CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE

CONTROVERSIES & UPDATES IN VASCULAR SURGERY

JANUARY 25-27 2018

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER, PARIS, FRANCE

Interest of upper approach

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Disclosure

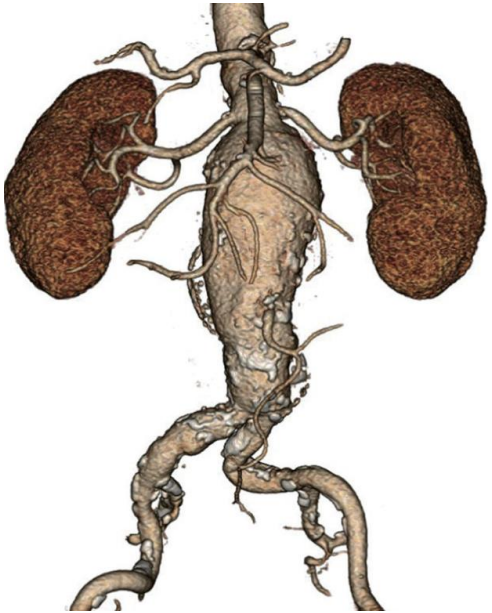
I have the following potential conflicts of interest to report:

Vascutek

Gore

Medtronic

Evident anatomical justification for a upper approach



angulation of target

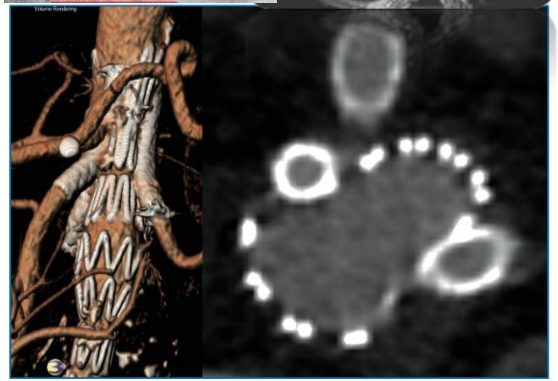
Upper approach validation

- Visceral arteries endovascular procedures

  SMA RA

- Endovascular aortic techniques:

  snorkel chimney

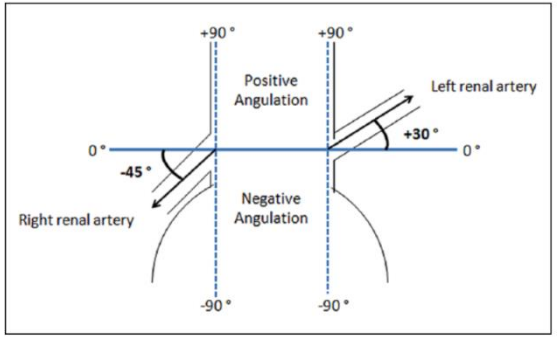


Upper approach validation

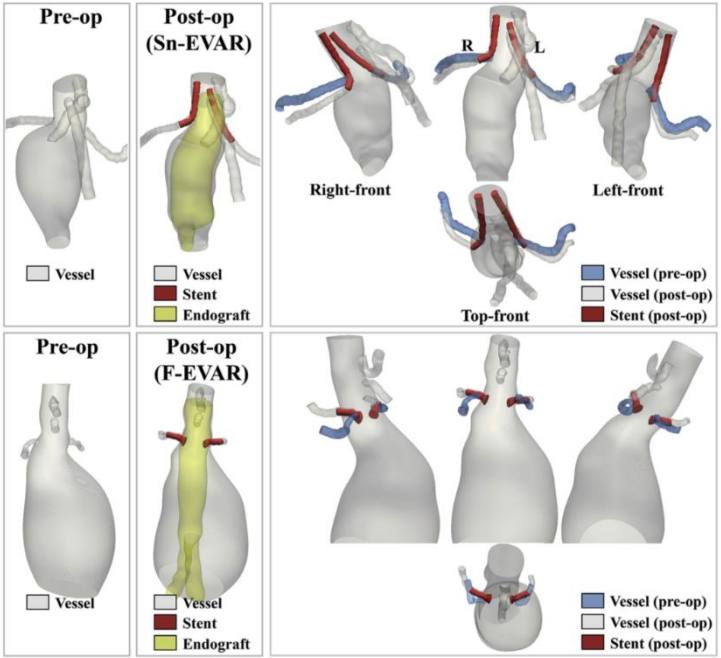
Procedural efficiency may be optimized by considering renal artery angulation as one of several objective variables used in the selection of an appropriate endovascular strategy.

