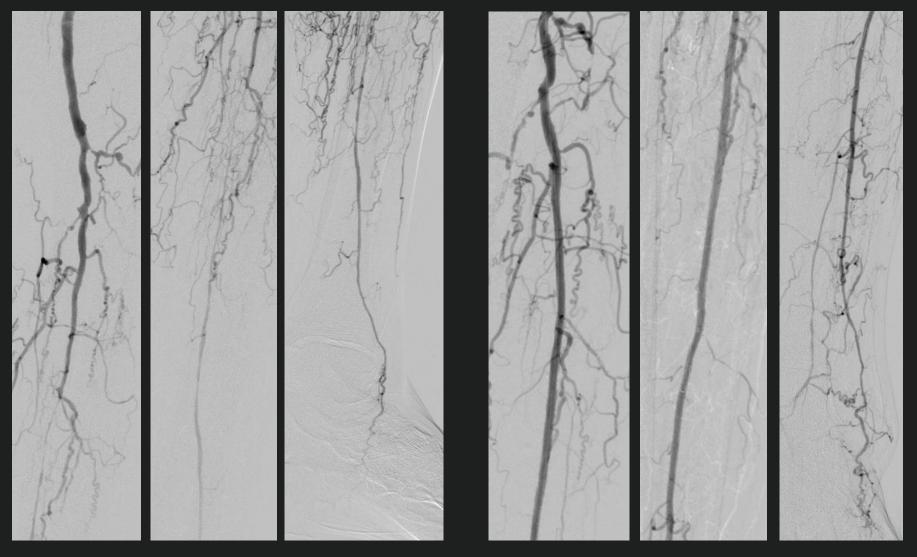
#### Third Re-Occlusion (in Stent) after 5 Months



Third re-occlusion

Fourth treatment with POBA

### Fourth Re-Occlusion at 6 Mo, Recurrence of Disease

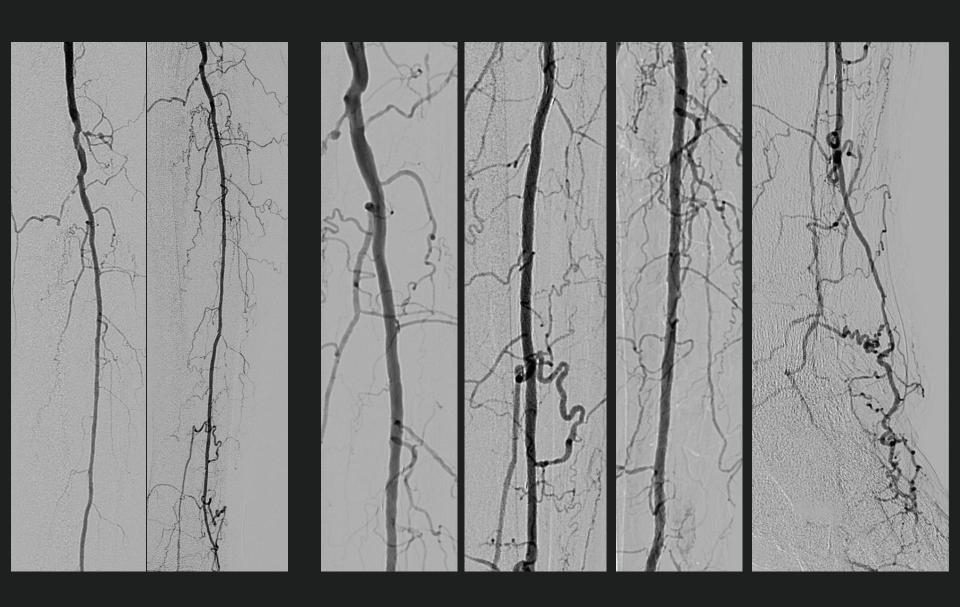


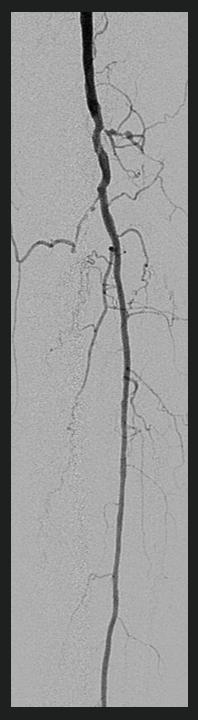
Fourth Re-occlusion

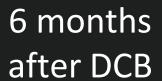
5. Intervention (DCB)

