

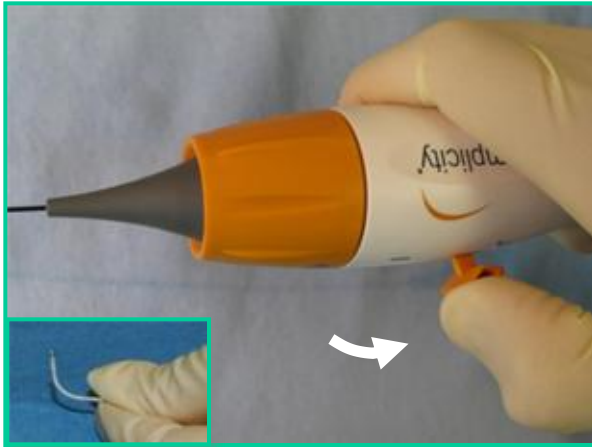
18th ANGIOPLASTY SUMMIT-TCTAP 2013
Seoul, Korea, April 23-26, 2013

Challenging Anatomies and Situations

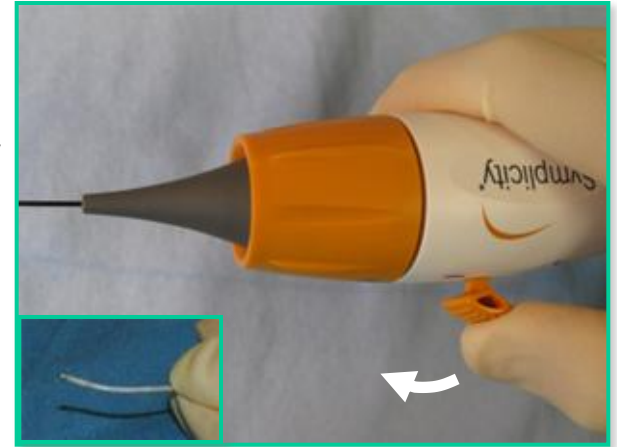
Horst Sievert, Ilona Hofmann, Laura Vaskelyte,
Stefan Bertog, Simon Lam, Sameer Gafoor
CardioVascular Center Frankfurt - CVC
Frankfurt, Germany

Symplicity Catheter: Handle Features

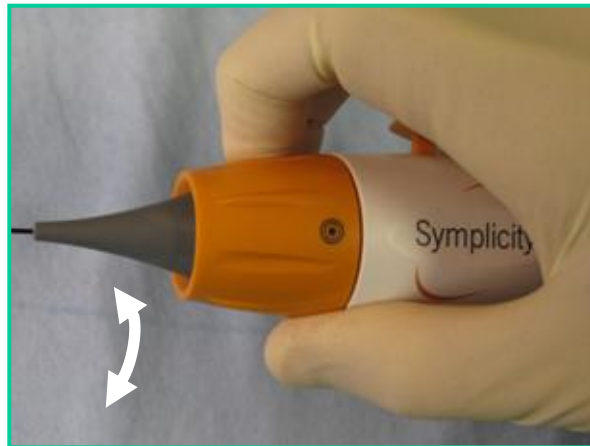
Deflect tip by pulling lever towards back of handle



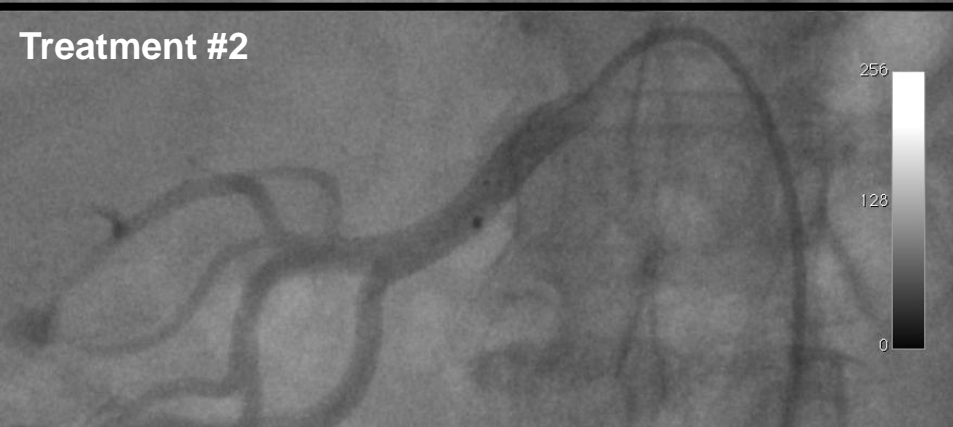
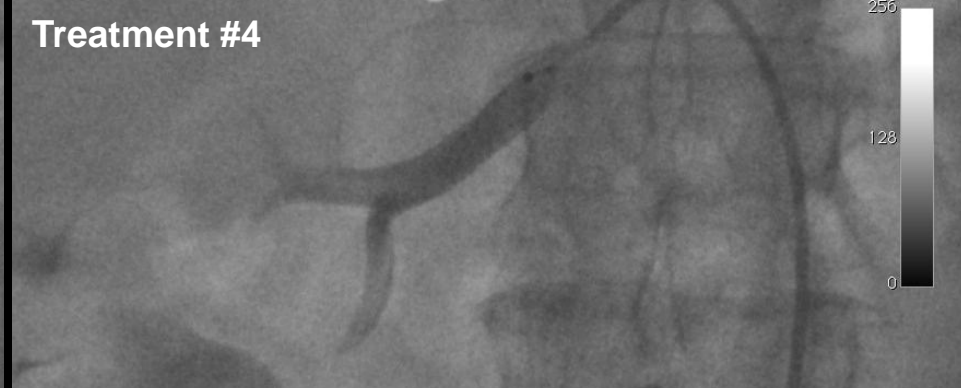
Straighten tip by pushing lever towards front of handle



