ILIOFEM JUNCTION EXTERNAL ILIAC ILIAC BIFURCATION

TECHNICAL CONSIDERATIONS

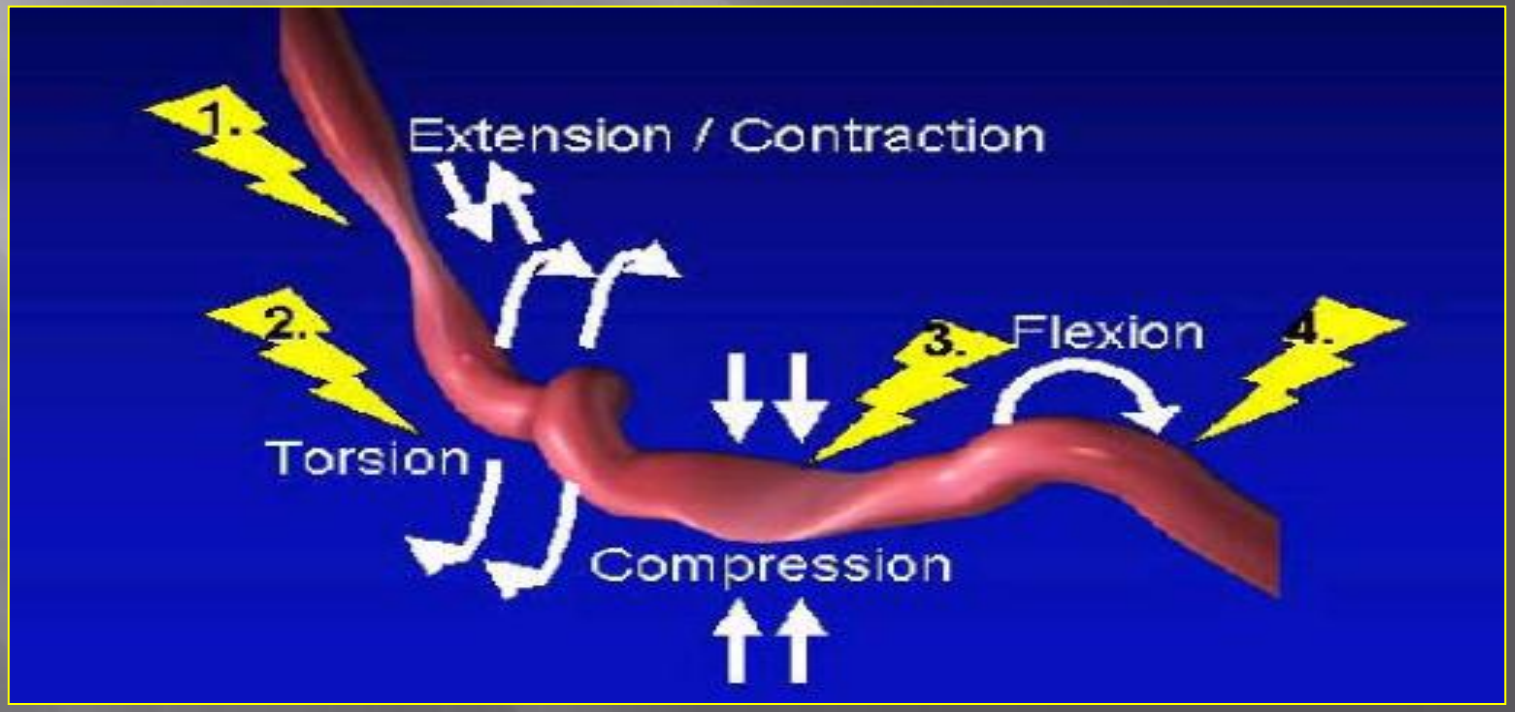
JM CARDON

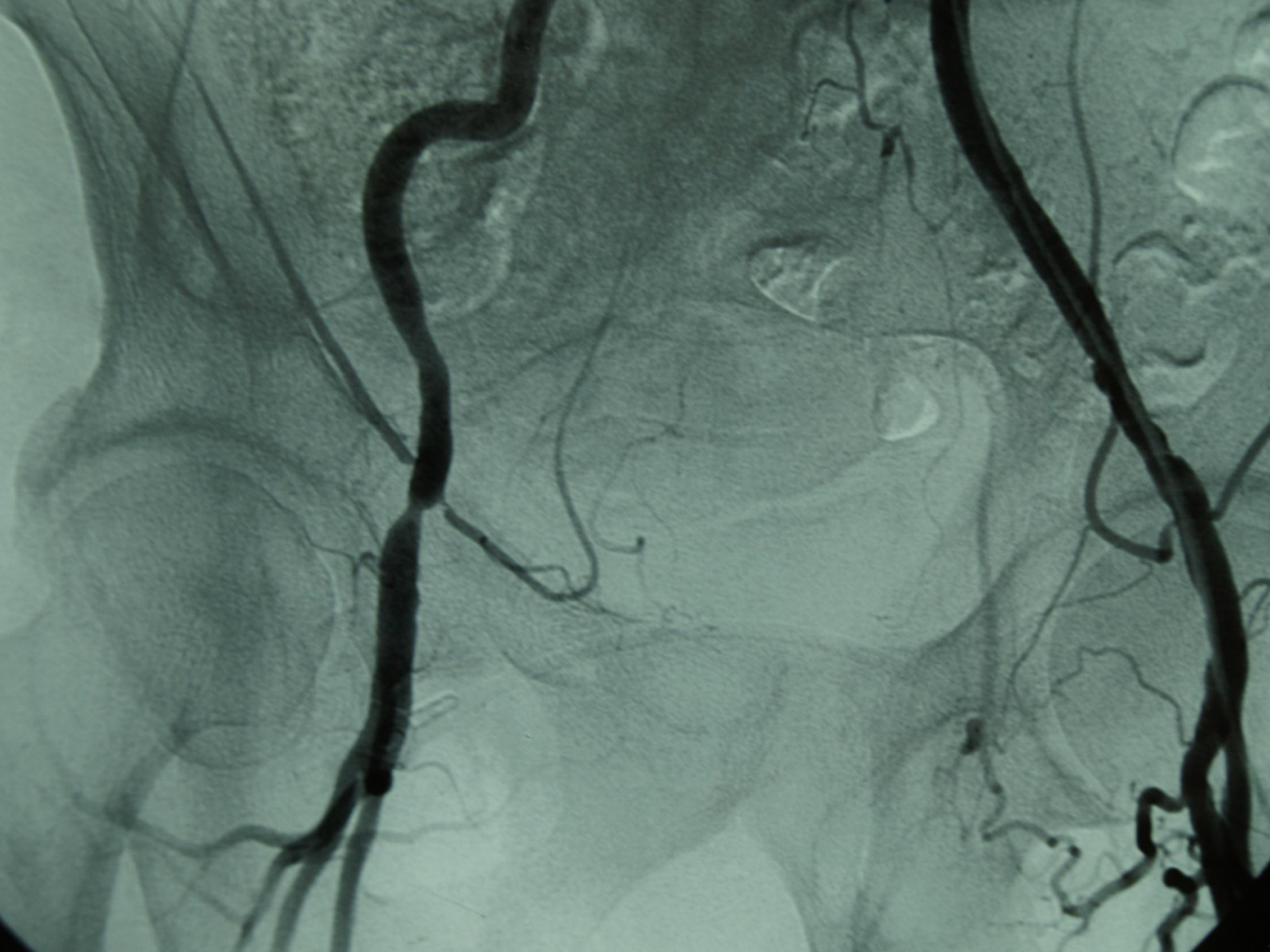
HPF

NIMES

ILIOFEM JUNCTION

Hip join level





Risk is stent fracture

Iliofem junction

- Balloon expandable stent are forbiden as they can crush or break

- Self expandable stent are mandatory

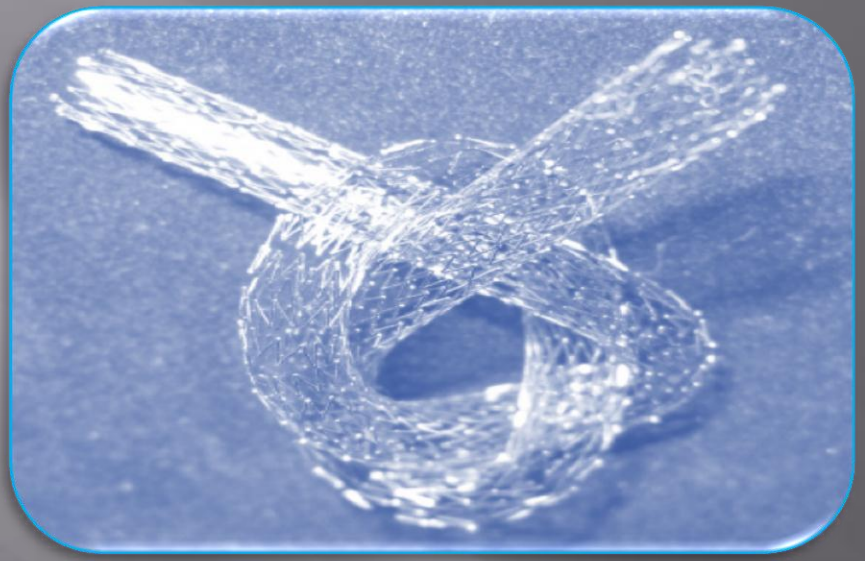
Fatigue test

Finger test

radial force

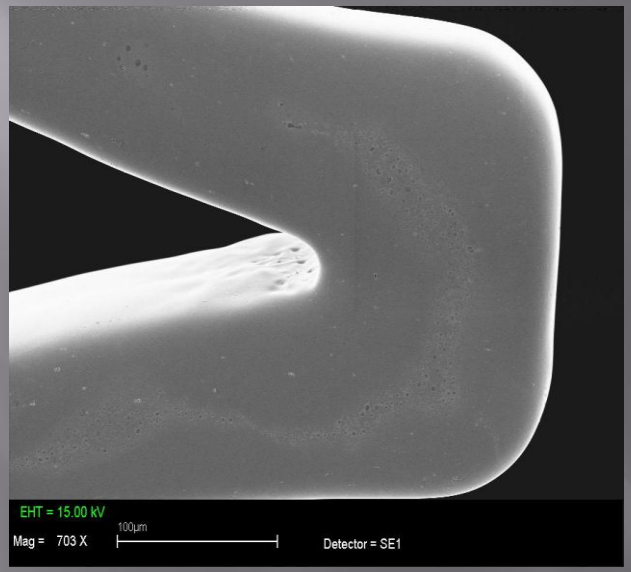
Memory shape : nitinol

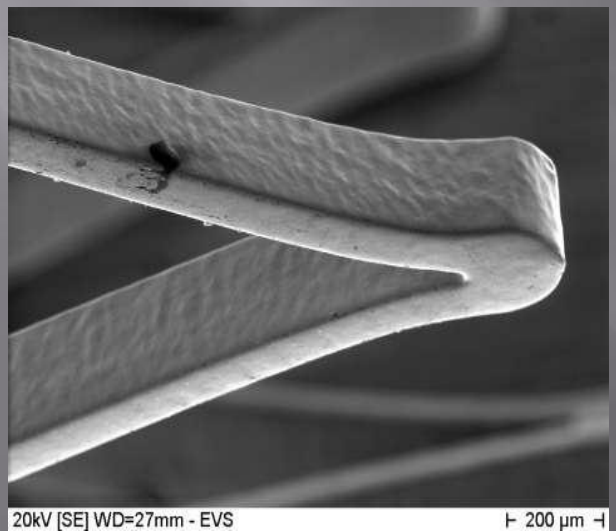
electropolishing

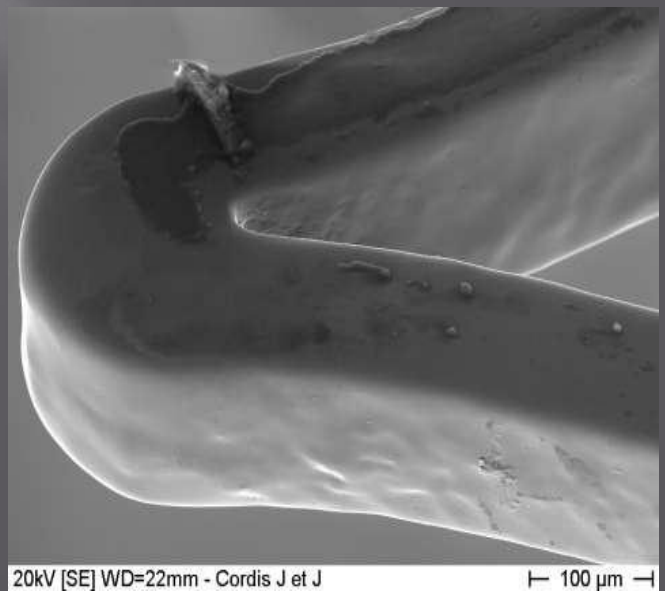



11
12
13


11
12
13


EHT = 15.00 kV