The fenestrated approach is more efficient with less downward angulation to the renal arteries, while the snorkel/chimney strategy is facilitated by more downward renal artery angulation.

Impact of Renal Artery Angulation on Procedure Efficiency During Fenestrated and Snorkel/Chimney Endovascular Aneurysm Repair
JEVT 2015, Vol. 22(4) 594–602
Ullery B et al



Impact on target vessels angulation according with a high or low approach



Upper approach / Sn-EVAR

- leads to less angulation
- causes significantly greater angle change at the stent end

Impact of Renal Artery Angulation on Procedure Efficiency During Fenestrated and Snorkel/Chimney Endovascular Aneurysm Repair
Journal of Endovascular Therapy 2015, Vol. 22(4) 594–602

Ullery B. and all

Upper approach critics

- **Stroke rates 3% to 10%**

This high rate is likely due to multiple vessels often requiring concomitant stenting or repeated and multiple access sites used from both upper extremities

Upper extremity access for fenestrated endovascular aortic aneurysm repair is not associated with increased morbidity

Knowles et al. J Vas Surg 2015; 61:80-7

- **Local access complications**

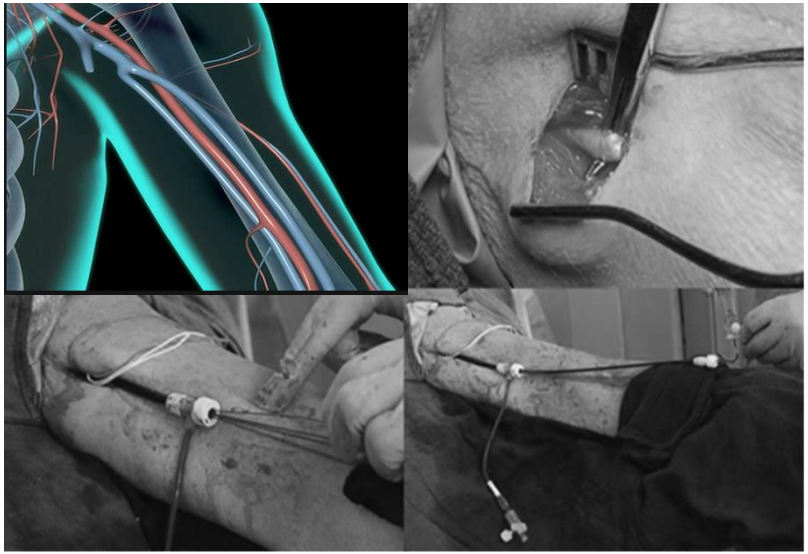
Vascular complications and access crossover in 10,676 trans- radial percutaneous coronary procedures

Burzotta F et al. *Am Heart J 2012;163: 230-8*.