Handle rotator has tactile "click" every 45 degrees



Example Treatment Locations in a Right Renal Artery



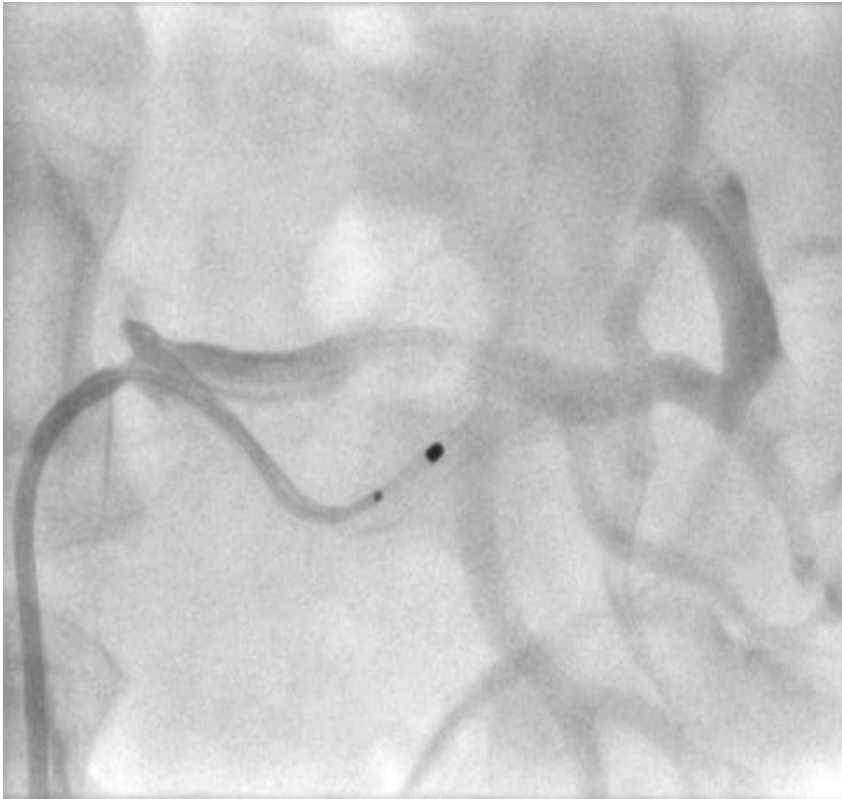
So usually this is a simple and straight forward, almost boring procedure

But not always!

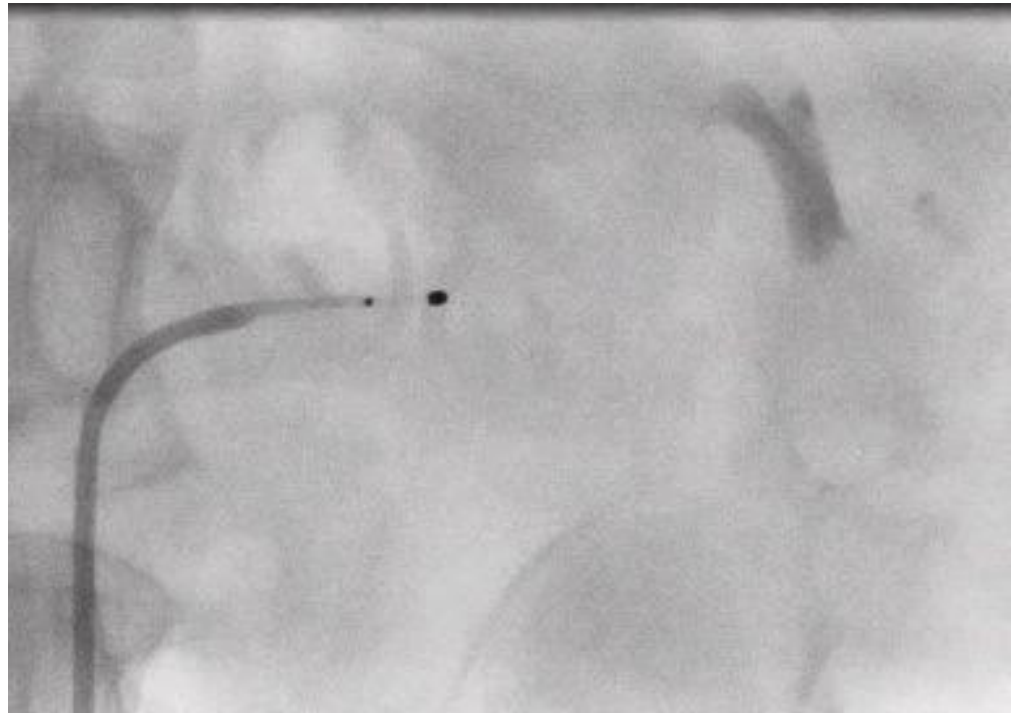
Va, male, 48 yrs

- Arterial Hypertension
- Office BP 170/90 mmHg
- 24h AMBP 156/91 mmHg
- CAD
 - STEMI, PCI/stent implantation 2009
- **Antihypertensive Medications:**
 - Metoprolol 95mg
 - Lercandipin 20mg
 - HCT 12.5mg
 - Telmisartan 40mg

- Left renal artery divides early into two branches
- Difficult access to the lower left artery



- Denervation of upper left renal artery



- What's that?
- What to do?



