

Ilio-Femoral Intervention (Practical Consideration)

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- **Vascular Access Site**
- **Approach Method**
- **Balloon & Stent**
- **Caution**

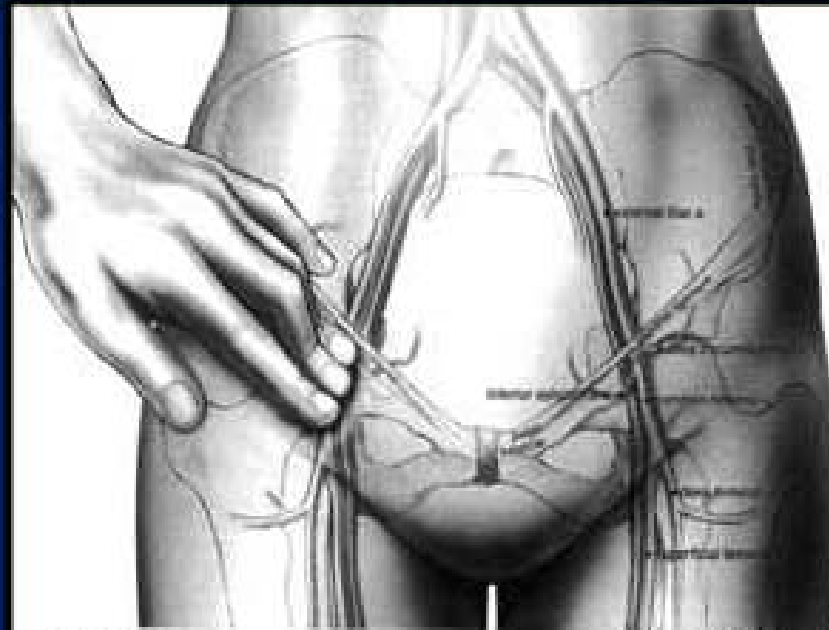
1. Aorto-Iliac Lesion

- Vascular Access Site

Iliac artery /c Aorta Bifurcation

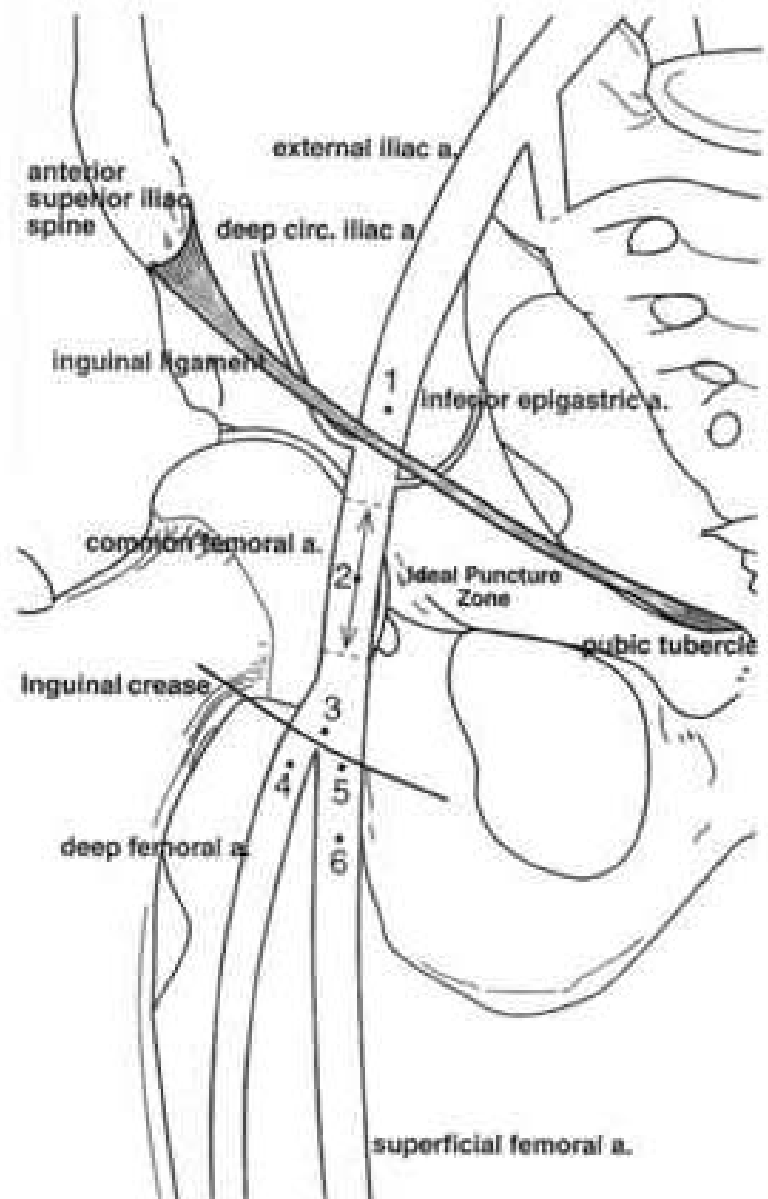
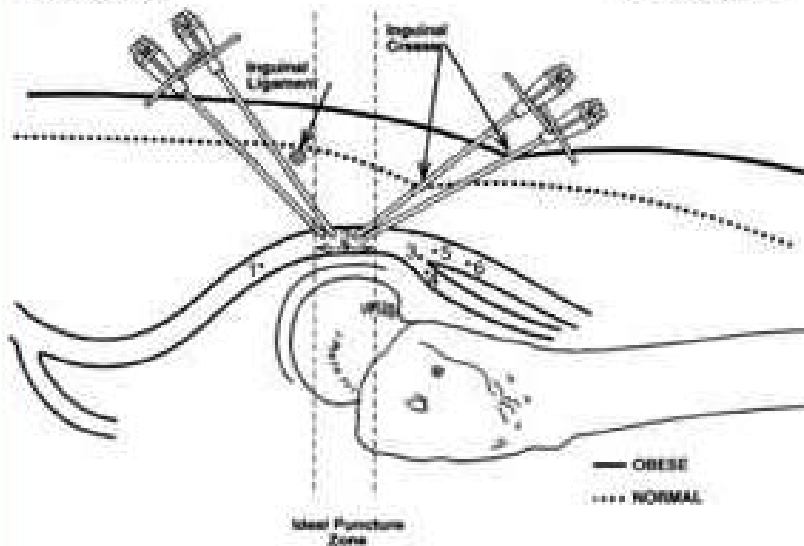
→ Bilateral retrograde approach

