



## The Eiffel Tower Technique For Endovascular Treatment Of Common Femoral Artery Bifurcation Lesions: What Is It And What Are Its Results: Lessons From The TECCO RCT

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### Disclosures

Y. Gouëffic reports:

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### ESVS 2024 guidelines for Common Femoral Repair

**Recommendation 61**

For patients with disabling intermittent claudication undergoing revascularisation, with common femoral artery stenosis or occlusion not extending down to the femoral bifurcation, endovascular treatment may be considered as an alternative to open surgery due to similar midterm patency rates compared with open surgery in non-complex common femoral artery lesions.

Class	Level	References	TOL
IIb	A	Changal et al. (2019) <sup>13</sup> Bouffl et al. (2021) <sup>14</sup>	

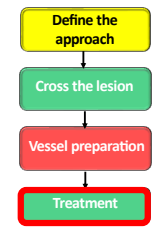
**Recommendation 62**

For patients with disabling intermittent claudication and a hostile groin (e.g., prior ipsilateral common femoral endarterectomy, morbid obesity, or previous regional radiotherapy to the groin region) undergoing revascularisation, endovascular treatment of steno-occlusive disease of the femoral bifurcation may be considered over open surgery due to the lower risk of surgical wound complications.

Class	Level	Reference
IIb	C	Consensus

Nordandstig, Eur J Vasc Endovasc Surg, 2023

### Common Femoral Artery Best Endovascular Treatment Should Be Determined



Gouëffic Y, EMC, 2024  
Dubosq M, Gouëffic Y, Medicina (Kaunas), 2022

### TECCO - Primary Endpoint

**Modified intent to treat analysis**

	Surgery (n=61)	Stenting (n=56)	p
Morbidity-mortality rate @ 1 month, n (%)	16 (26)	7 (12.5)	0.05

**Per protocol analysis**

	Surgery (n=58)	Stenting (n=47)	p
Morbidity-mortality rate @ 1 month, n (%)	16 (26)	3 (6.4)	0.005

Gouëffic, JACC Intern, 2017

### Complex CFA Lesions and In-Stent Restenosis



Nasr, Ann Vasc Surg, 2019

**Complex Lesions (type 3) = CFA Bifurcation Is Involved**  
 In TECCO RCT, 61% of the lesions were type 3

**CFA to DPA or CFA to SFA stenting**      **Kissing stent**  
**Effell tower**  
**T-stent**

Gouëffic, JACC Interv, 2017

**CFA Deep femoral artery stenting**

**CFA kissing stent**

Complex Lesions

**T stenting**      **Culotte technique**

Y. Gouëffic, M. Raux, M. Dubosq, C.C Barndé, Alexandra Hauguel, Mar Alonso Chornet, L. Salmi, A. Baron et B. Nasr, EMC, In press

**Tour Eiffel Technique**  
 2 steps

- 1. Stenting of the CFA trunk by a OTW 0.035 SES.**
- 2. Stenting of the CFA bifurcation by 2 RX BE covered stents**
  - To have an easier catheterization of the stented CFA in case of reintervention
  - To decrease potentially the risk of in-stent restenosis.

Lebaz-Dubosq, Nasr, Gouëffic, JACC Interv, 2024

**Step 1- Stenting of the CFA Trunk by a OTW 0.035 SES**

- 7Fr-45cm introducer
- Catheterization of SFA and DFA by 2 .014 GW
- A co-axial .035 SES is choosen and its delivery catheter tip is cut as much as possible
- The .035 delivery system is threaded over the two .014 in place
- The .035 SES is implanted as close as possible of the CFA bifurcation to allow the connection with the covered BES

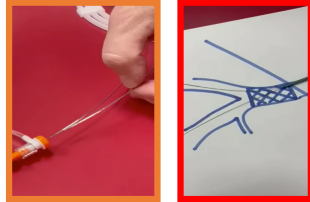
Lebaz-Dubosq, Nasr, Gouëffic, JACC Interv, 2024

**Step 2 - Stenting of the CFA bifurcation by 2 RX BE covered stents**

- 2 RX BE covered stents (diameters: 4-6mm / Lengths: 12-18mm)

- 2 RX BE covered stents are introduced separately into the introducer

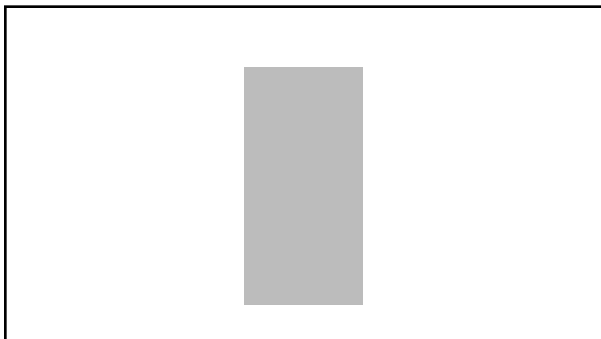
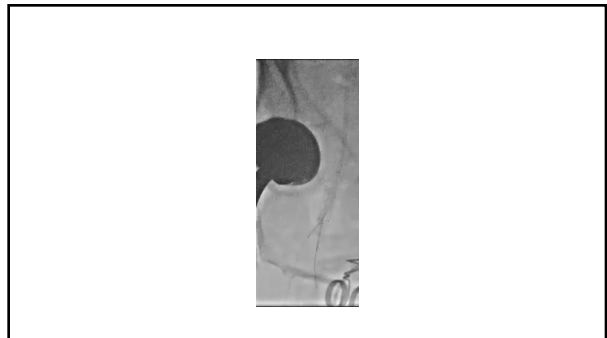
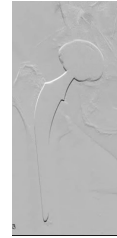
- and deployed simultaneously into the ostia of the deep and superficial femoral arteries, including an overlap with the .035 SES



Lebaz-Dubosq, Nasr, Gouëffic, JACC Interv, 2024

**Bolus Chase**

(cross over approach / 7Fr-45cm sheath)



**Take home message**

- Eiffel Tower technique for CFA bifurcation lesions by covered stenting allows further endovascular procedures at the ipsilateral limb.
- Eiffel Tower technique for CFA bifurcation lesions could decrease the risk of in-stent restenosis.
- More evidences are required regarding the mid and long-term outcomes of CFA endovascular stenting for complex lesions