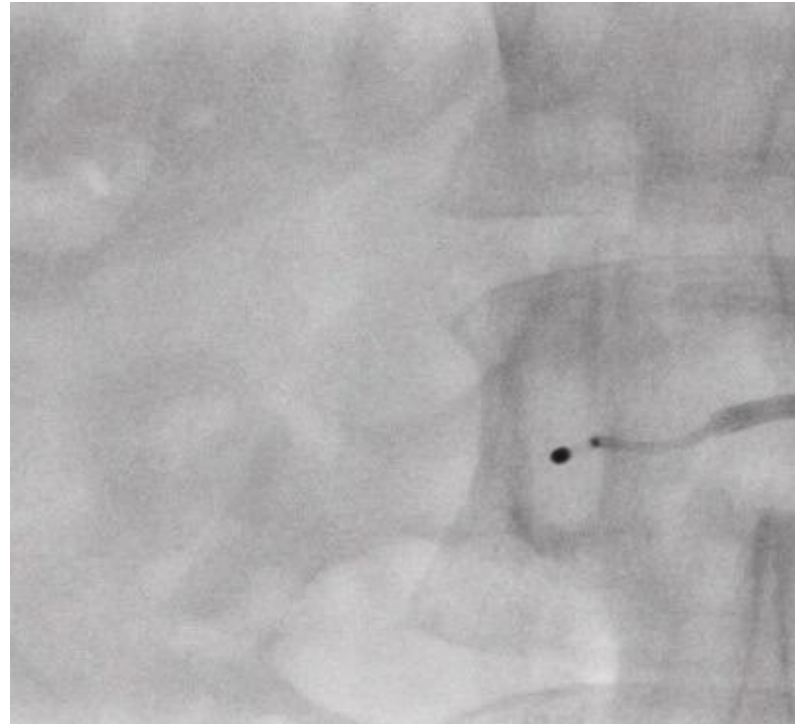
Options

- Nitro
- other vasodilators
- steroids
- gentle balloon inflation
- stent

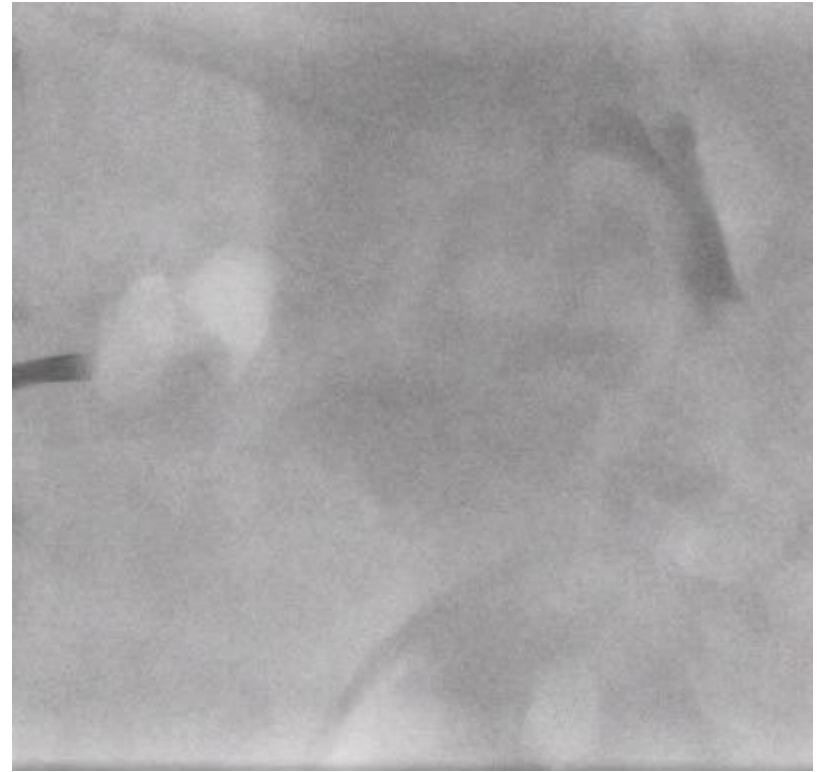


We did nothing!

Ablation of the right renal artery without difficulties



Post-procedure Angiogram of the left upper artery



... no further complications



LIVE
CASES

TRENDS 2013 ASIA-PACIFIC

SEPTEMBER 14, 2013 | TAIPEI, TAIWAN



Renal Denervation ... Device Based Treatment of Hypertension ...
Neurohumoral Interventions ... www.csi-trends.org

Ha., female, 68 years

Hypertension

Atrial fibrillation

TIA in 12/10

Antihypertensive medication:

- Bisoprolol 3.75mg
- Candesartan 16mg
- HTC 12.5mg
- ASS 100mg

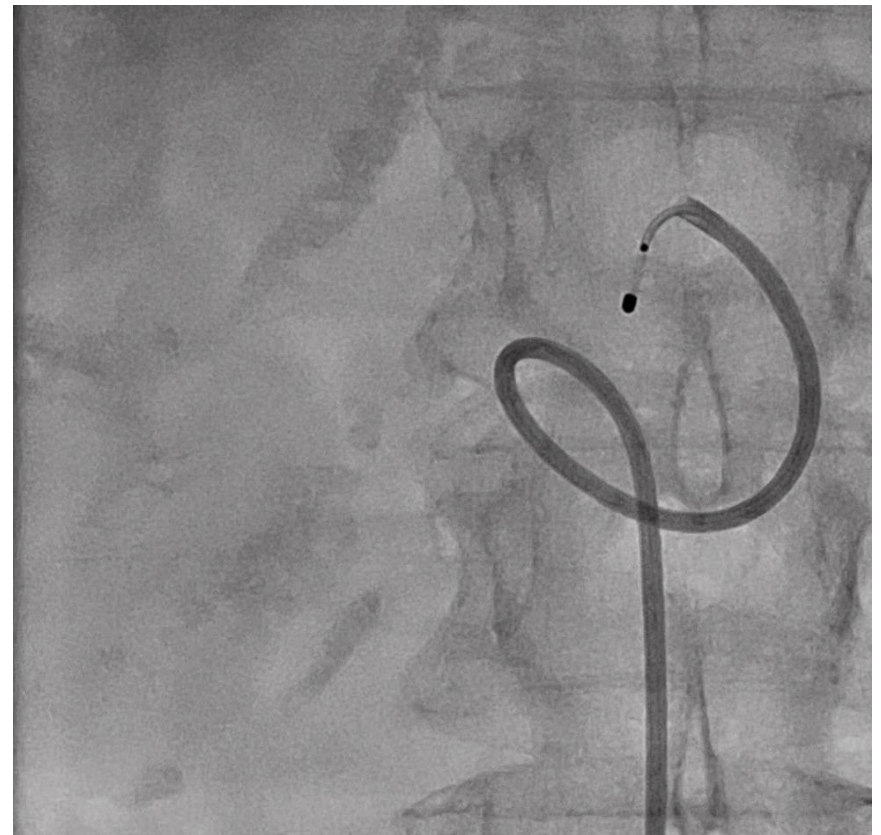
Severe kinking of the infra-renal aorta



Infra-renal kinking



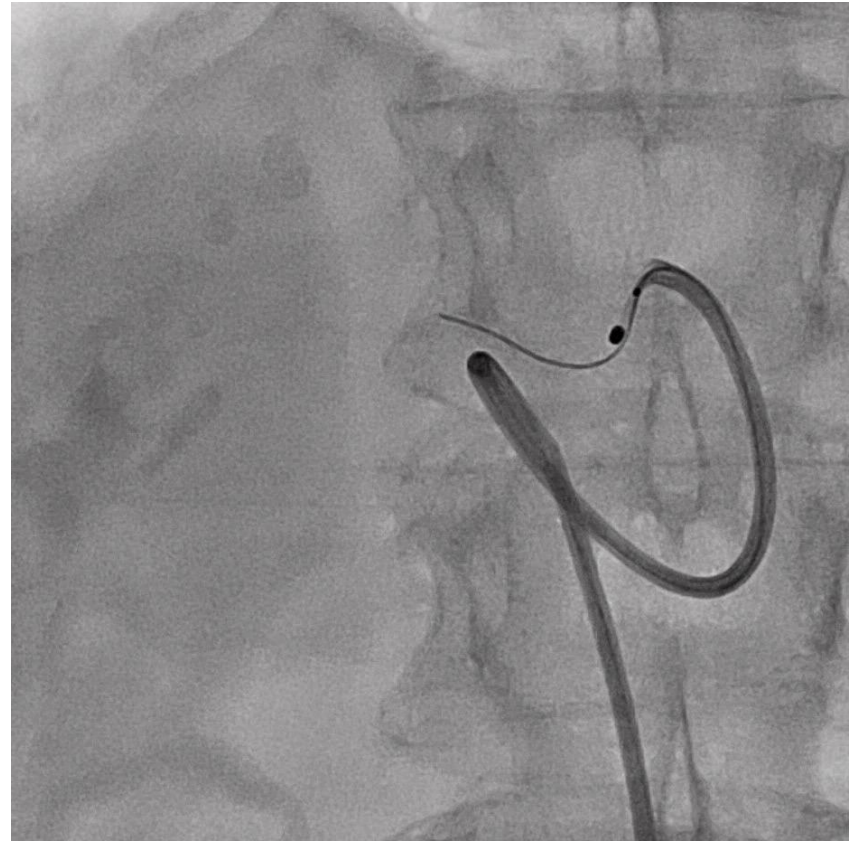
Renal guiding catheter



... with Simplicity cath

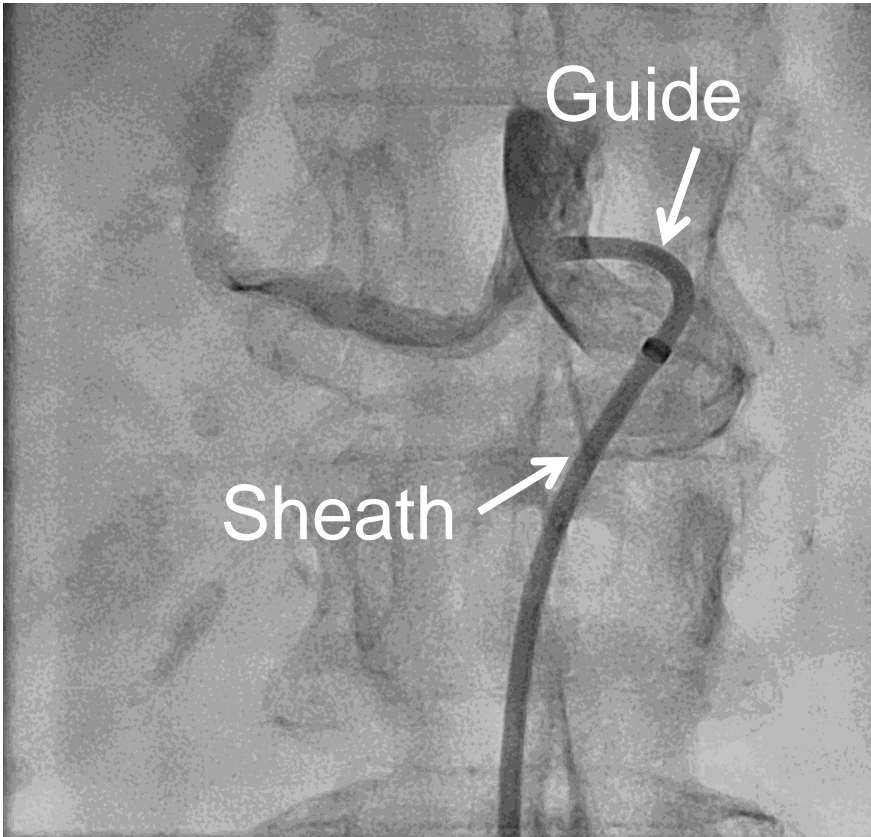
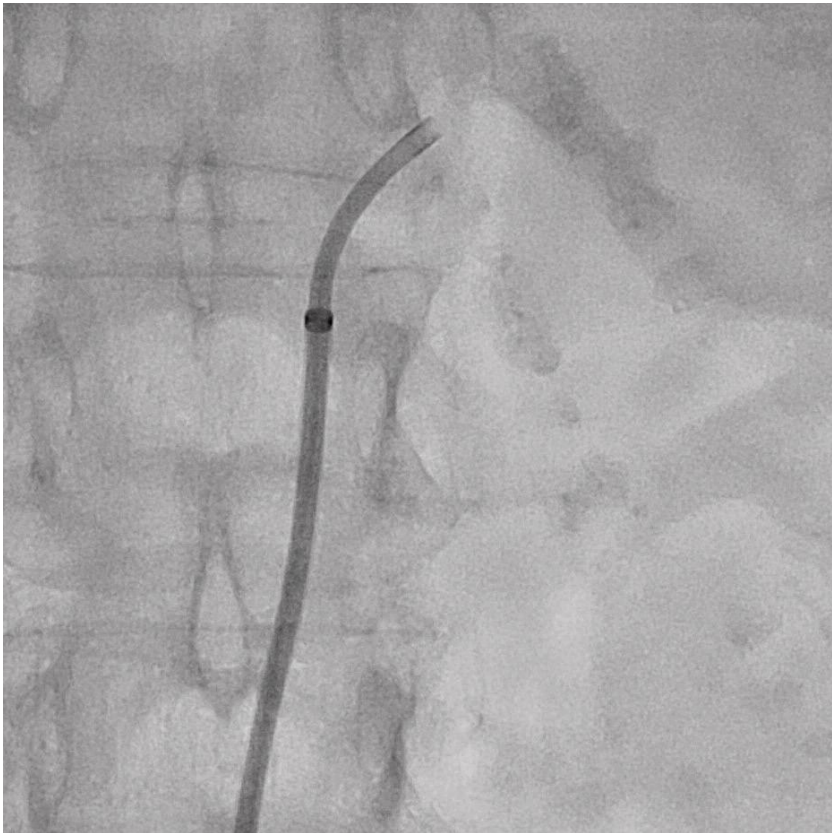
- 0.018" wire for stabilization

