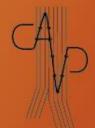


# CONTROVERSIES & UPDATES IN VASCULAR SURGERY

JANUARY 25-27 2018

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER





## **CFA** endovascular repair

which approach, which material, how to deal with proximal lesions, the SFA profunda bifurcation and calcified lesions?

Y. Gouëffic, MD, PhD

Department of vascular surgery, University hospital of Nantes, France

#### **Disclosure**

Speaker name: Yann Gouëffic

X have the following potential conflicts of interest to report:

Receipt of grants/research support

Details: Abbott; Bard; Medtronic; Terumo; WL Gore

Receipt of honoraria and travel support

Details: Abbott; Bard; Boston Sc; Cook; WL Gore; Medtronic;

Perouse; Spectranetics

do not have any potential conflicts of interest to report

#### PERIPHERAL VASCULAR

## Stenting or Surgery for De Novo Common Femoral Artery Stenosis

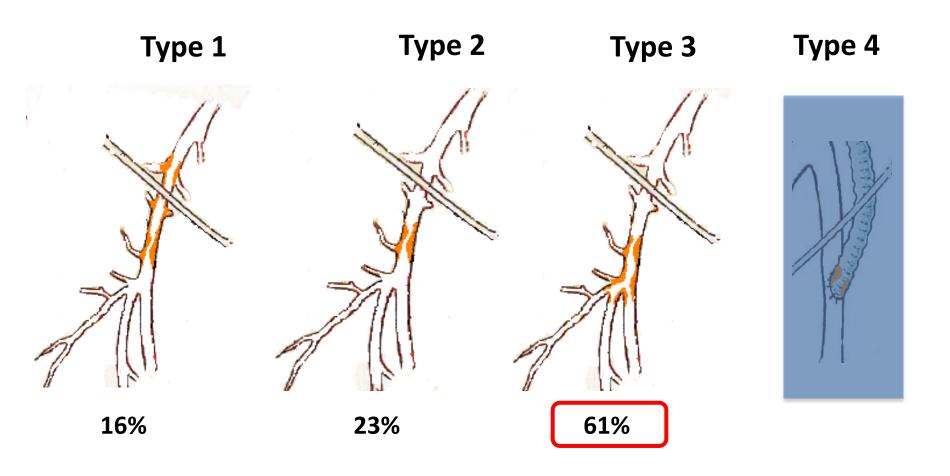


Yann Gouëffic, MD, PhD, a, h,c Nellie Della Schiava, MD, d Fabien Thaveau, MD, PhD, Eugenio Rosset, MD, PhD, Jean-Pierre Favre, MD, PhD, Lucie Salomon du Mont, MD, Jean-Marc Alsac, MD, PhD, Réda Hassen-Khodja, MD, Thierry Reix, MD, Eric Allaire, MD, PhD, Eric Ducasse, MD, PhD, Raphael Soler, MD, Béatrice Guyomarc'h, Bahaa Nasr, MDP

JACC: CARDIOVASCULAR INTERVENTIONS CME/MOC

conclusions In patients with de novo atherosclerotic lesions of the CFA, the perioperative morbidity and mortality rate was significantly lower among patients who underwent endovascular therapy by stenting compared with surgery, whereas clinical, morphological, and hemodynamic outcomes were comparable at mid-term. (Traitement des Lésions Athéromateuses de l'Artère Fémorale Commune par Technique Endovasculaire Versus Chirurgie Ouverte [Endovascular Versus Open Repair of the Common Femoral Artery] [TECCO]; NCTO1353651) (J Am Coll Cardiol Intv 2017;10:1344–54) © 2017 by the American College of Cardiology Foundation.

## **TECCO** lesions characteristics



# Intraoperative data

Surgery (N=58)	
Endarterectomy	46 (69)
with venous patch (%)	7 (12)
with prosthetic patch (%)	37 (64)
direct suture (%)	2 (3)
Bypass with a prosthesis	11 (19)
Eversion	1 (2)

Stenting (N=54)	
Crossover access – no. (%)	43 (78)
Brachial access – no. (%)	7 (13)
Femoral ipsilateral – no. (%)	4 (7)