Mag = 703 X
100µm
Detector = SE1


20kV [SE] WD=27mm - EVS
200 µm


20kV [SE] WD=22mm - Cordis J et J
100 µm

We do primary stenting

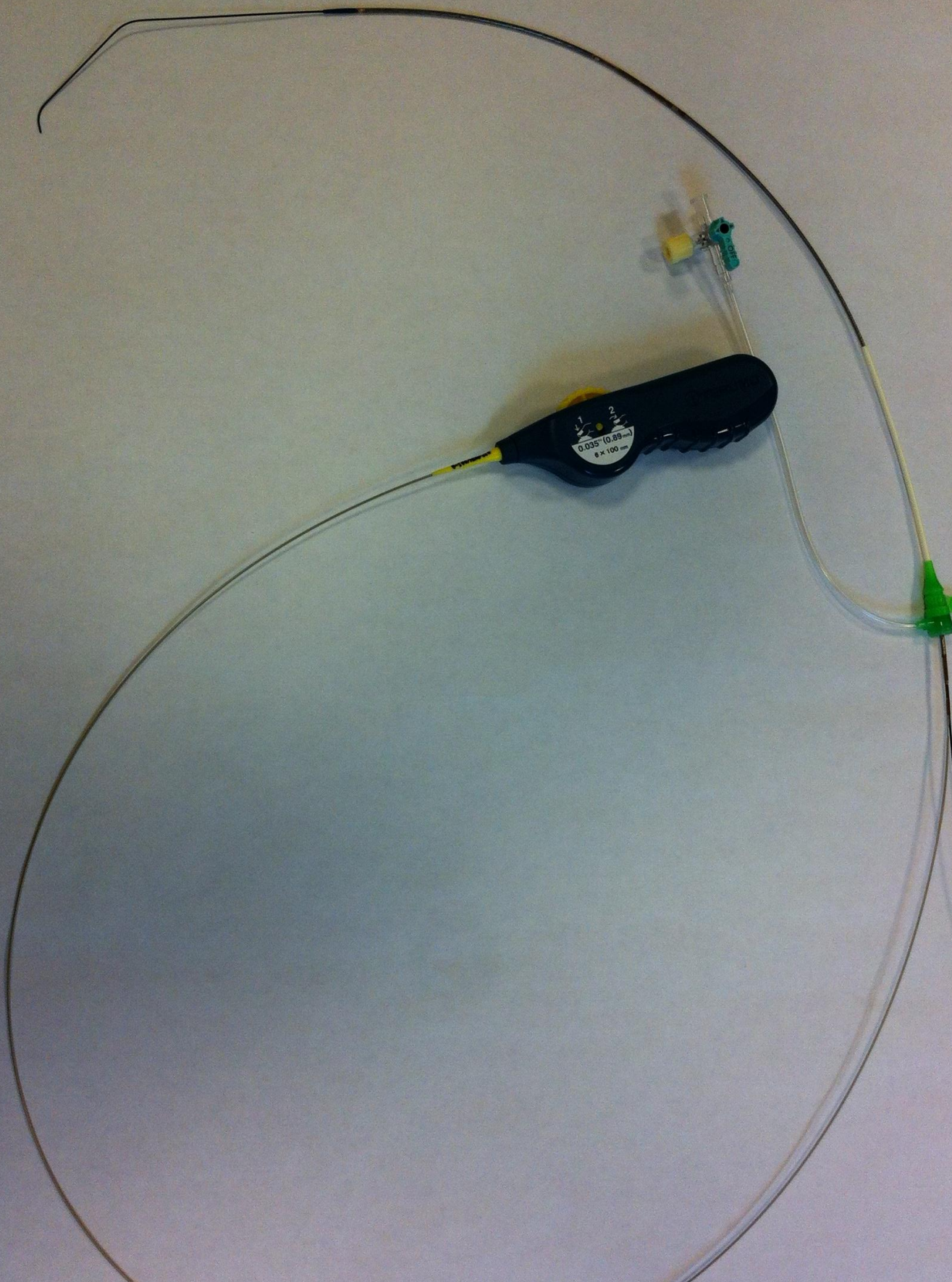
- We always oversize the nitinol stent from 10 to 20% to have best radial force and memory
- But We cover only the disease part of the artery to avoid neointima proliferation on undease artery streched by an oversized stent
- The ballon is inflated only inside the stent

We use the controlateral route

- Give the room to work
- Common femoral under the lesion is often ill: not the best side to puncture
- compression close to the stent not ideal
- Starclose on controlateral side