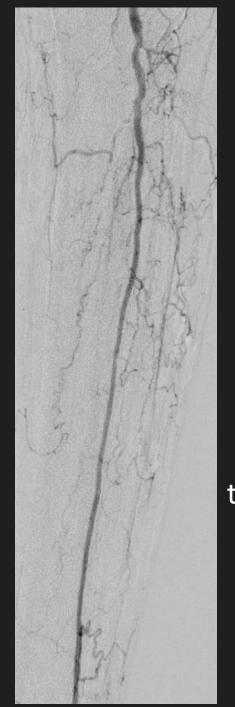


#### 6 Months Angiography after DCB, no Symptoms







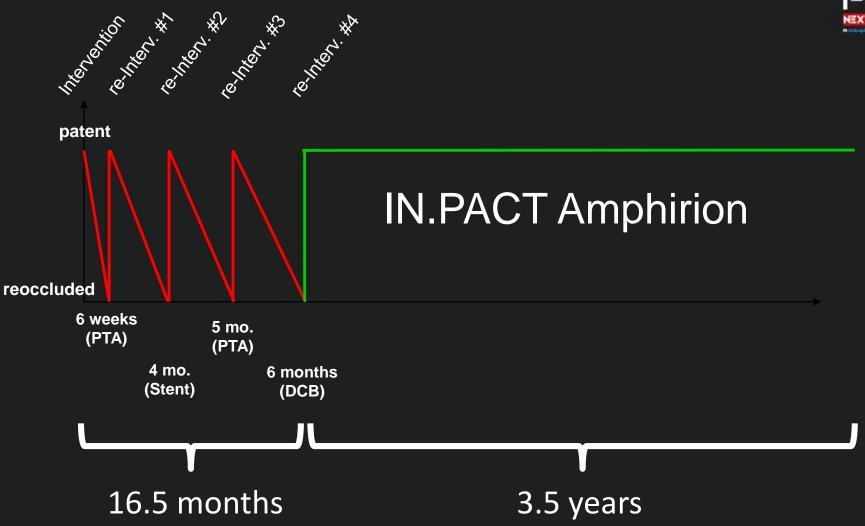




3.5 years after DCB

Angio during treatment right





DCB-treatment in the first step would have prevented recurrence of disease and 4 TLRs?



#### **IN.PACT DEEP: 12 Months Results**

	DEB	POBA	Р
LLL (mm)	0,61	0,62	0,950
Binary restenosis rate	41,0 %	35,5 %	0,609
		2	

	DEB	POBA	Р
Major amputation	8.8 %	3.6 %	0.080

Zeller et al. JACC 2014



#### Leipzig Experience With DCBs BTK

1/2009 – 5/2012:

IN.PACT DCBs were used in Apop / BTK

• 195 CLI patients (Ruth 4-6); 205 limbs

Rutherford 4: 52 (25.4%)

Rutherford 5: 140 (68.3%)

• Rutherford 6: 13 (6.3%)