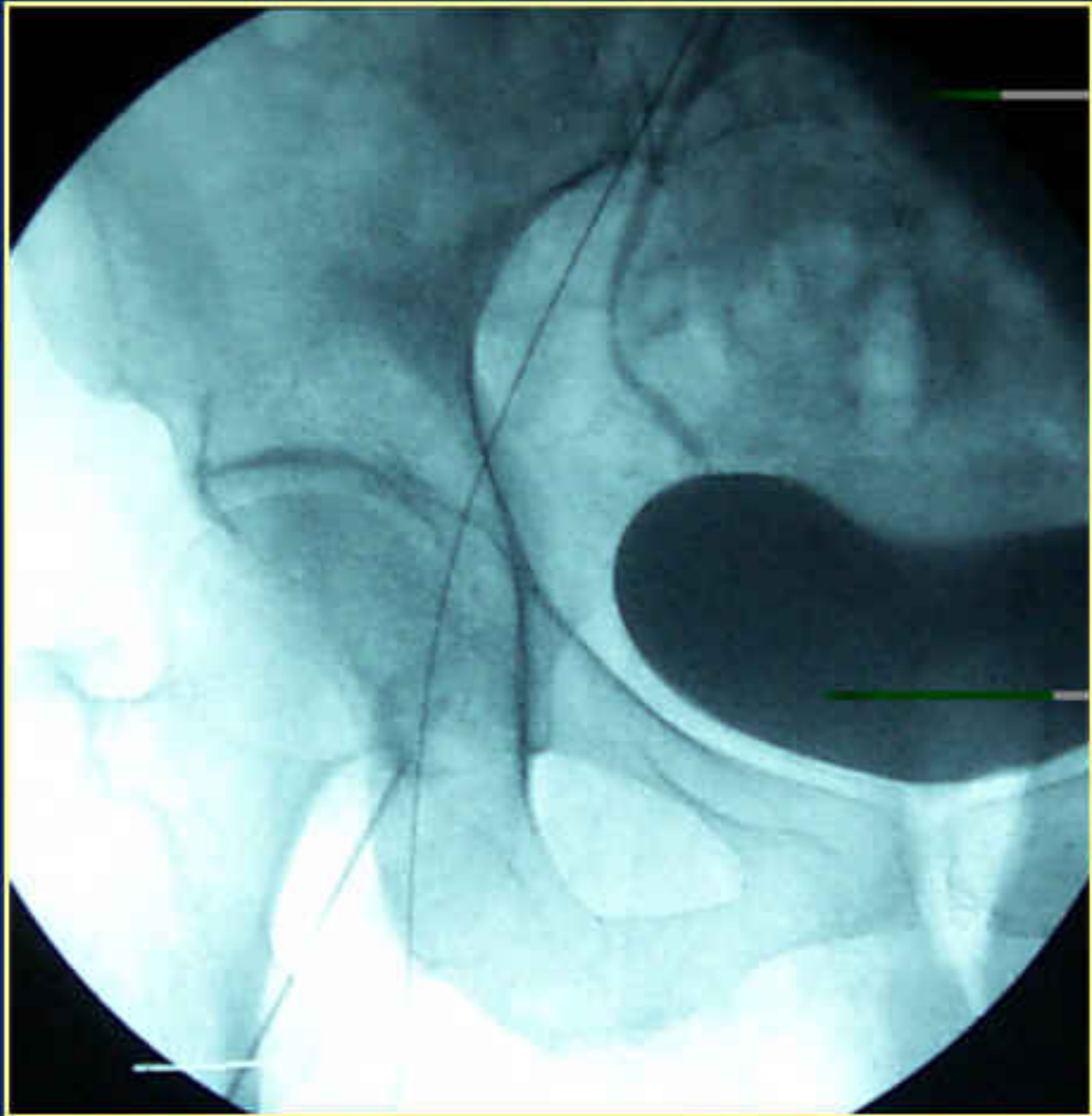
Approach



ANTEGRADE

RETROGRADE





F/73

#1883276

Chief Complaint:

Dyspnea x 1 day

Present illness:

The patient admitted to the ER due to sudden onset of dyspnea

Time course

- 09:00 AM -> coronary angiography
- 10:00 AM -> transferred to coronary care unit