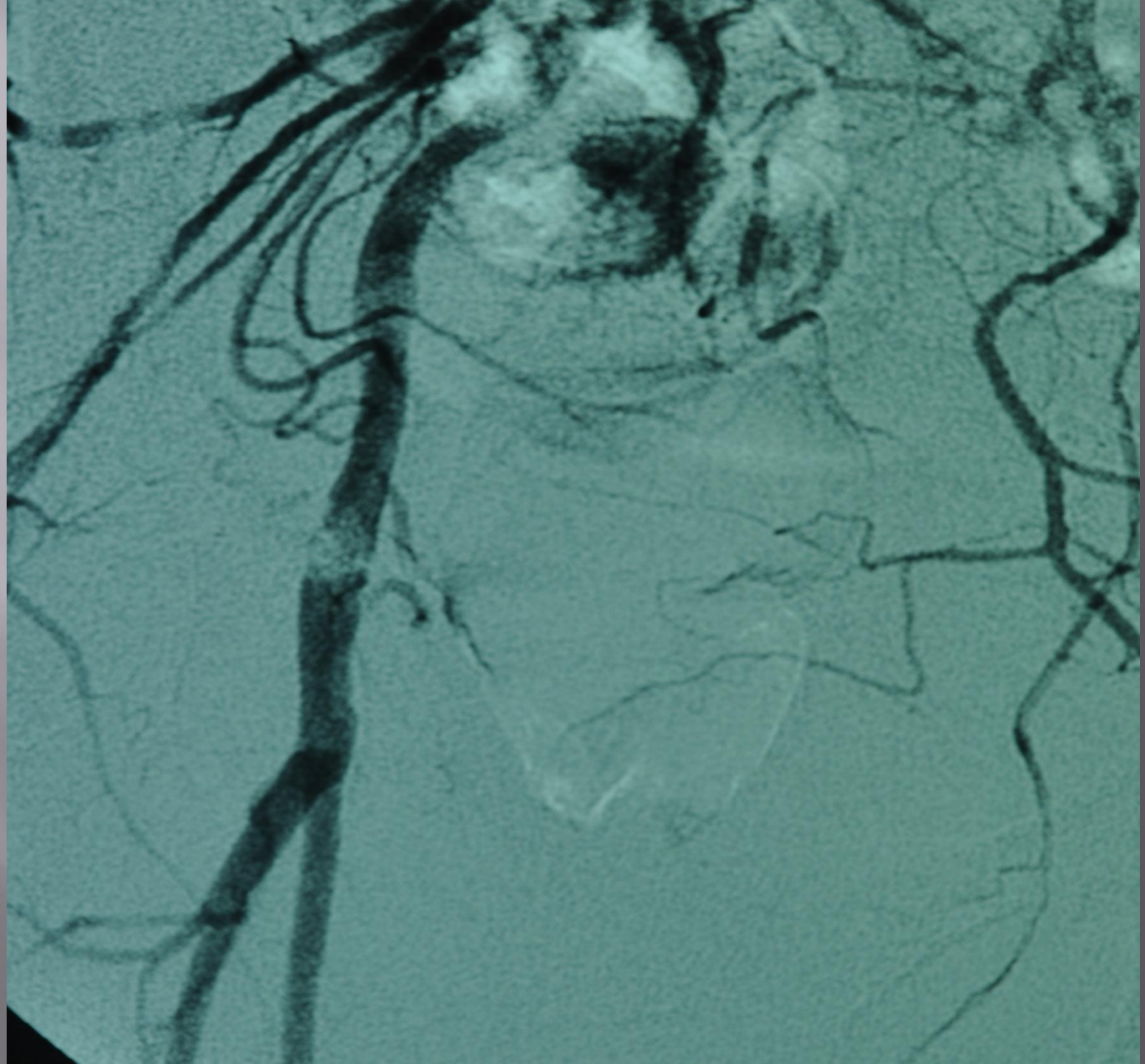
The terumo misago

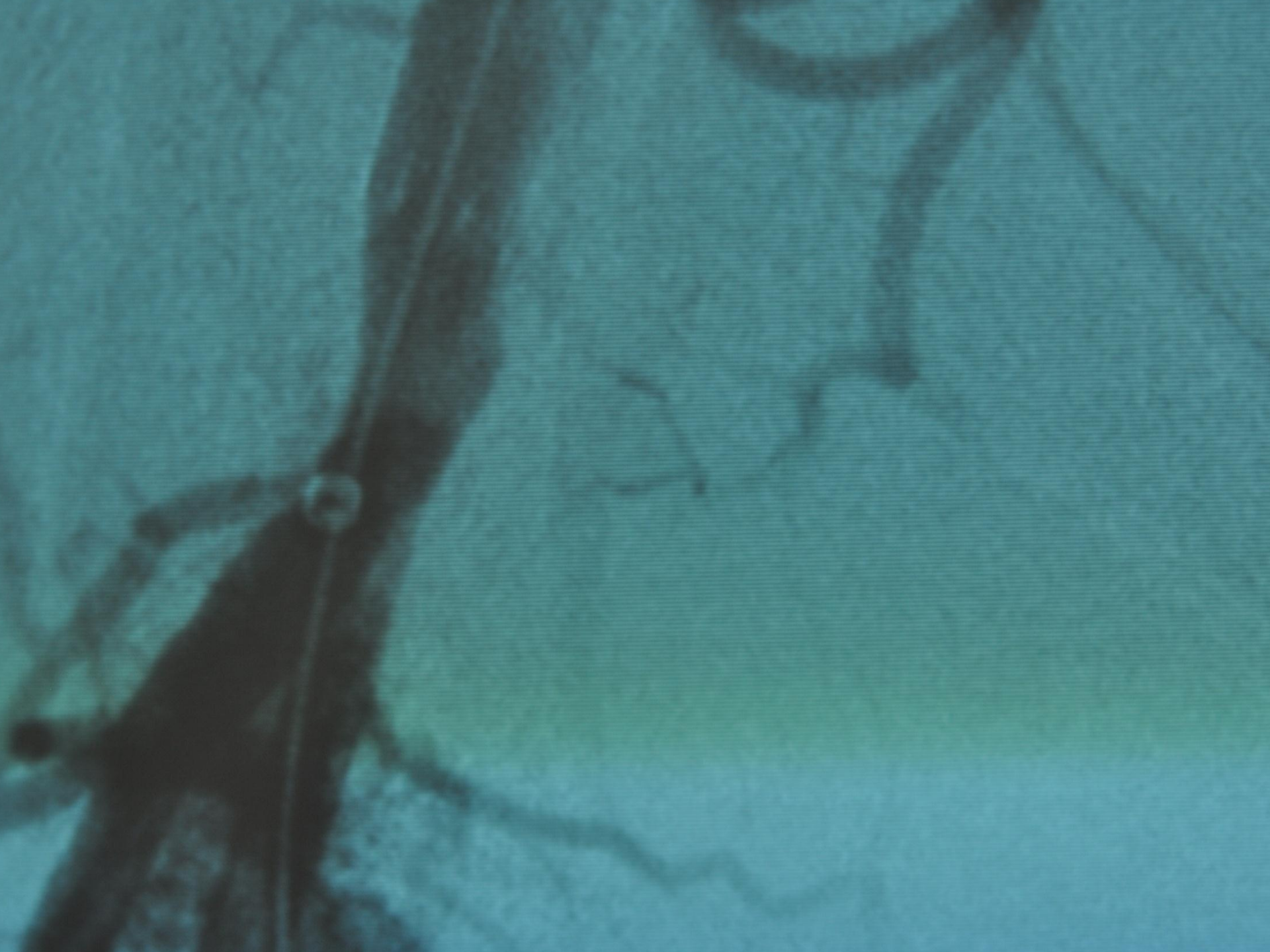
- Stent answer all the requirement(nitinol,fatigue test,finger test ,radial force,electropolishing)
- Delivery platform allows a very easy use and precise placement with tractability,push,and comformability
- Rapid exchange system makes the procedure easy and safe(impossible to loose the guirewire while retracting the delivery system)


1
2
0.035" (0.89mm)
6 × 100 mm

material

- Hydrophilic guide wire 0,35 terumo angled tip
- Contra 2 catheter to pass to the controlateral side ,pushed as far as possible in distal artery
- Terumo destination sheath to catheterize controlateral iliac close to the lesion
- Cross the lesion under road map if not done before
- deploy the stent
- Ballon
- withdraw





External iliac

- Anatomy of external iliac is a curve:

  no rigid balloon expandable stent

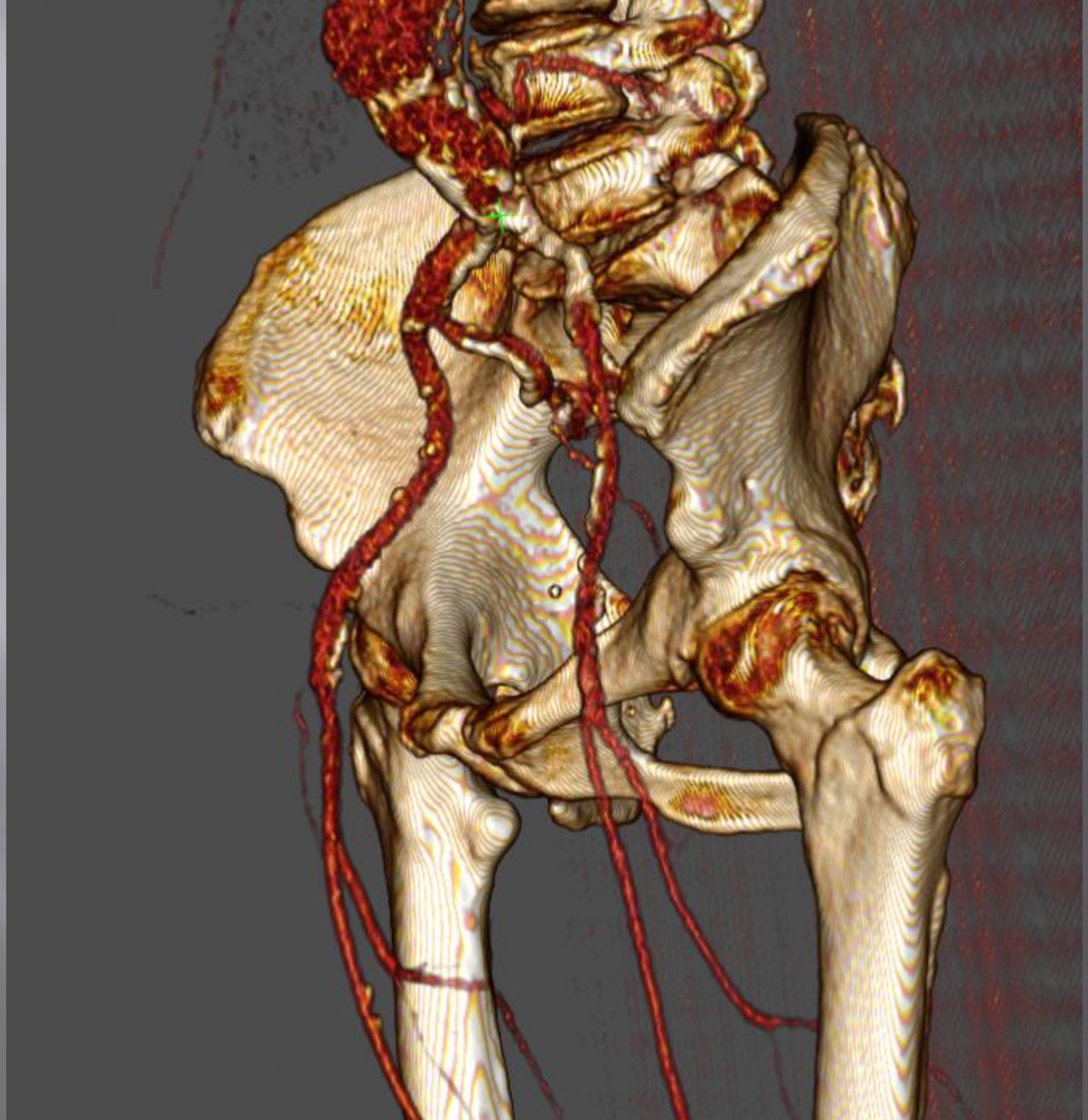
  only self expandable stent
- Sames rules as before