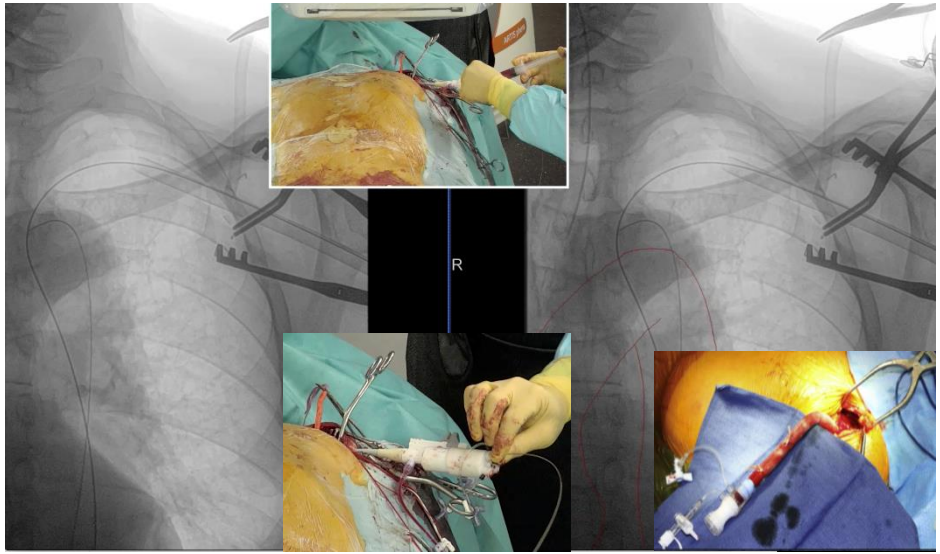
Technical aspects

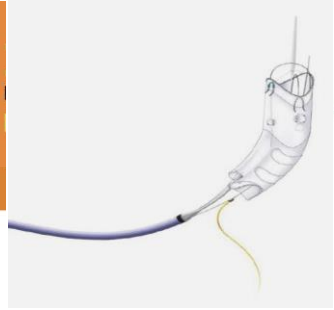
Courtesy
Eric Allaire
Nicolas Frish
Claude Mialhe