- 12:30 PM -> tingling sensation of Rt. foot
- 14:40 PM -> pain and loss of sensation at Rt. lower limb.

No palpable pulse at Rt dorsalis pedis

Weak palpable pulse at Rt. Popliteal a.

Cold & pale Rt. Lower leg.

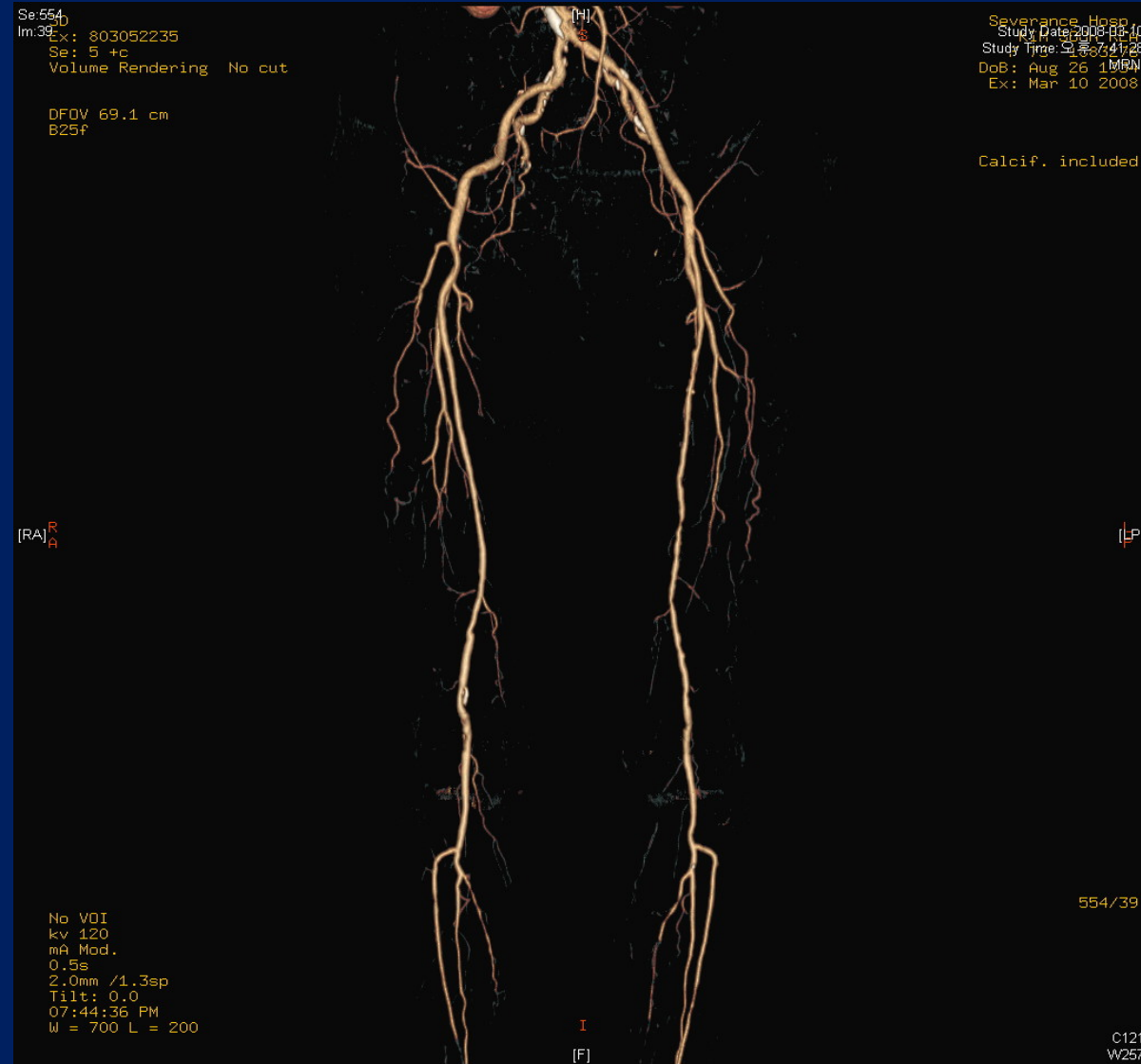
-> Emergency peripheral angiography.