➤ failed



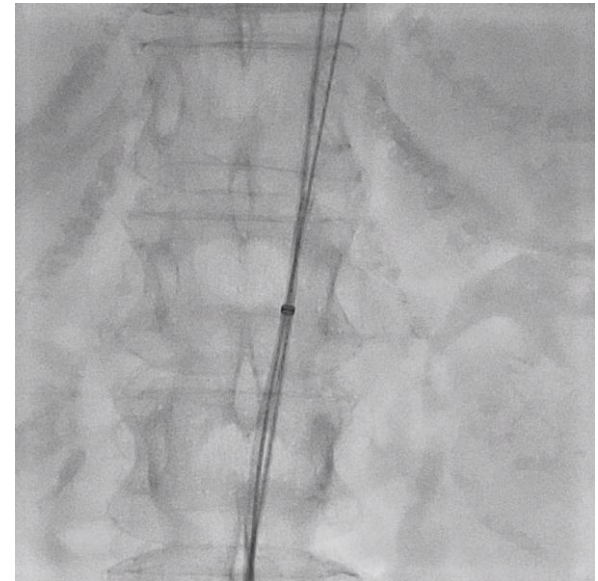
Long sheath

→ failed

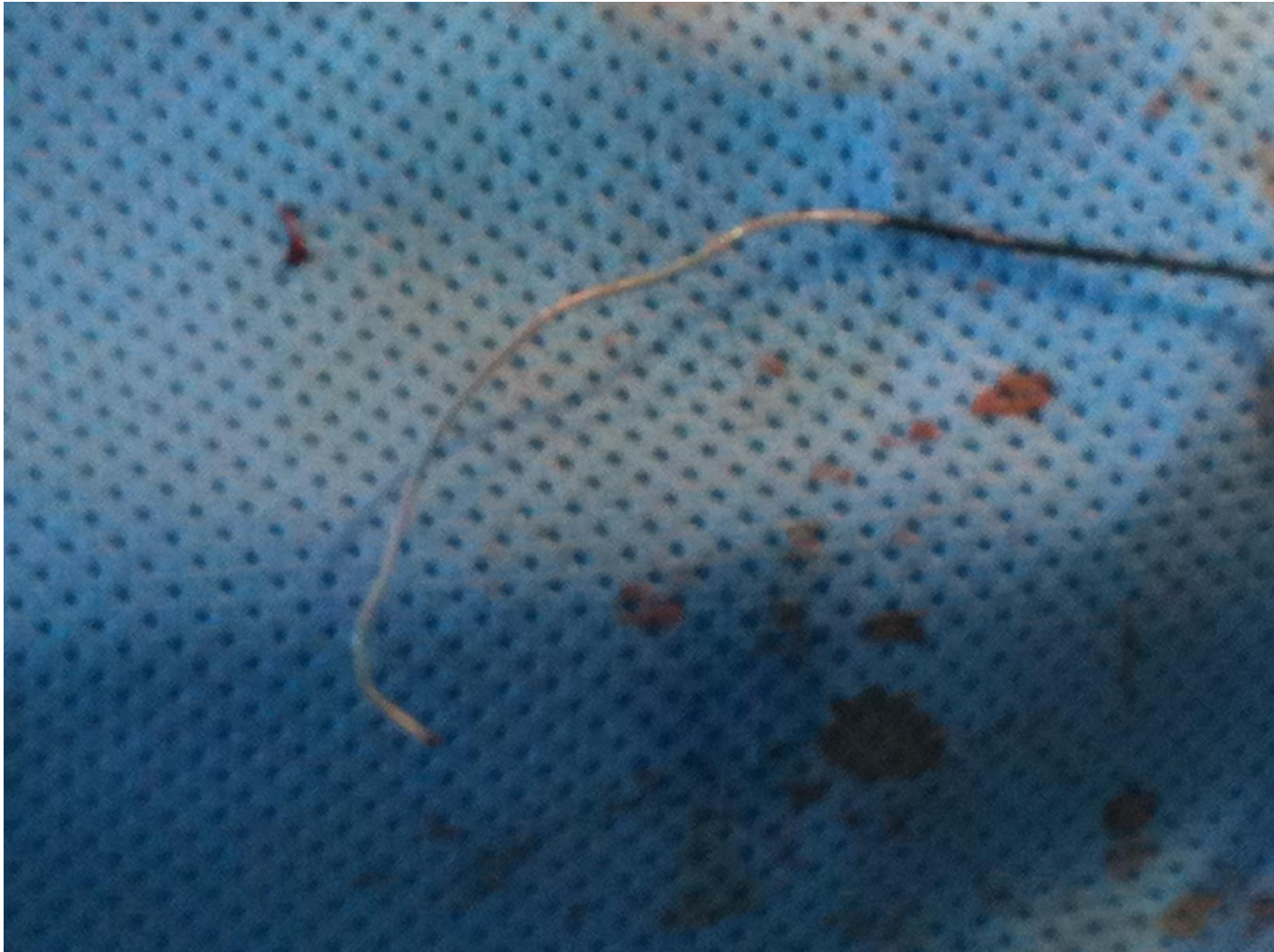


- Sheath and aorta straightened with a stiff wire

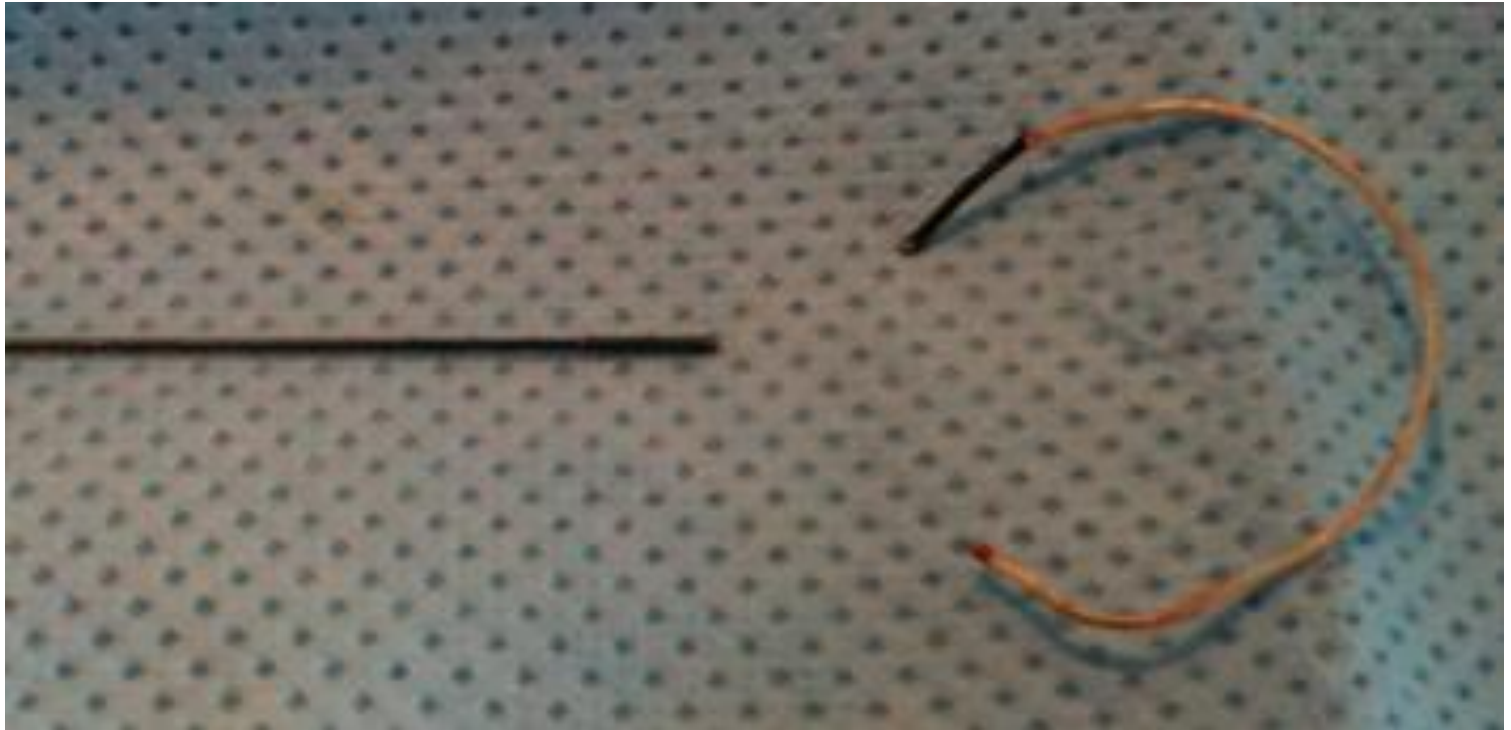
➤ failed



Simplicity catheter after the first few attempts