# **Controlateral femoral approach**





Type 1, 2 and 4: 5-6Fr

Type 3: 6-7Fr

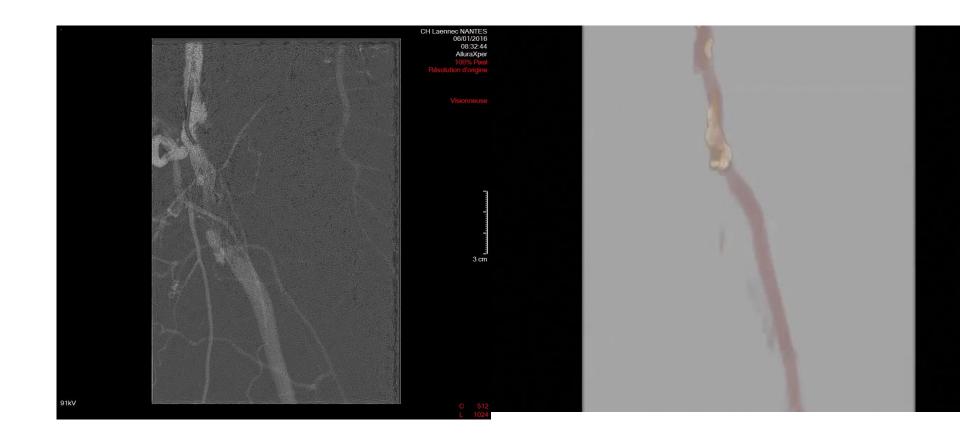




# **Brachial approach**

Obesity
Controlateral CFA disease
Aorto-bi-femoral bypass

# Retrograde approach



#### **CLINICAL RESEARCH**

Interventional Cardiology

#### Endovascular Treatment of Common Femoral Artery Disease

Medium-Term Outcomes of 360 Consecutive Procedures

Robert F. Bonvini, MD, † Aljoscha Rastan, MD, \* Sebastian Sixt, MD, \* Elias Noory, MD, \*
Thomas Schwarz, MD, \* Ulrich Frank, MD, † Marco Roff, MD, † Pierre André Dorsaz, PitD, †
Uwe Schwarzwilder, MD, \* Karlheinz Bürgelin, MD, \* Roland Macharzina, MD, \* Thomas Zeller, MD\*
Bad Kruzingen, Germany, and Geneva and Chur, Switzerland

#### **Key findings:**

■ 360 limbs / CLI: 22.1%

■ Lost of FU @ 10mo: 12.2%

■ Perioperative complications: 6.4%

■ Restenosis rate: 27.6%

■ TLR: 19.9%

The use of <u>stents</u> was identified as <u>the</u> <u>only independent protective factor</u> against procedural failure, TLR and 1-year restenosis



#### Journal of Vascular Surgery

Volume 53, Issue 4, April 2011, Pages 1000-1006



# Endovascular treatment of common femoral artery obstructions

Frederic Baumann, MD,\* Mirka Ruch,\* Torsten Willenberg, MD,\* Florian Dick, MD,\* Dai-Do Do, MD,\* Hak-Hong Keo, MD,\* Iris Baumgartner, MD,\* and Nicolas Diehm, MD,\* Berne, Switzerland

#### **Key findings:**

■ 98 limbs / CLI: 19%

■ De novo / restenosis: 85/15%

■ Perioperative complications: 6.4%

■ Bailout stenting: 27%

■TLR: 17/46%

Primary sustained clinical improvement was significantly better in patients in whom stents had been implanted

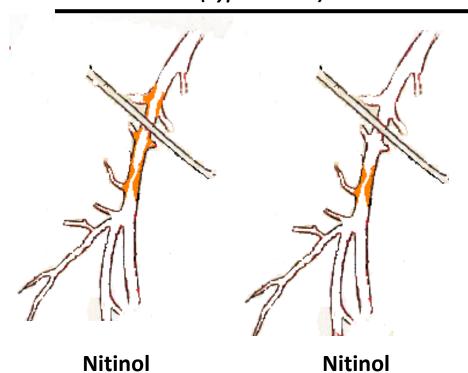
Baumann, J Vasc Surg, 2011



#### Simple and complex lesions

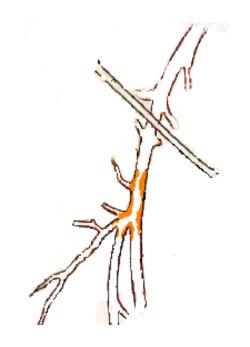
#### **Simple lesions**

(Type 1 and 2)



#### **Complex lesions**

(Type 3)