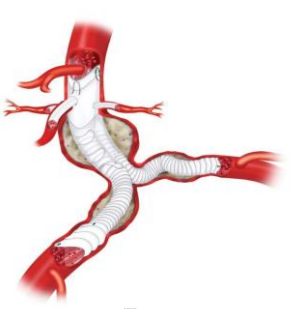
Brachial access 14 F



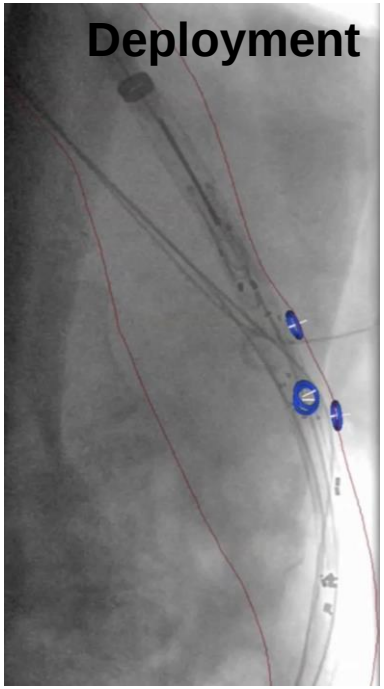
Axillary access 20 F

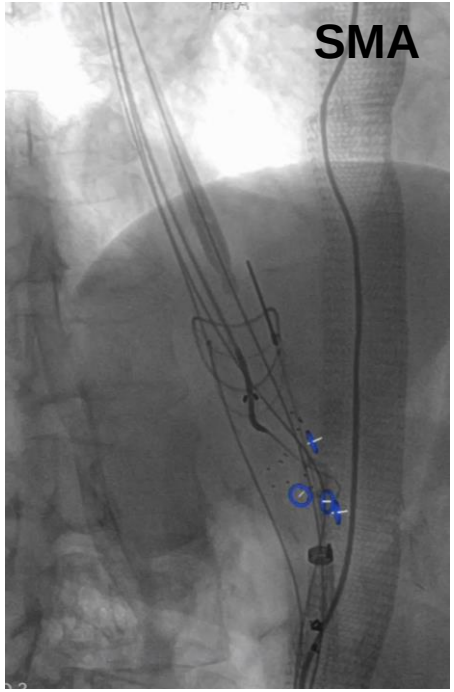


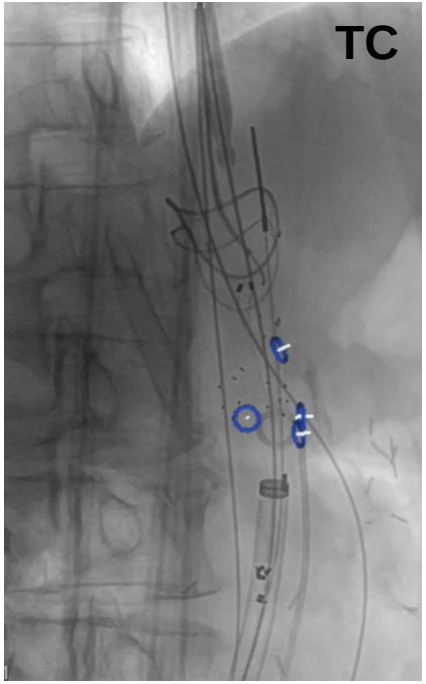




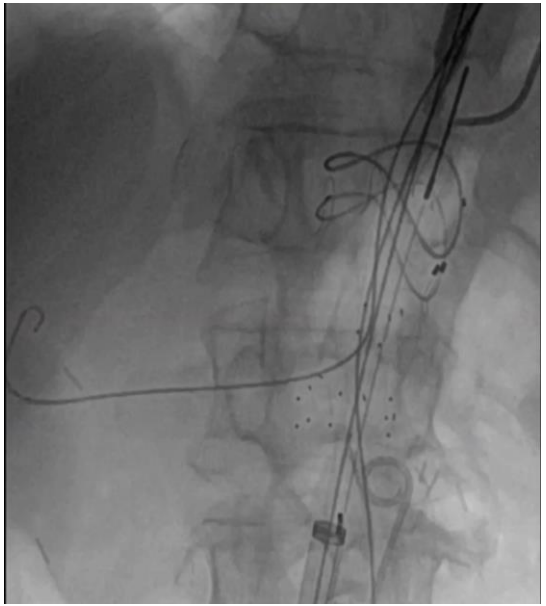
Technical aspects

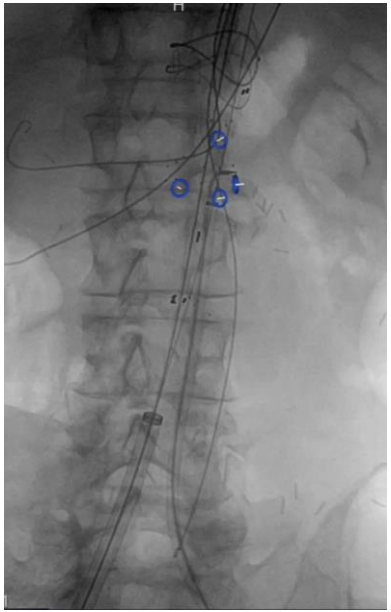


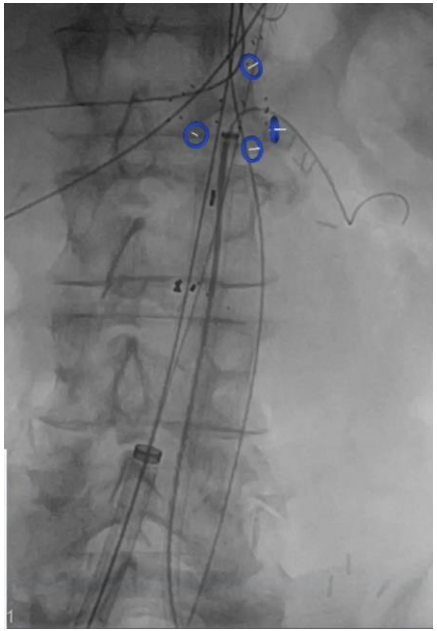




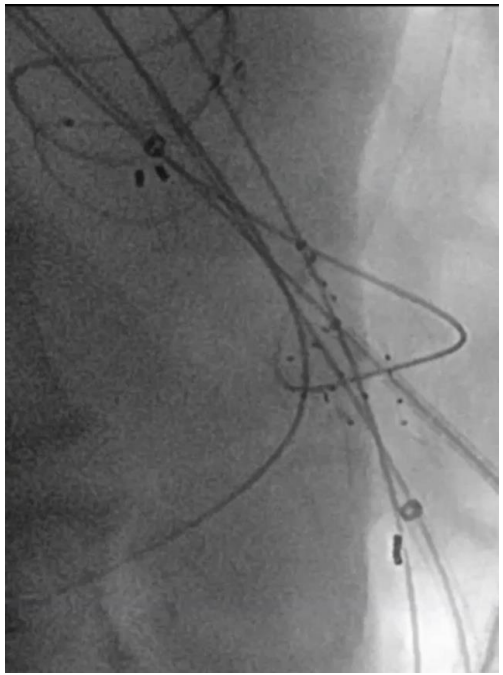
Upper and femoral approach for the renal arteries