.... after some more attempts



Transbrachial access!

- Renal guiding catheter is too short for the patient
 - Coronary guiding catheter is too long for the Simplicity catheter
- What to do now?



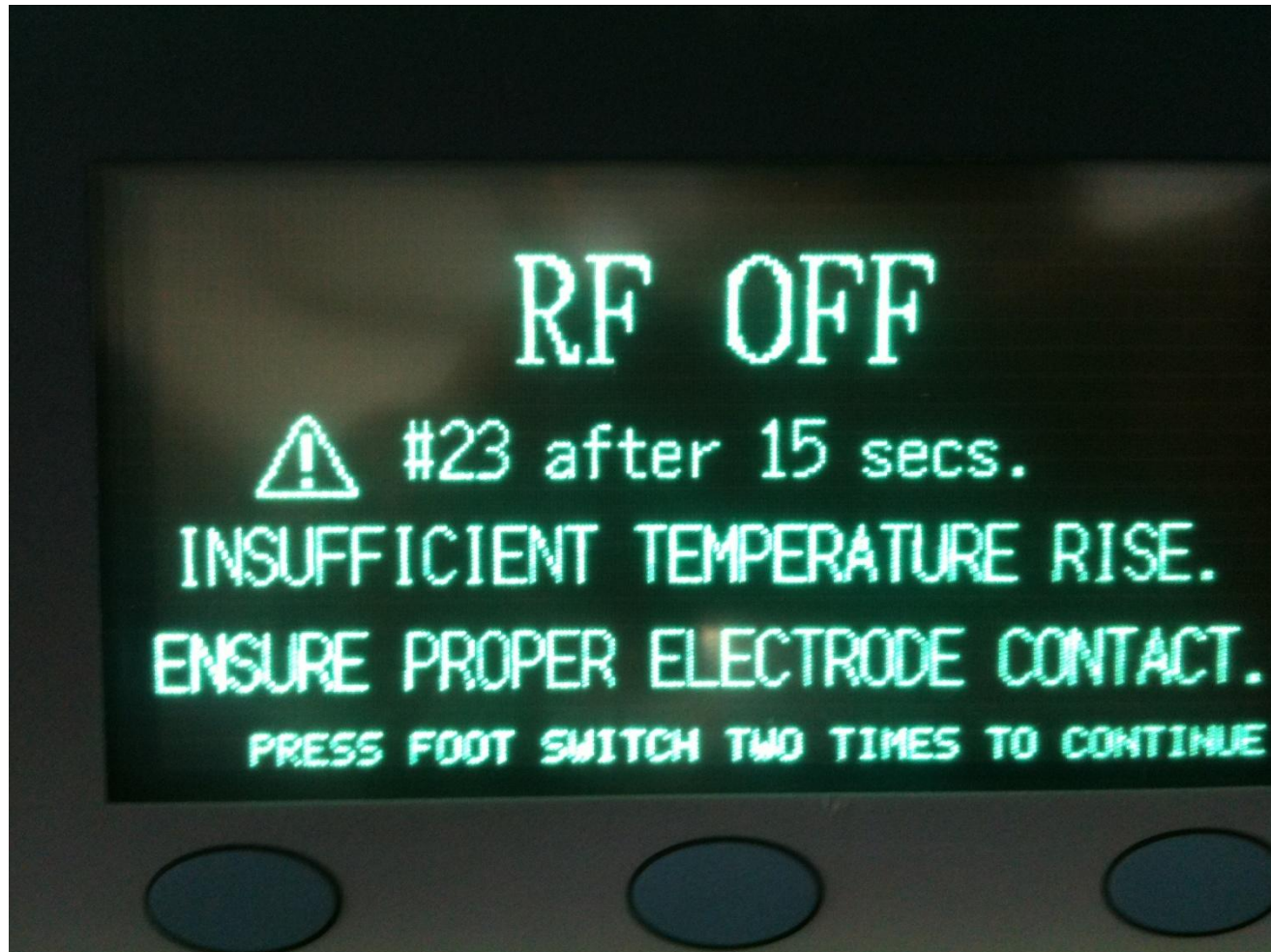
- **Transbrachial access**
 - 6F long sheath