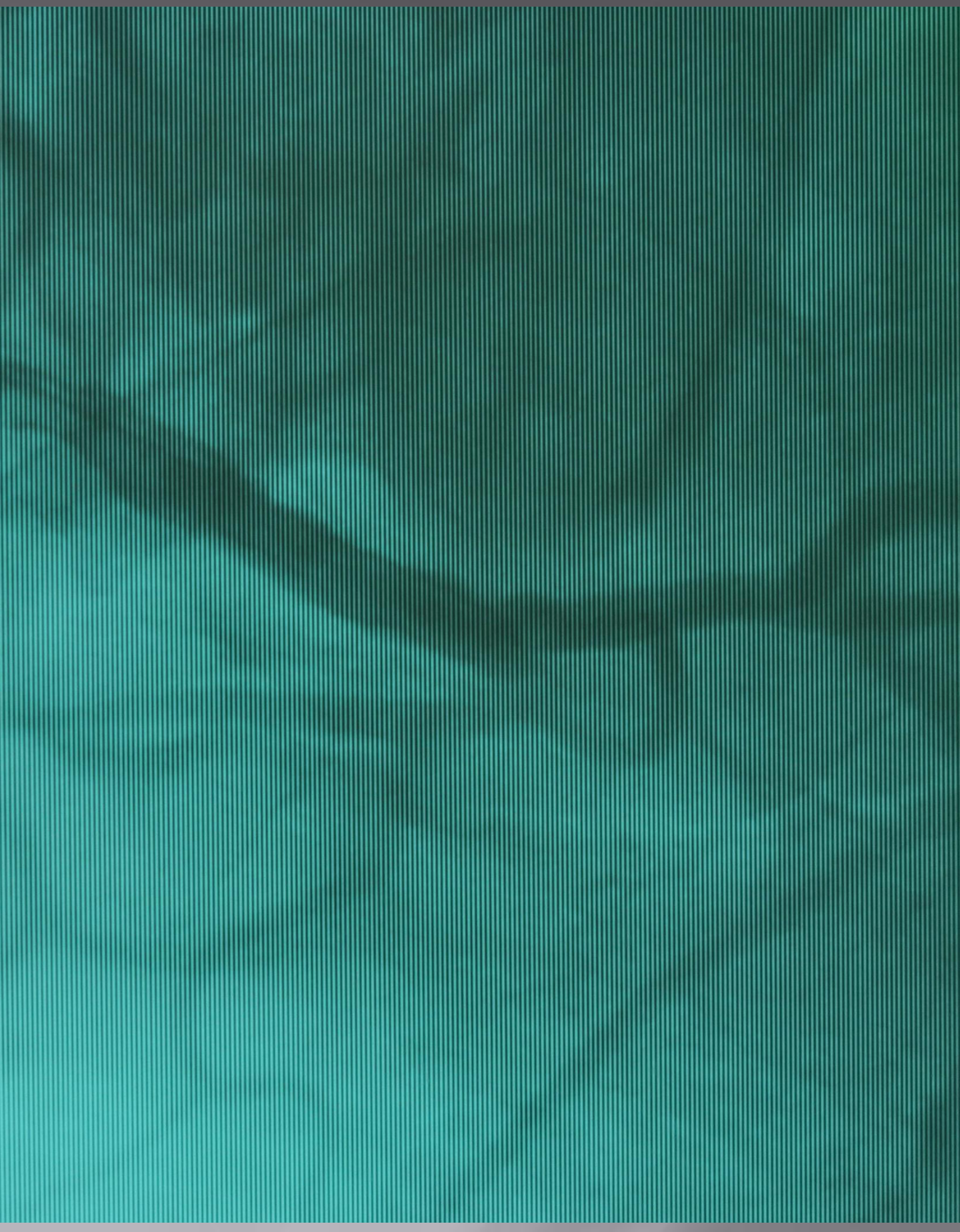
  primery stenting

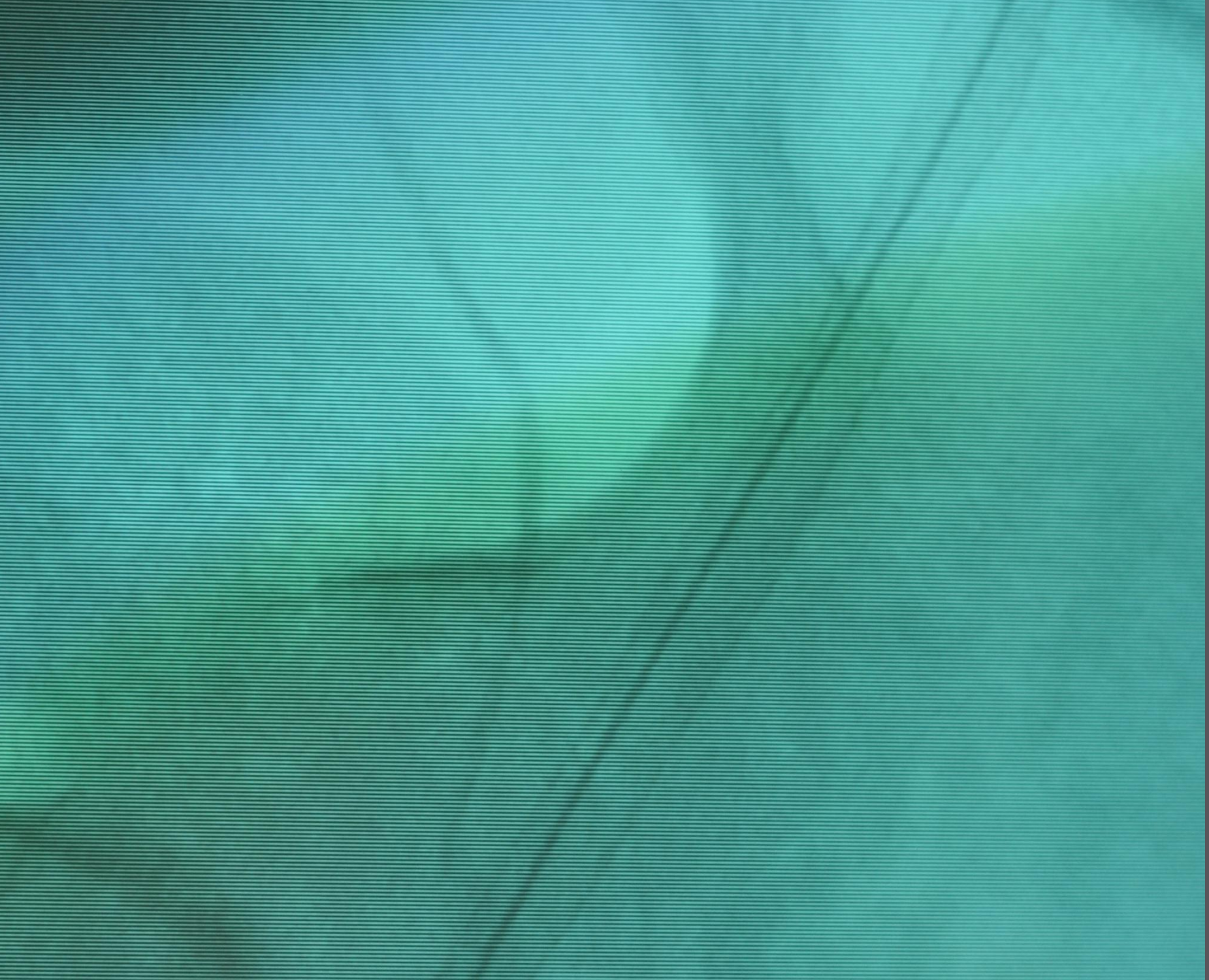
  oversizing of stent

  cover the lesion only

  exact sizing when balloning to avoid rupture
- homolateral route prefered