Emergency fogarty embolectomy, Rt. SFA

- Op. findings
 - : Complete obstruction of Rt. SFA due to Angioseal.
 - : Fogarty embolectomy catheter of Rt. SFA & popliteal artery.
 - > small amount of fresh thrombi removed.



CT lower extremity



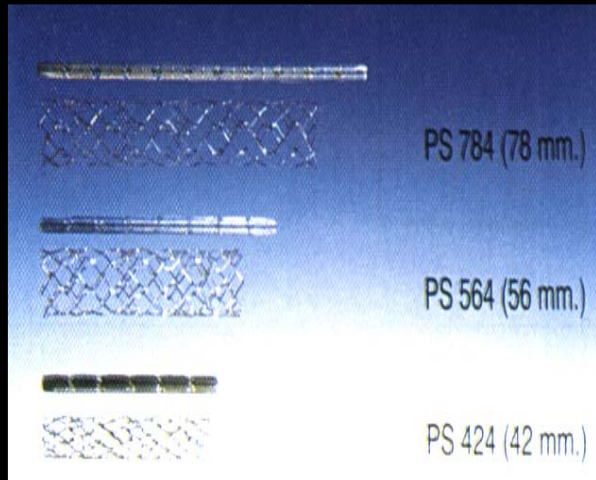


1. Aorto-Iliac Lesion

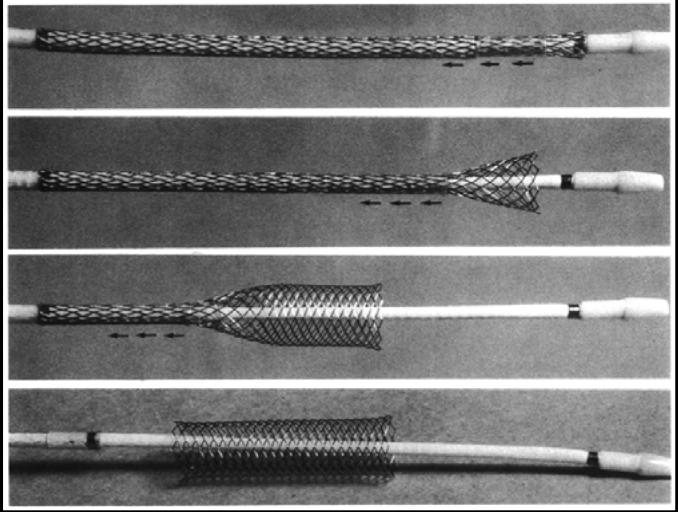
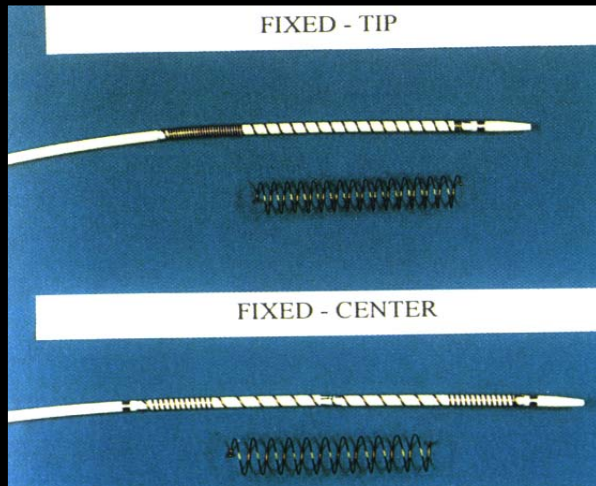
- **Balloon - expandable stent (1-1.1:1 size)**
bifurcation lesion, accurate lesion location,
lesion which need radial force
- **Self-expandable stent (20% bigger size)**
Jumping phenomenon
curved lesion, long lesion, where lower limbs
move