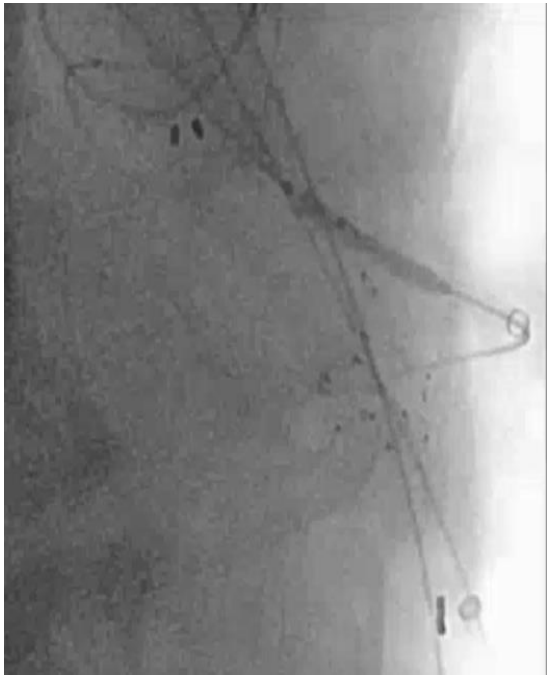




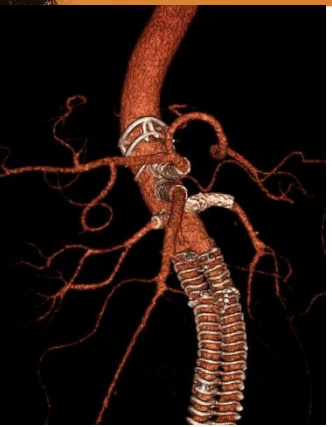
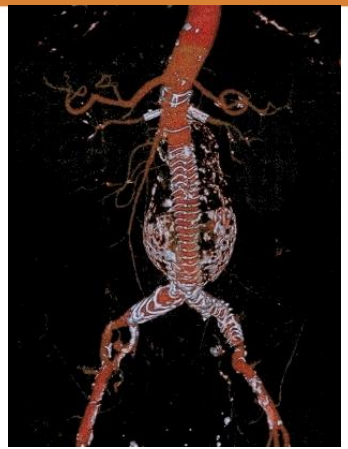