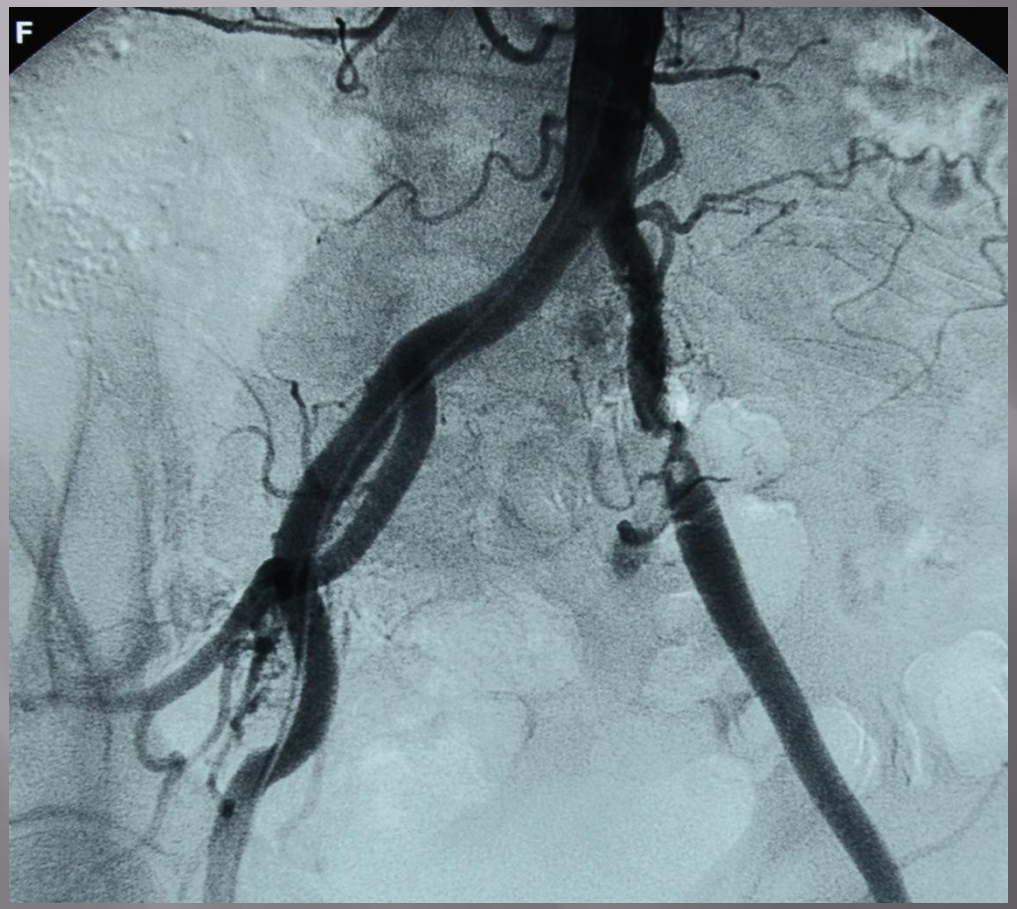




Iliac bifurcation

- Common iliac dividing into external and internal iliac arteries

- Our aim is to protect both external and internal as we give to hypogastric artery the same