Balloon- & Self-Expandable Stent

Balloon-expandable



Self-expandable



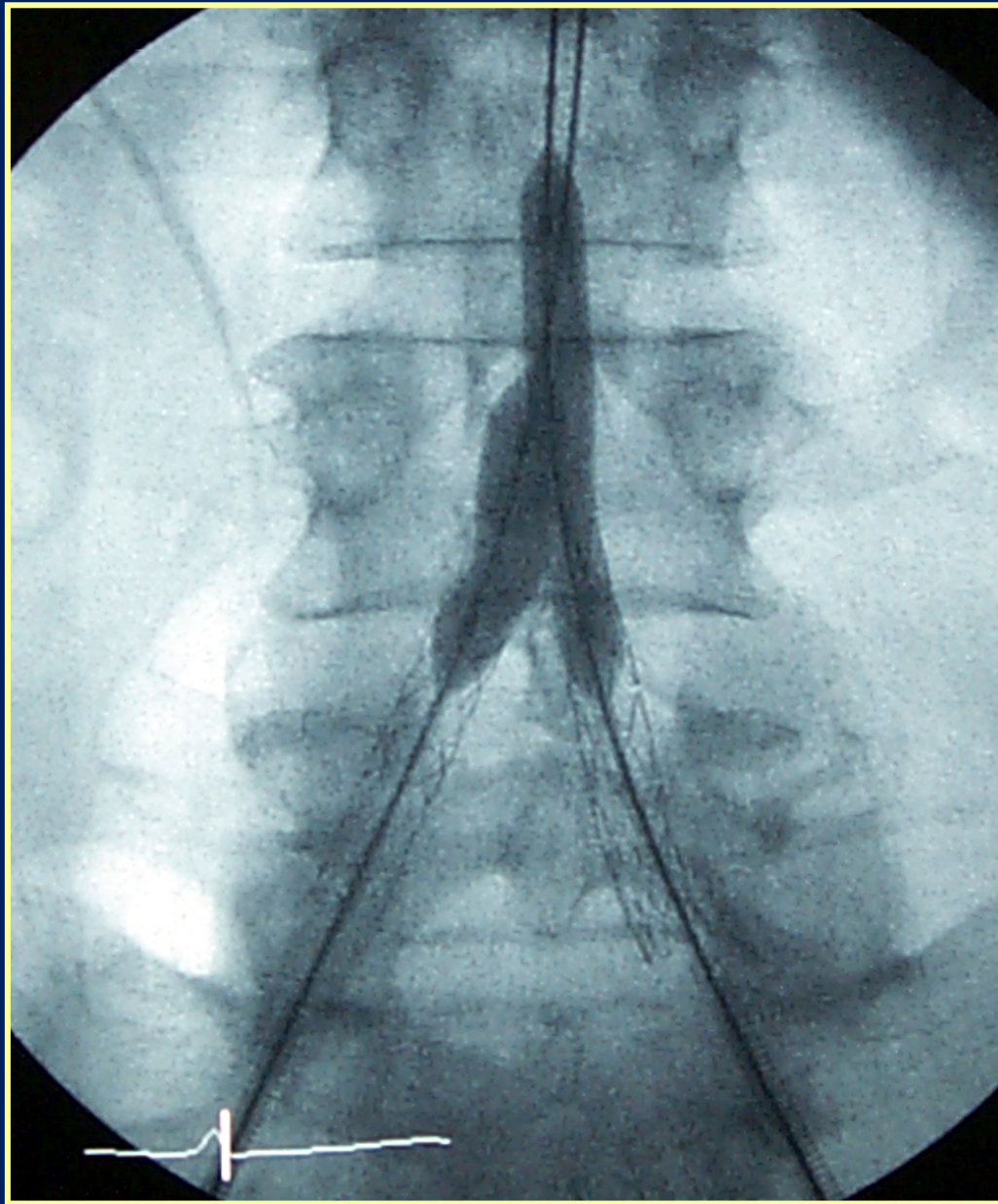
1. Aorto-Iliac Lesion

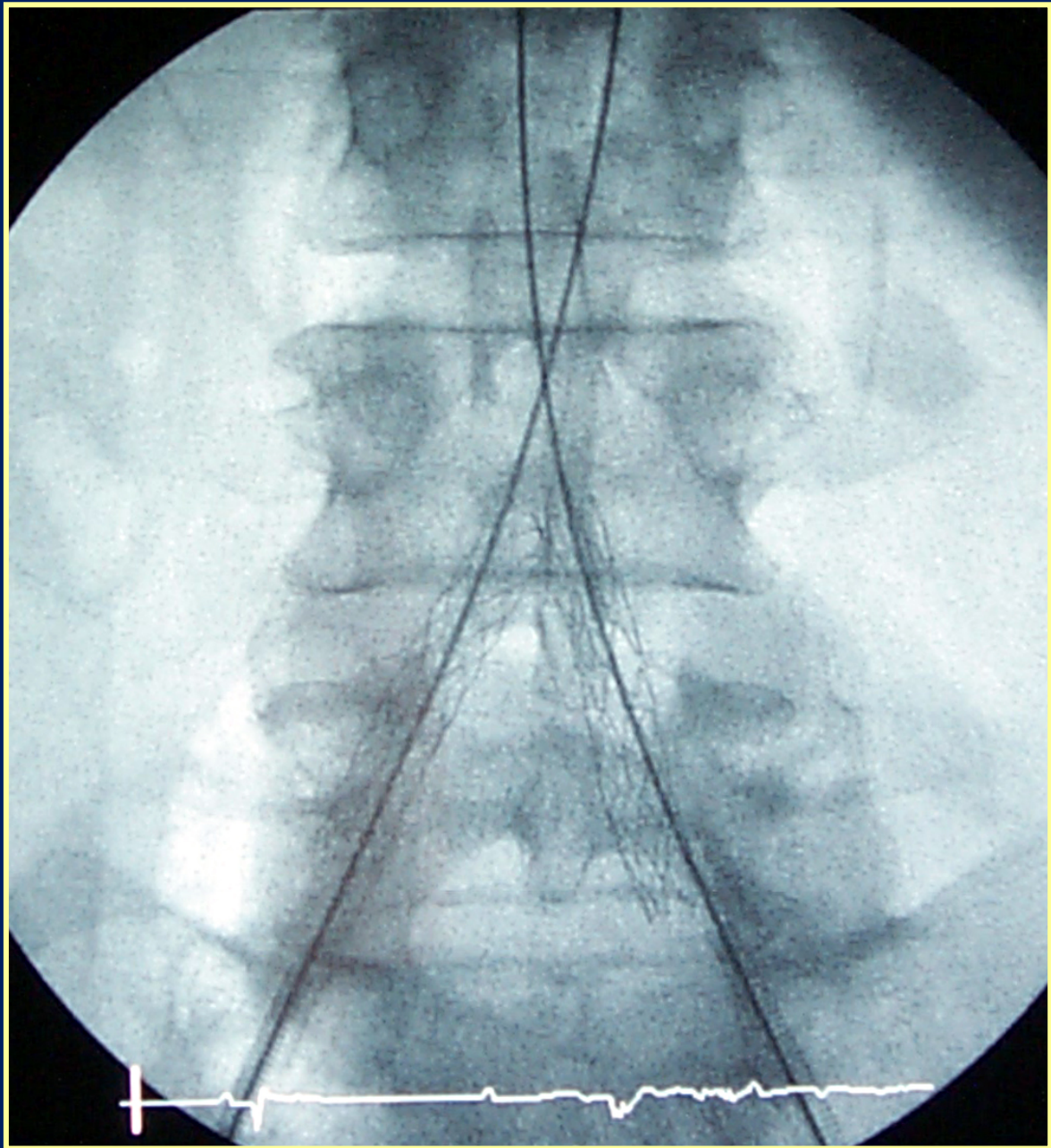
Caution!

Kissing balloon & stent

Iliac bifurcation lesion (plaque shift)

→ kissing stent technique





2. Ilio-femoral

Vascular Access Site

CIA or EIA lesion

→ Ipsilateral retrograde approach

CIA or EIA /c Proximal SFA lesion

→ Contralateral antegrade approach

If Failed → Brachial Approach

2. Ilio-Femoral Lesion

Stent



2. Ilio-femoral

Caution!

- **Chronic total occlusion, heavy calcified lesion, old age patients**
 - smaller size balloon than reference vessel (risk of rupture)
- use balloon smaller than reference vessel size
- **Balloon expandable vs self expandable stent**
- **Long Stent Selection (length shortening)**

3. SFA

Vascular Access Site

Femoral Artery

→ Contralateral antegrade approach,
ipsilateral antegrade approach

→ if failed, ipsilateral retrograde approach via
popliteal artery

(difficult puncture, vascular complication)