Stenting and flairing iof the vessels in the axis



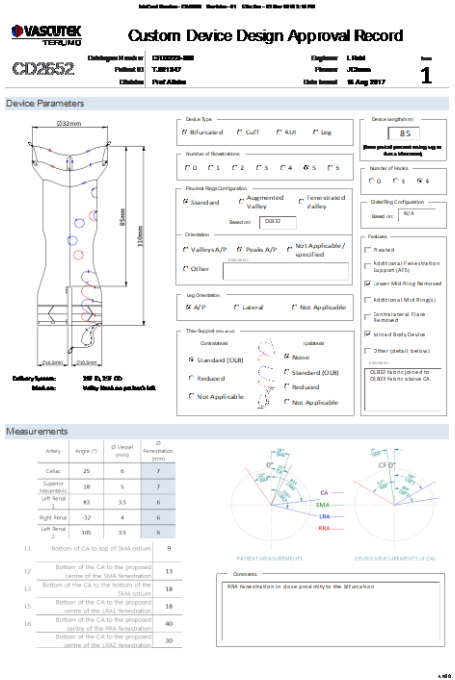


Final control


- Interest of the upper approach for challanging cases

Case : 5 fenestrations 3 renal arteries


VASCUTEK TERUMO

Custom Device Design Approval Record

CD2652

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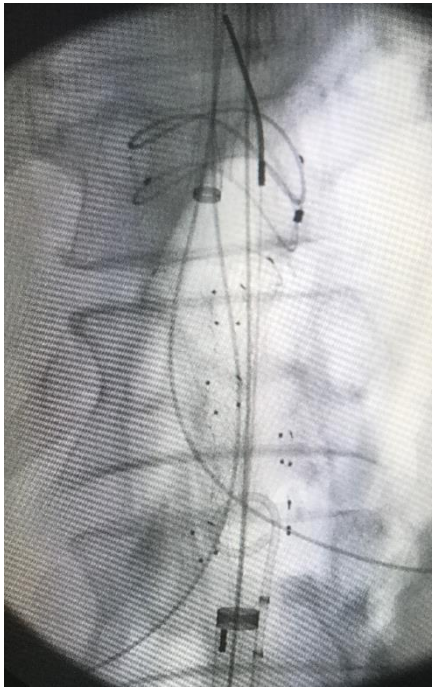
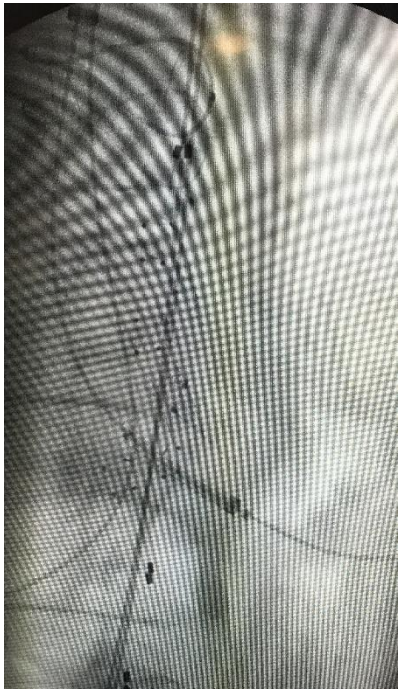
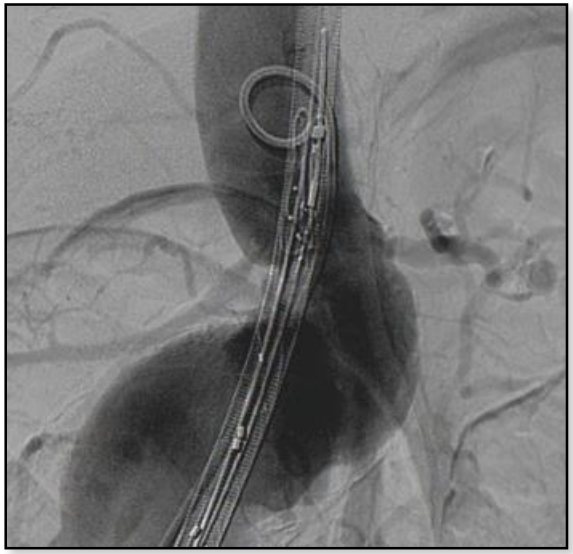
Device Parameters