function as profunda at the common femoral level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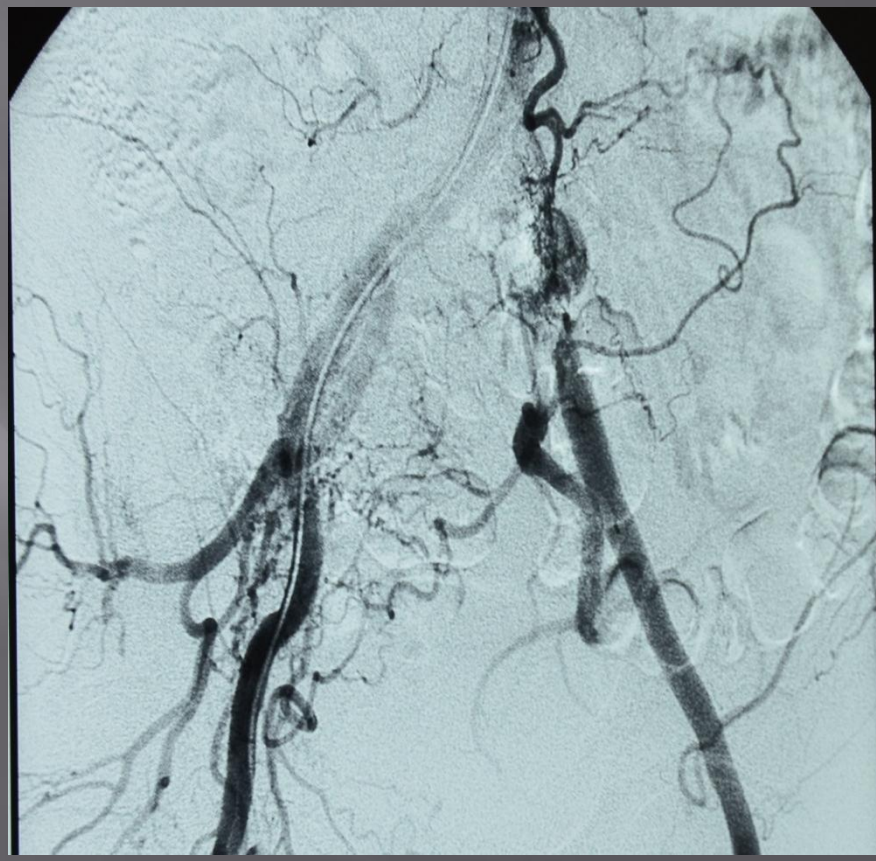
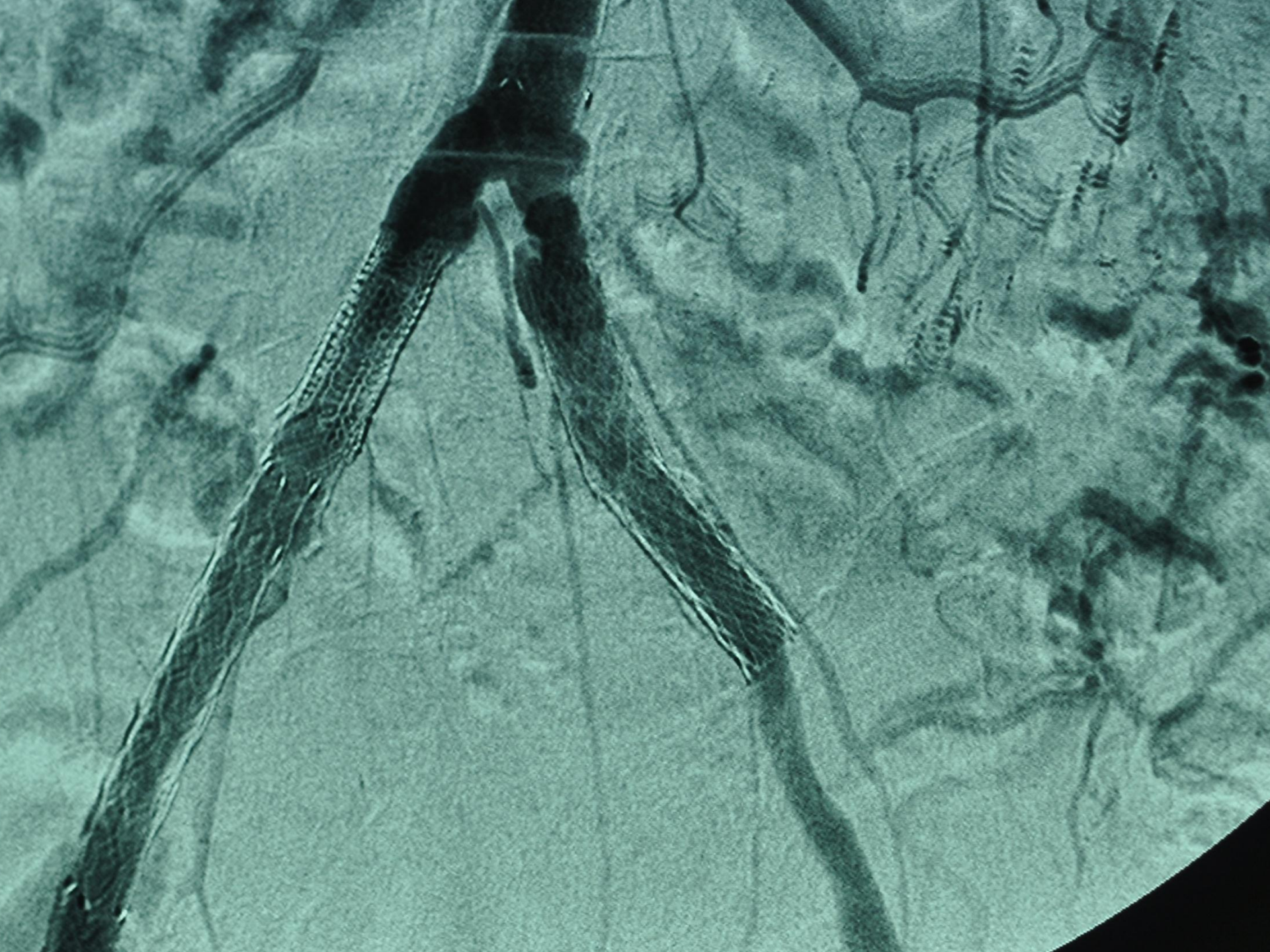
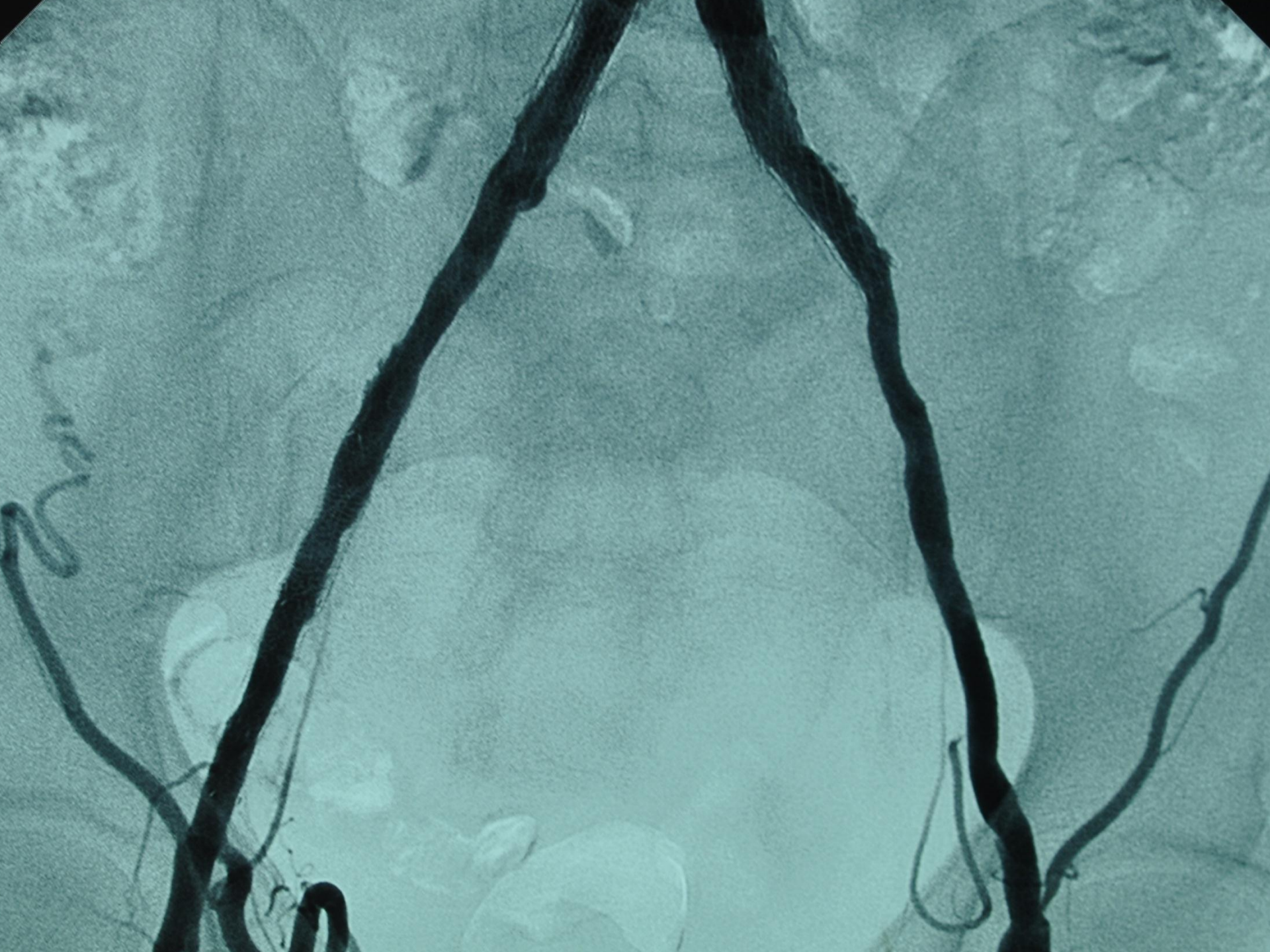