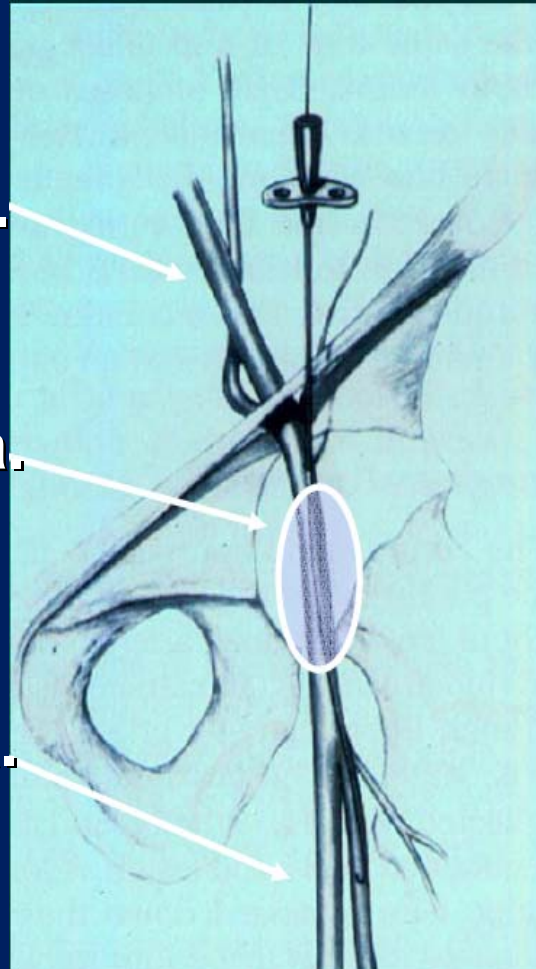
Subintimal approach

Antegrade Approach

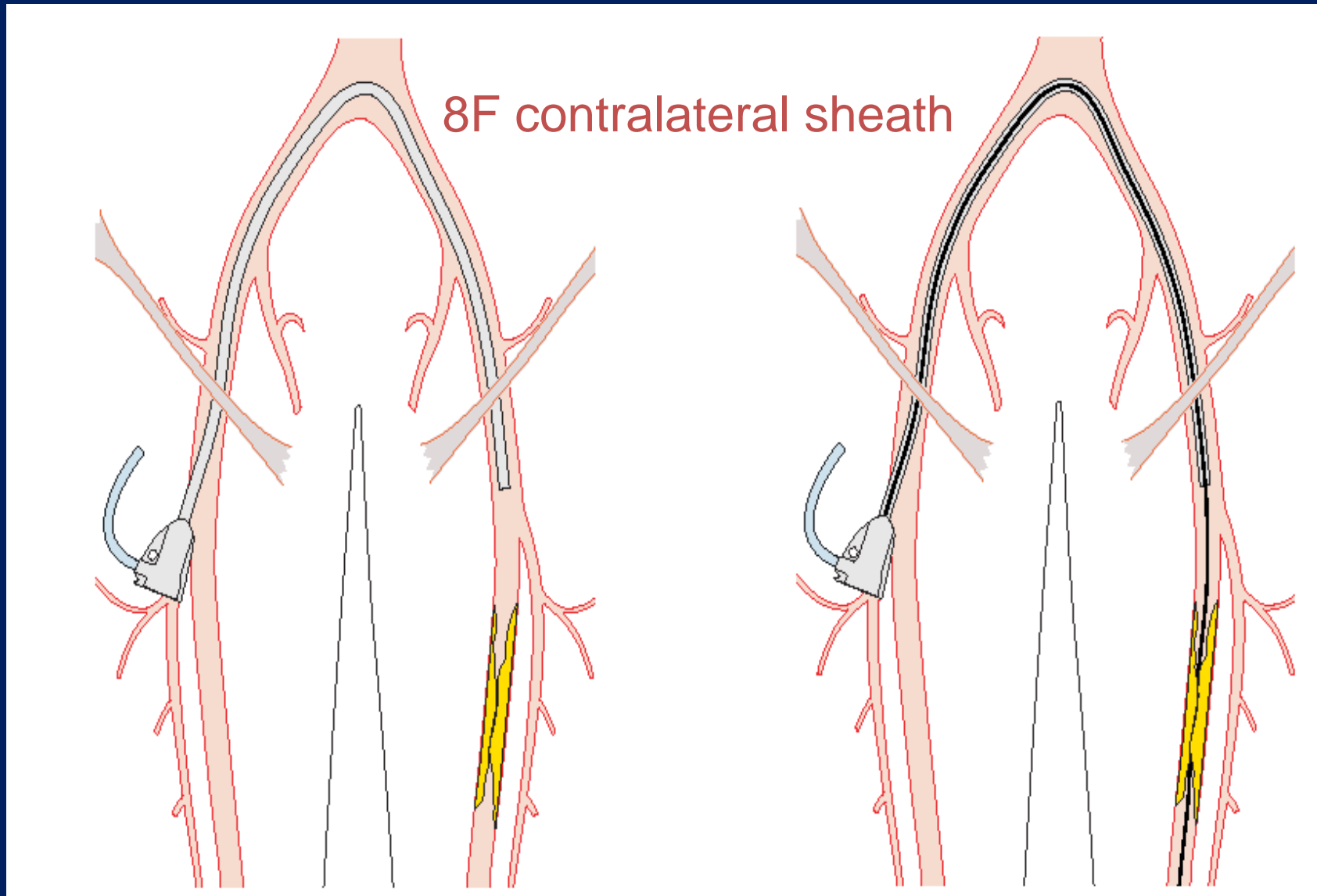
Ext. Iliac a.