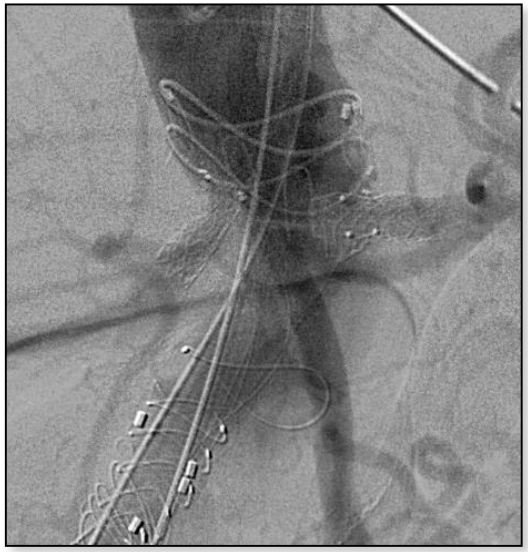
Measurements



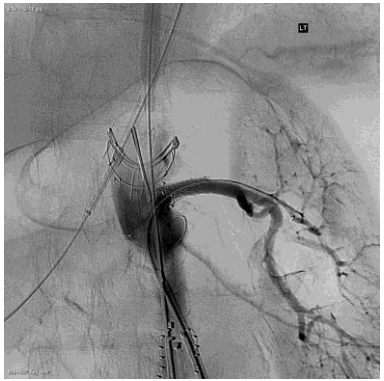


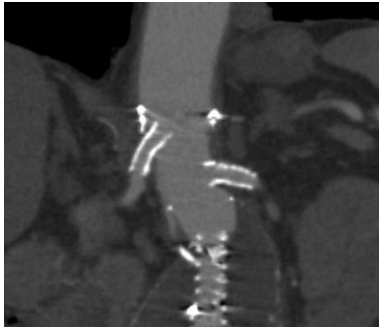
Angulated neck



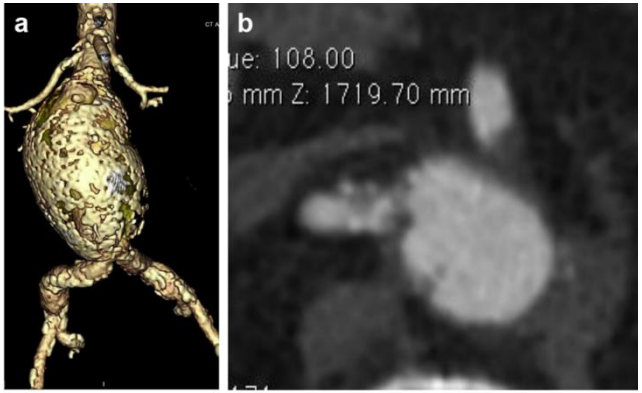


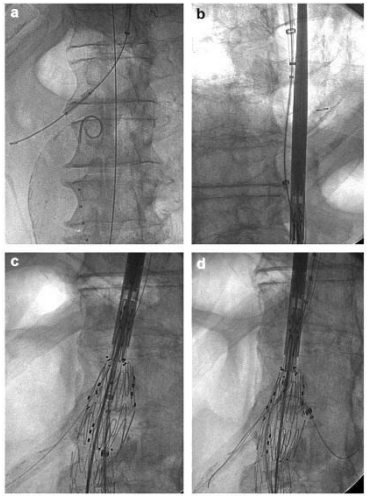
Obliquity of target arteries

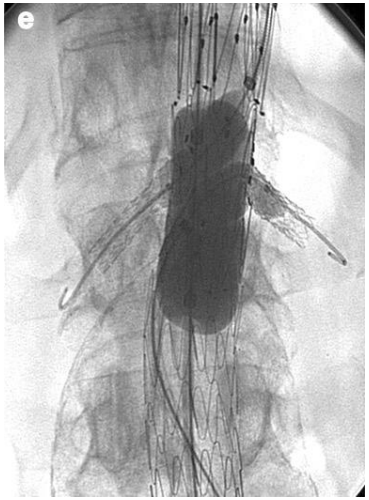




Caudal angulation and stenosis of the renal arteries



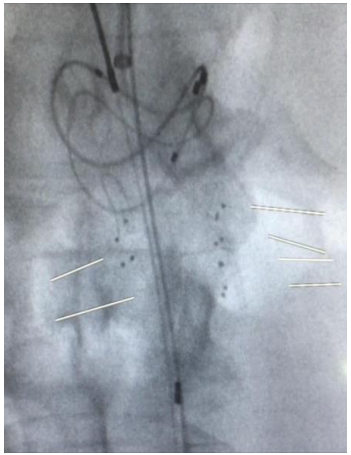


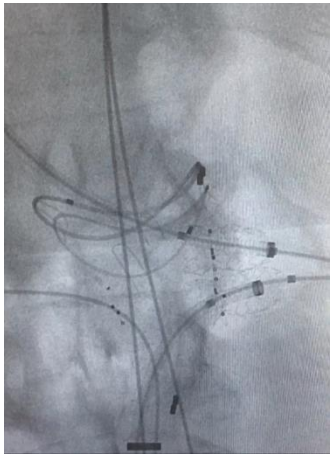


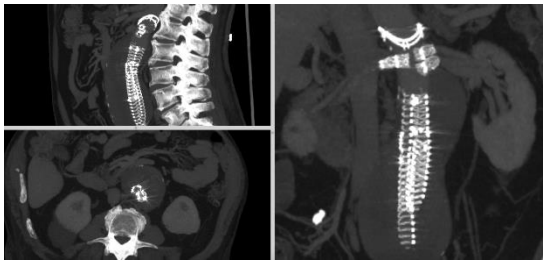
Transbrachial branch cannulation during Zenith fenestrated endovascular aortic aneurysm repair using a robotically guided body-floss technique