Loosing the hypogastric artery means

- Usuly transform a mild calf claudication in a severe butcock claudication

- In case of secondary thrombosis of extenal iliac no collateral pathway :risk of acute ischemia or critical ischemia





Both femoral approach

- Homolateral side to treat the common and\or external lesion:

  6fr sheath 21 cm long

  0,35 terumo guidewire to cross lesions

- Controlateral side to treat (protect)hypogastric

  5 fr sheath 45 cm long

  0,35 to catherize hypogastric,exchanged for 0,14

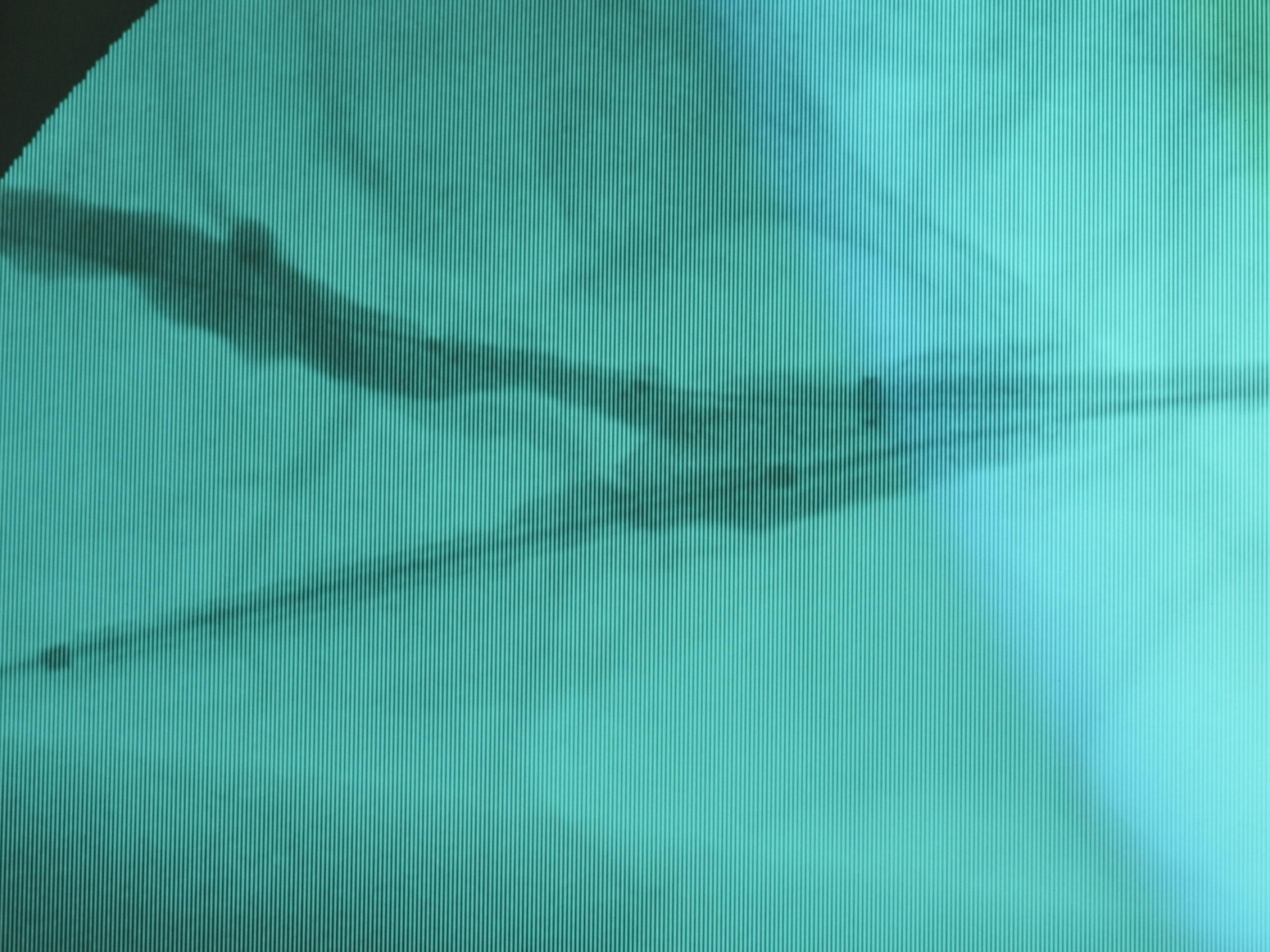
Kissing stent

- By homolateral route:

B E S on common,SES on external without covering the hypogastric ostium using 0,35 compatible stent

- By controlateral route :

BES rapid exchange ,0,14 compatible stent



Conclusion

- Choice of stent is dictated by location of lesions
- Choice of route is dictated by the easier is the better
- Knowledge of anatomy and physiology is mandatory to have efficacy treating iliac lesions