Nitinol and/or BES

## Simple and complex lesions

Type 1

Type 2





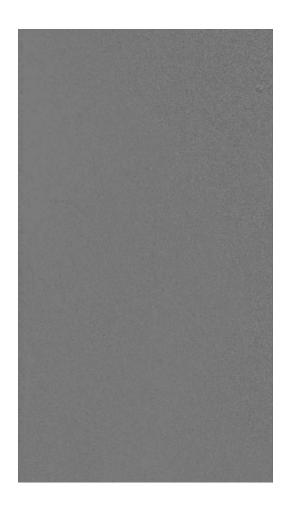
**Type 3** *Keep the profunda safe* 



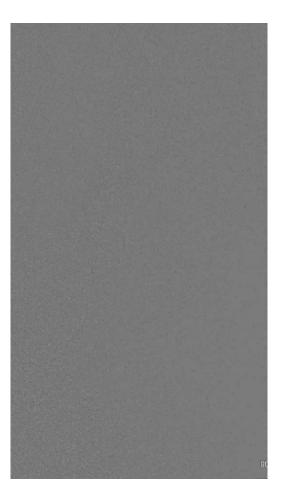




# **CFA-** Deep femoral artery stenting

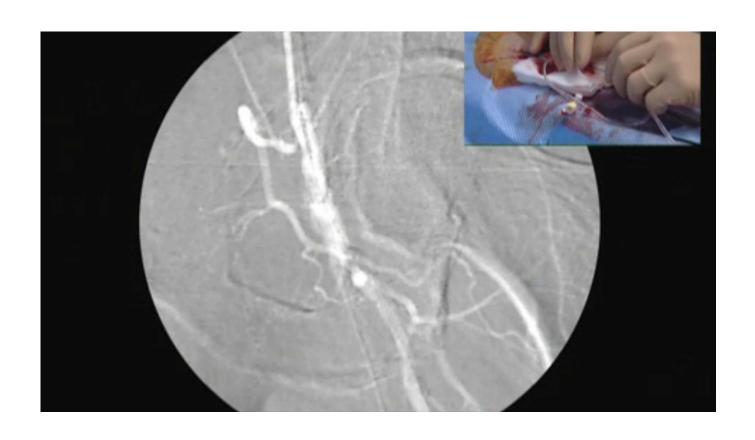








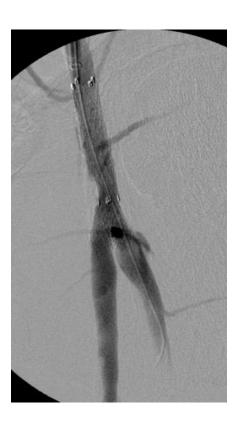
## **CFA** kissing stent



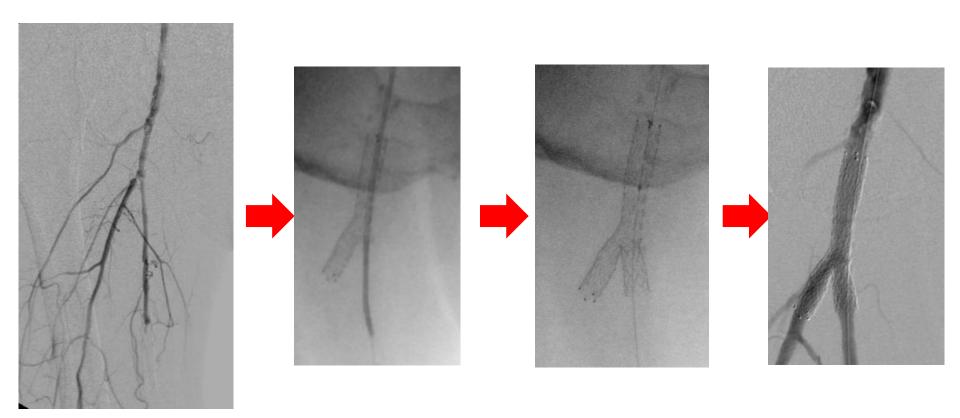
# **Eiffel tower stenting**







# **T-stenting**







#### PESTO-AFC (NCT02517827)

Dr Aljoscha Rastan (Herz-Zentrums Bad Krozingen)

- Directional atherectomy and paclitaxel-coated balloon angioplasty versus open, surgical endarterectomy for CFA lesions
- Primary Outcome Measures : **Primary patency** @12 months

**Estimated Enrollment:** 

Allocation:

**Intervention Model:** 

**Study Start Date:** 

**Estimated Primary Completion Date:** 

**Estimated Study Completion Date:** 

306 participants

Randomized

**Parallel Assignment** 

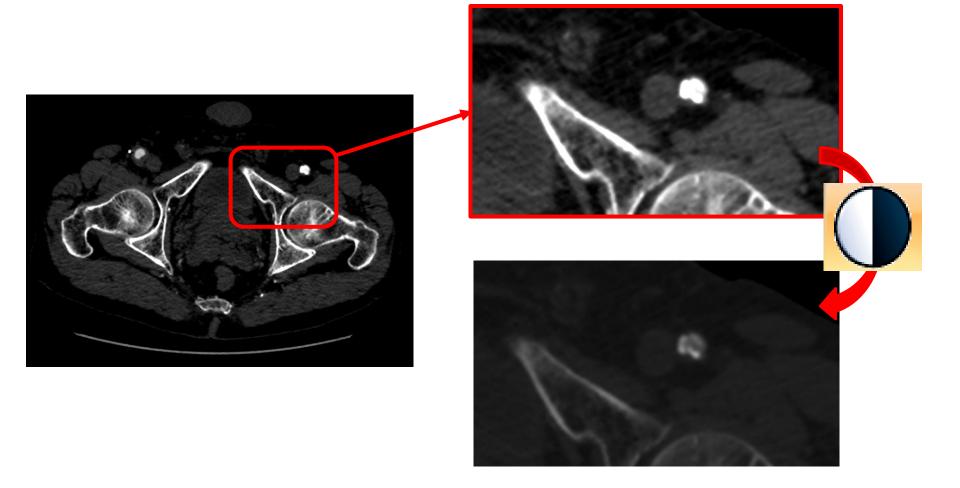
**November 2016** 

**June 2018** 

December 2019



# **Calcifications:** *blooming* **effect**





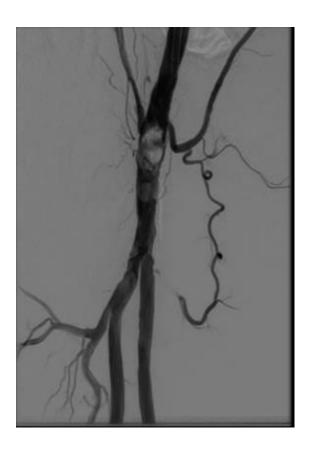


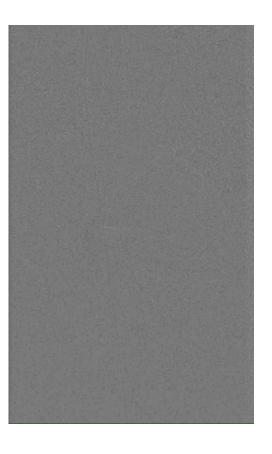
#### Coral reef lesions are not a limit

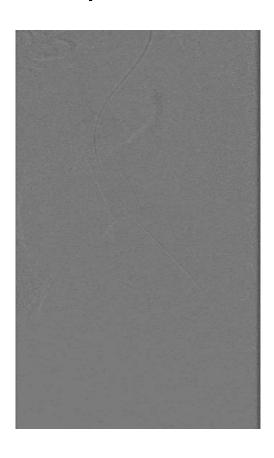
**Pre operative lesions** 

Pre-inflation 9-40mm

Supera 8-40mm







### **Stented CFA does not compromise future approaches**

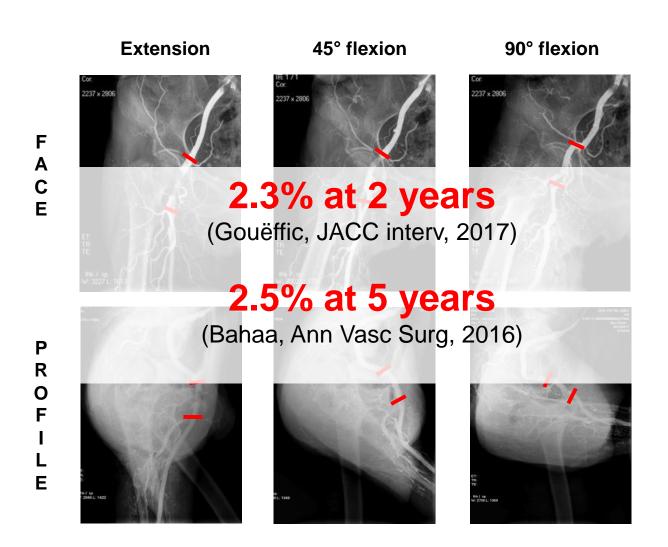








#### Fear of stent fracture is not longer relevent



#### Take home message

- In patients with de novo atherosclerotic lesions of common femoral artery, the perioperative morbimortality rate was significantly lower among patients who underwent endovascular therapy by stenting rather than surgery.
- Intra operative techniques should take account of the type of lesions
- Calcifications, stent fracture, to compromise femoral approaches do not appaear as a limit of CFA stenting