J Vasc Surg Cases 2016;2:68-72. Han S et al

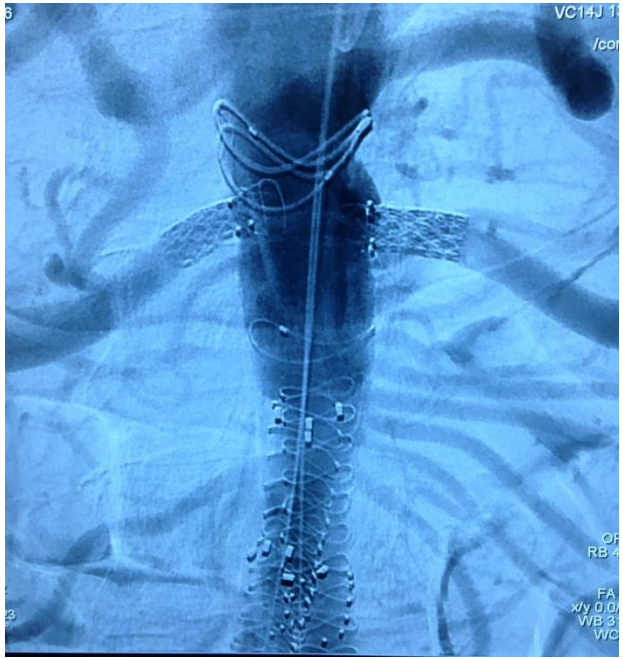
Double renal arteries

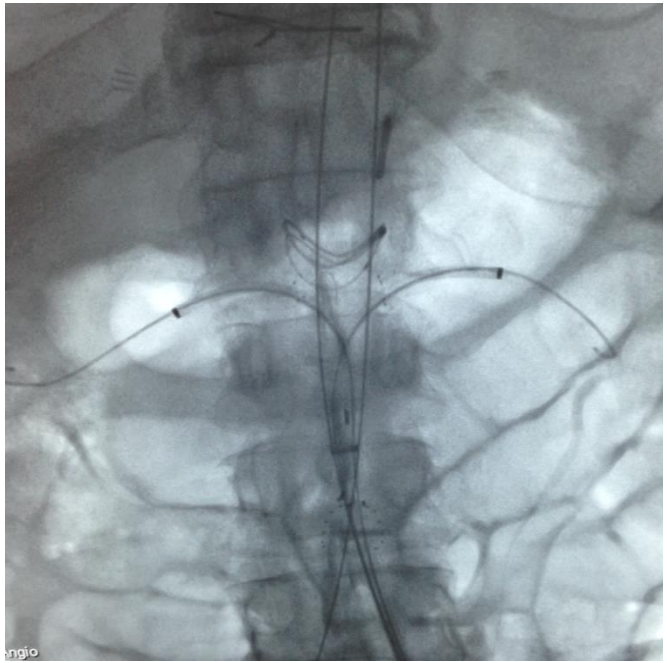




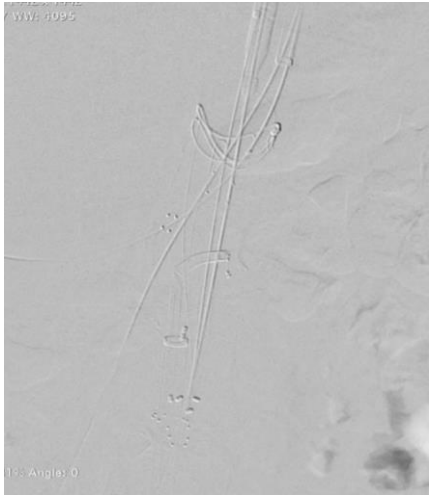


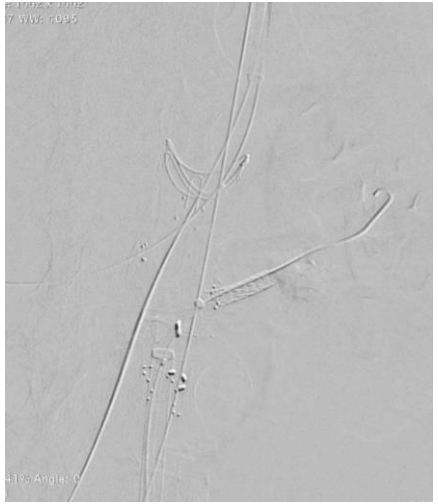
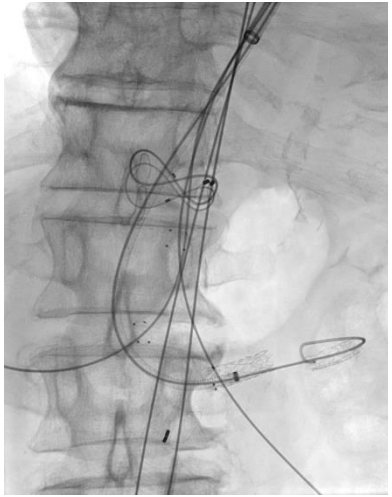
Femoral approach for 2 fenestrestions





Interest of combinated approach



Conclusion

- Upper extremity access is also frequently required for FEVAR because of the caudal orientation of the visceral vessels.

- Upper and the femoral approach must be usefully combined for difficult cases

The news shows us that we must have all the arms to exist