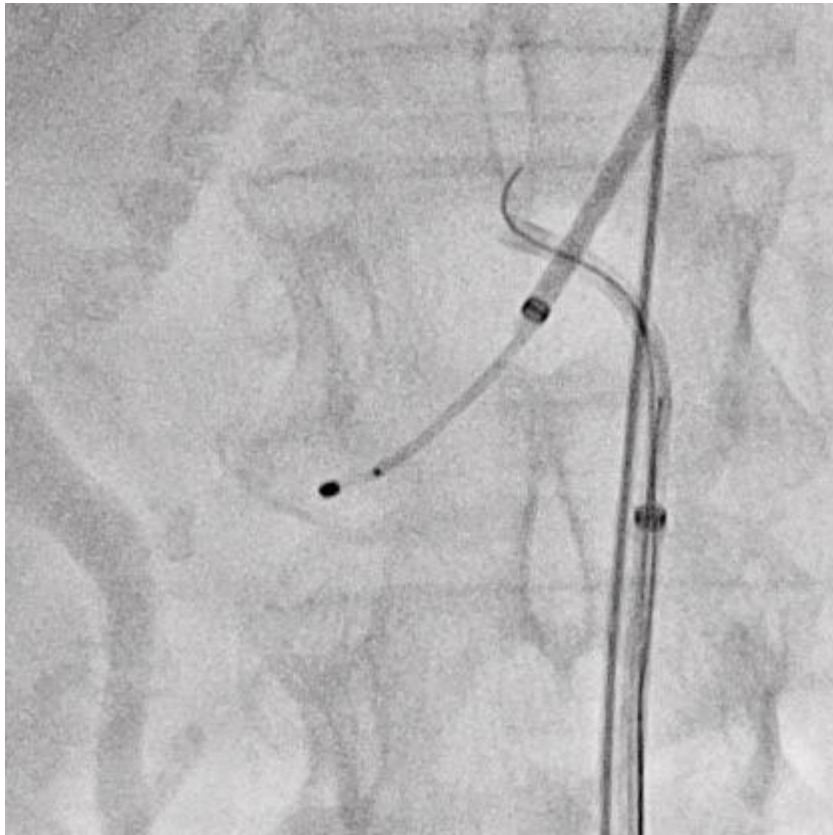
What was the problem?



The generator is intelligent



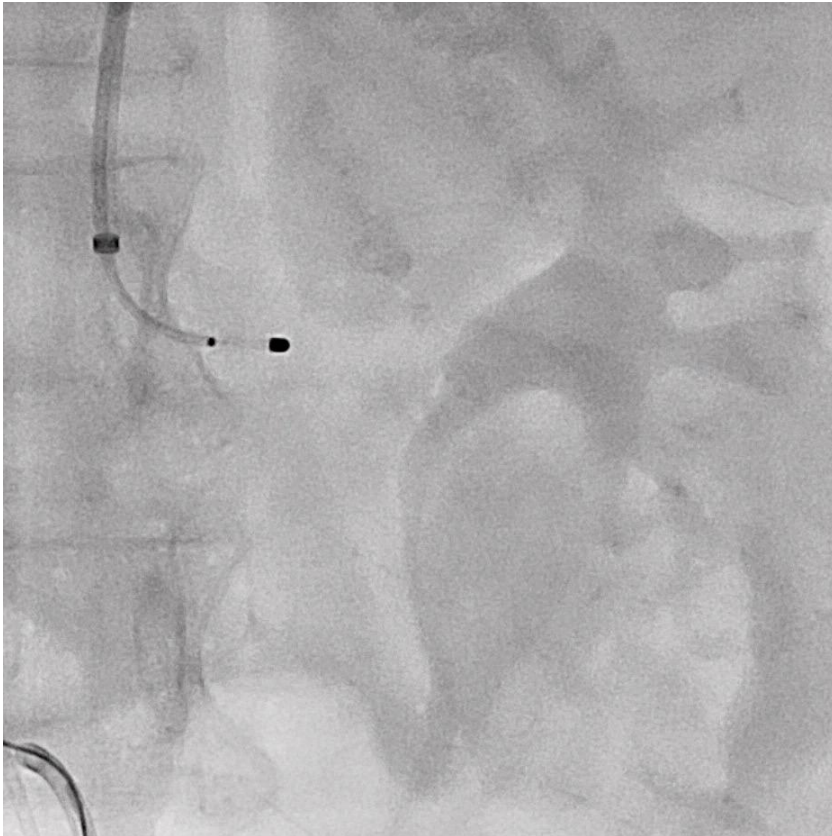
Breathing and a beating heart are important for the patient ...