Mean lesion length: 148 ± 92 mm

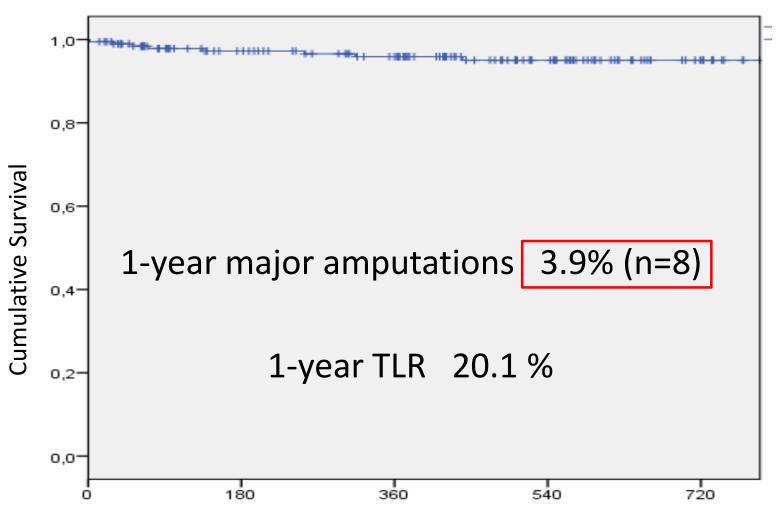
Occlusion 142 (69.3%)

• De-novo 133 (64.9%)

### TK RATION

#### Leipzig Experience With IN.PACT Deep BTK



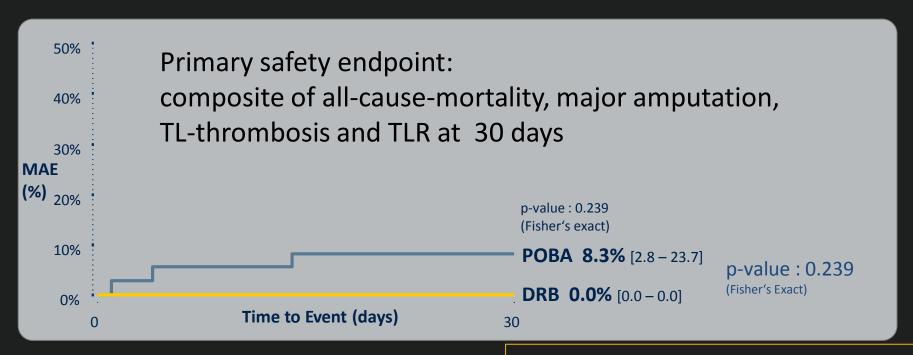


Follow-up in days



# BIOLUX P-II: RCT Passeo 18-Lux vs. POBA BTK Major Adverse Events at 30 days

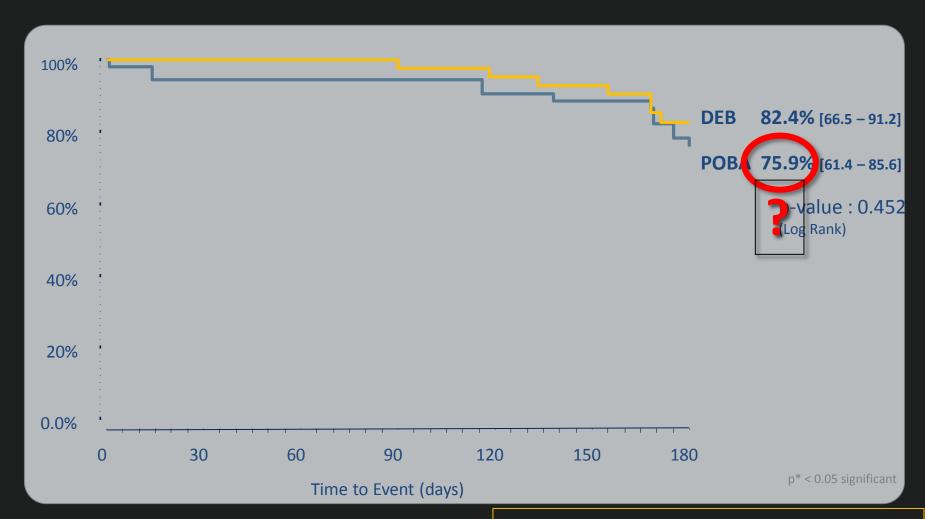
- Passeo-Lux DCB 31 patients
- Passeo-control 31 patients







#### **TL Primary Patency at 6 months**



Zeller et al. JACC Intervent 2015



#### Summary

- So far no good data to prove that DCB work BTK but cases give hints that they can be effective