



Drug-eluting devices for the SFA - why and when to treat?

# Diabetics: How to Obtain Long Term Results

Bertrand LEHALLE (MD; PhD)

Pôle Vaisseaux & Louis Pasteur Clinic

Nancy - FRANCE



## Diabetic patient profiles

- High risk patients (co morbidity)
- High risk of infection
- Major amputations x14

Fosse S et col. BEH 2006

• No symptoms (??) before ulcers, gangrene

- PAD : more severe/extensive lesions
  - Distal (BTK) + FEMORAL / popliteal lesions

## The goal of treatment of SFA

To remove ischemia

To ensure an optimal distal (BTK) flow

The SFA decompensation is a fundamental element in the prognosis of PAD in diabetic patients

## Interest of SFA Stenting

- Advantages:
  - efficacy
  - easy to use

- Disadvantages:
  - risk of in-stent restenosis
  - fracture
  - possible need for reintervention

Diabetic patients: the goal = sustained patency (femoro popliteal axis)

#### Potential benefits of ZilverPTX (diabetic patients)

4-years positive data (Zilver PTX trial)

Dake MD et al. J Am Coll Cardiol 2013

2-years positive data:

Sub-group of diabetic patients (Zilver PTX trial) vs non diabetic patients

Fanelli F et al. Cardiovasc Intervent Radiol 2013

#### **ZILVER PTX = SAFETY AND EFFECTIVENESS**

Inflammatory context (processes furthered by the infection: ulcers, gangrene)

vs late-phase inflammatory response (with DES)

Tagushi I, Yoneda S et al. 2012, 2013

ZILVER PTX = A PARTICULAR VALUE IN CASE OF CLI?

#### Clinical application:

implantation of ZilverPTX as a treatment of choice after SFA angioplasty in diabetic patients (first results)

- 207 consecutive diabetic patients (oct 2011 nov 2013)
- Primary patency:
  - 2 years = 79.5 %
  - -18 months = 86.8%
  - 12 months = 91.4 %
- Clinical criteria:
  - Limb salvage: 100 %
  - Major amputation rate: 0 %
  - Relieving pain / dysesthesia: 100 %
  - 2 years survival rate: 95,2 %

## First lesson: "Zilver PTX = It works great!"

PTA + ZilverPTX stent in SFA disease

= has emerged as a treatment of choice for diabetic patients

To secure the PTA, the choice is made...

		Fanelli F et al. 2013
N	207	285
1 year primary patency	91.4 %	86.6 %
2 years primary patency	79.5 %	
Lesions characteristics :	> 10 cm = 79 %	> 7 cm = 51 %
	> 20 cm = 19 %	> 15 cm = 22 %
Number of lesions	1:15 %	1:87 % >1:13%
Population Male/Female	61 % / <mark>39 %</mark>	73 % / 27 %
Age (year)	73.2	67.4
Hypertension	92 %	85 %
Active smoker	11 %	28 %
<ul><li>High risk patients/ MetS:</li><li>severe renal insufficiency / hemodialysis</li></ul>	31 %	
Ischemic heart disease	35 %	
• Obesity	64 %	
History of stroke	6 %	

#### Second lesson:

### ... "even further and rather better"

Conditions under which patients are treated

Multidisciplinary care

#### ... Above and beyond these results:

#### Diabetes: "silent epidemic"

- 285 millions of diabetic around the world (...439 millions in 2030...)
- 400 new cases each day in France (5 millions patients in 2020)
- Susceptibility to wounds: 6-12 %
  - Handicaps, disabilities, impairment of quality of life
  - Leading cause of amputation (10.000/year in France SNIRAM 2012)
  - High costs:
    - 30.000 prolonged hospitalization (2012 France)
    - Up to 20.000 € (wound treatment)
    - 32.000 € (amputation) (RAY JA et col. Curr Med Res Opin 2005)

#### How best to treat our diabetic patients:

#### The use of ZilverPTX:

essential condition to obtain a lasting result in case of:

- CLI:
  - Limb salvage





#### How best to treat our diabetic patients:

The use of ZilverPTX:

essential condition to obtain a lasting result in case of:

- Grade 2 or 3: (243.000/year = "foot risk management")
  - To reduce frequency and severity of PAD complications
     Major public health issue
  - To improve the quality of life

Treatment of ischemic situations this "early stage" benefit from endovascular therapies

#### Conclusions

The « zero amputation » goal is achievable:

- The use of the right treatment
  - Endovascular therapies with ZilverPTX
- The treatment of high risk and ischemic foots

The multidisciplinary care