... but not good for
transbrachial renal denervation



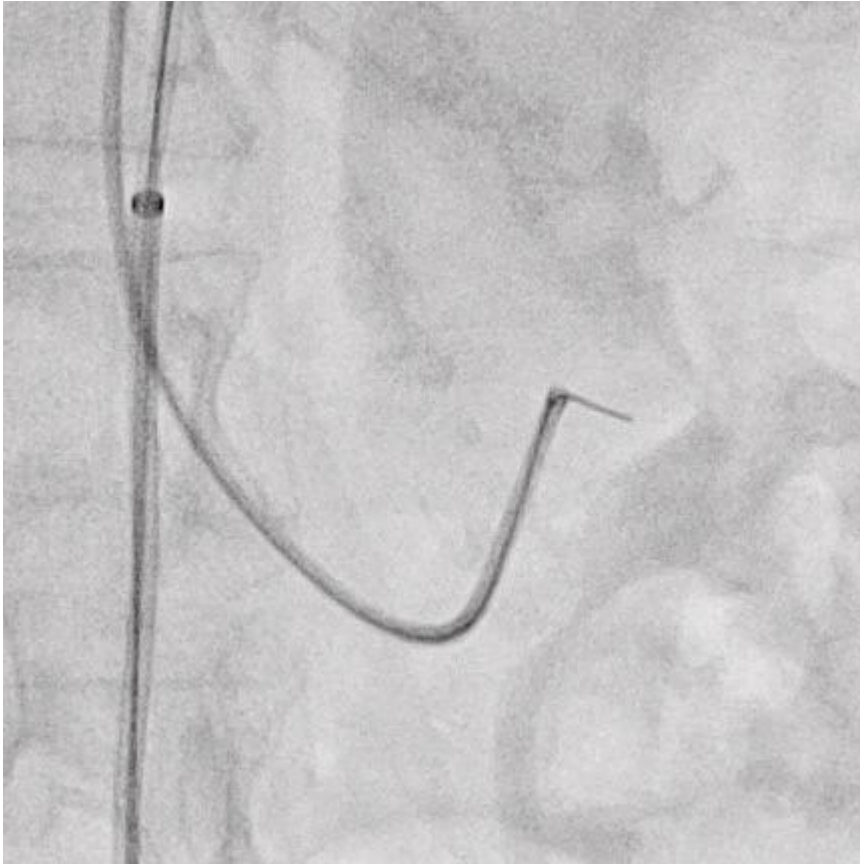
Difficult access on the left side



Aorta straightened from below

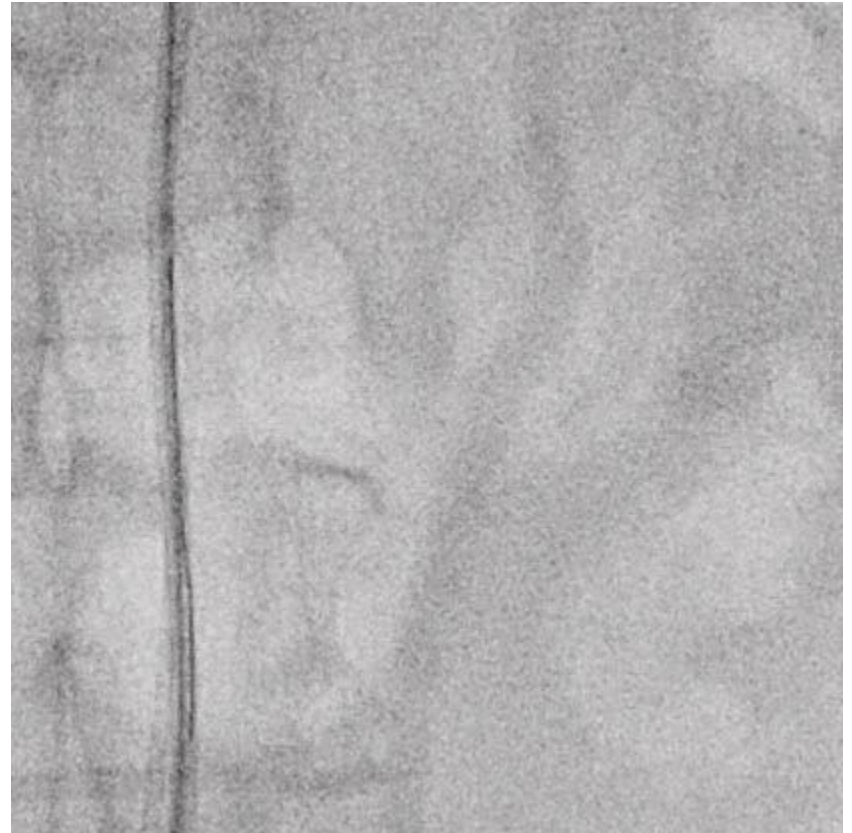


5 F diagnostic cateter

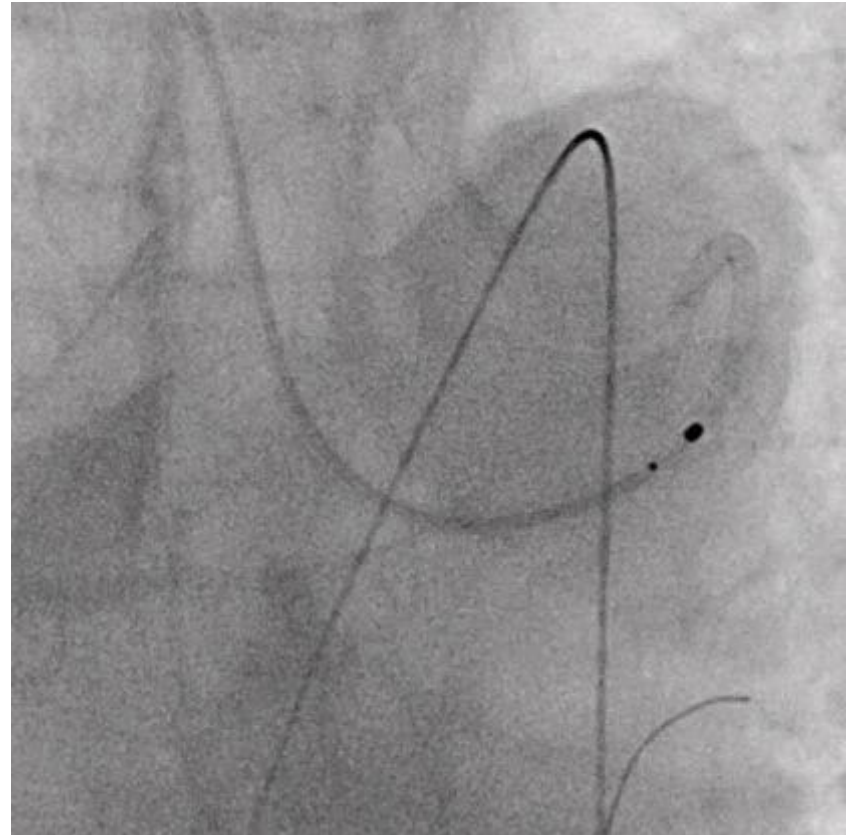


... exchanged for a 6F sheath

- Simplicity catheter advanced through 6 F sheath



- Simplicity catheter advanced through 6 F sheath
 - Aortic arch



- 4 ablations in the proximal vessel segment



Outcome

- BP reduction by 20mmHg after 3 months
- Patient: "Why did this procedure took so long?? Please explain!!"

So usually this is a simple and
straight forward, almost boring
procedure

But not always!