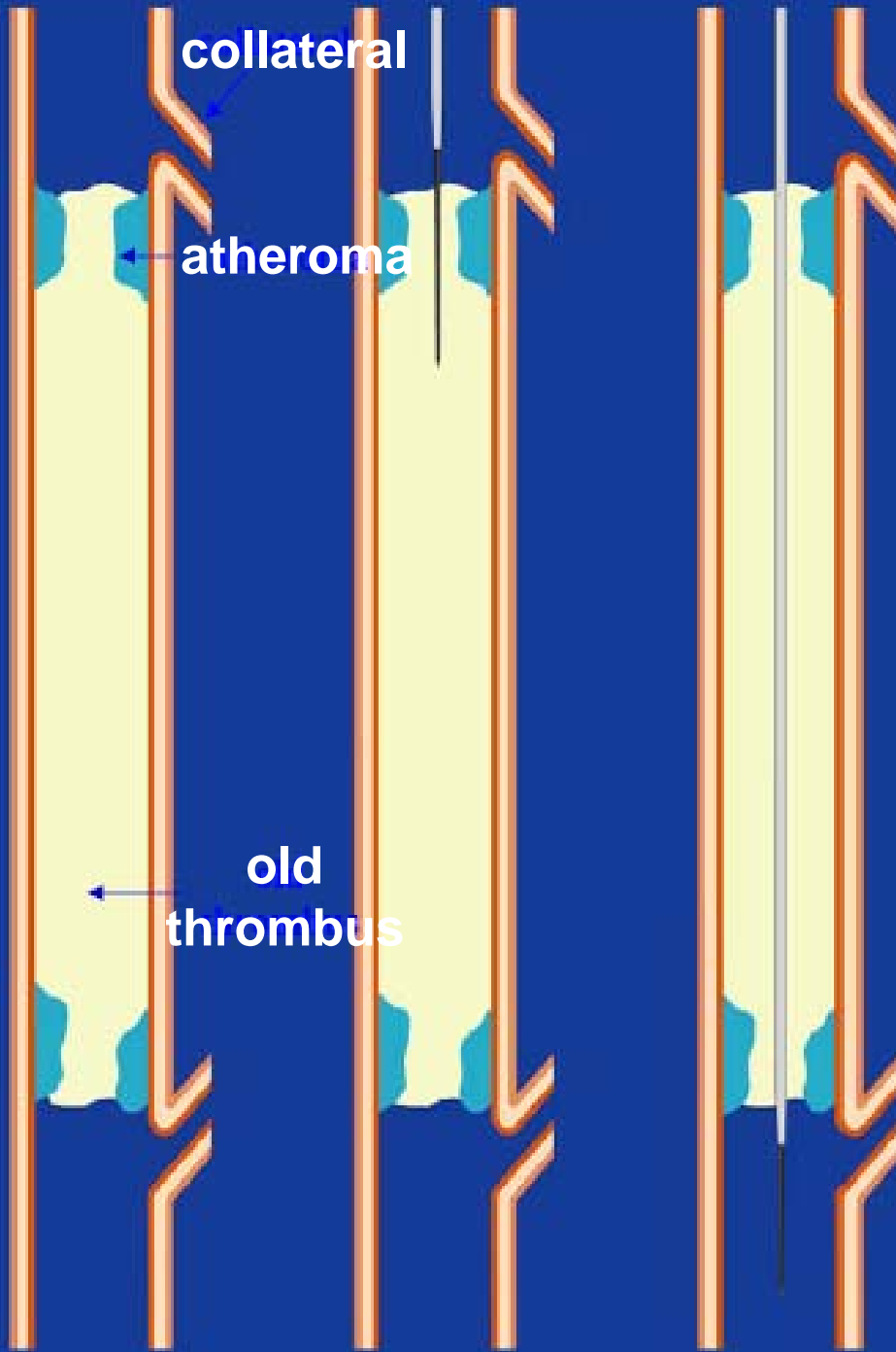
Com. femoral a.

Sup. femoral a.



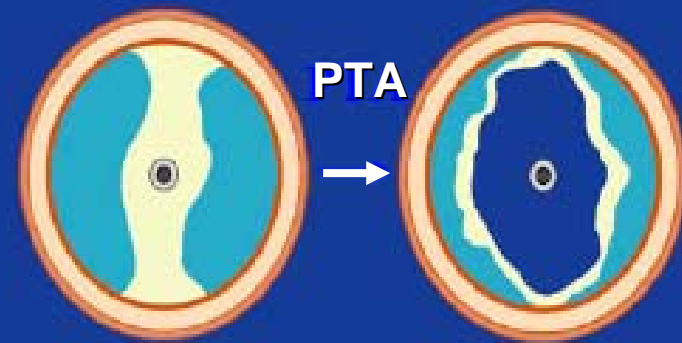
Contralateral approach

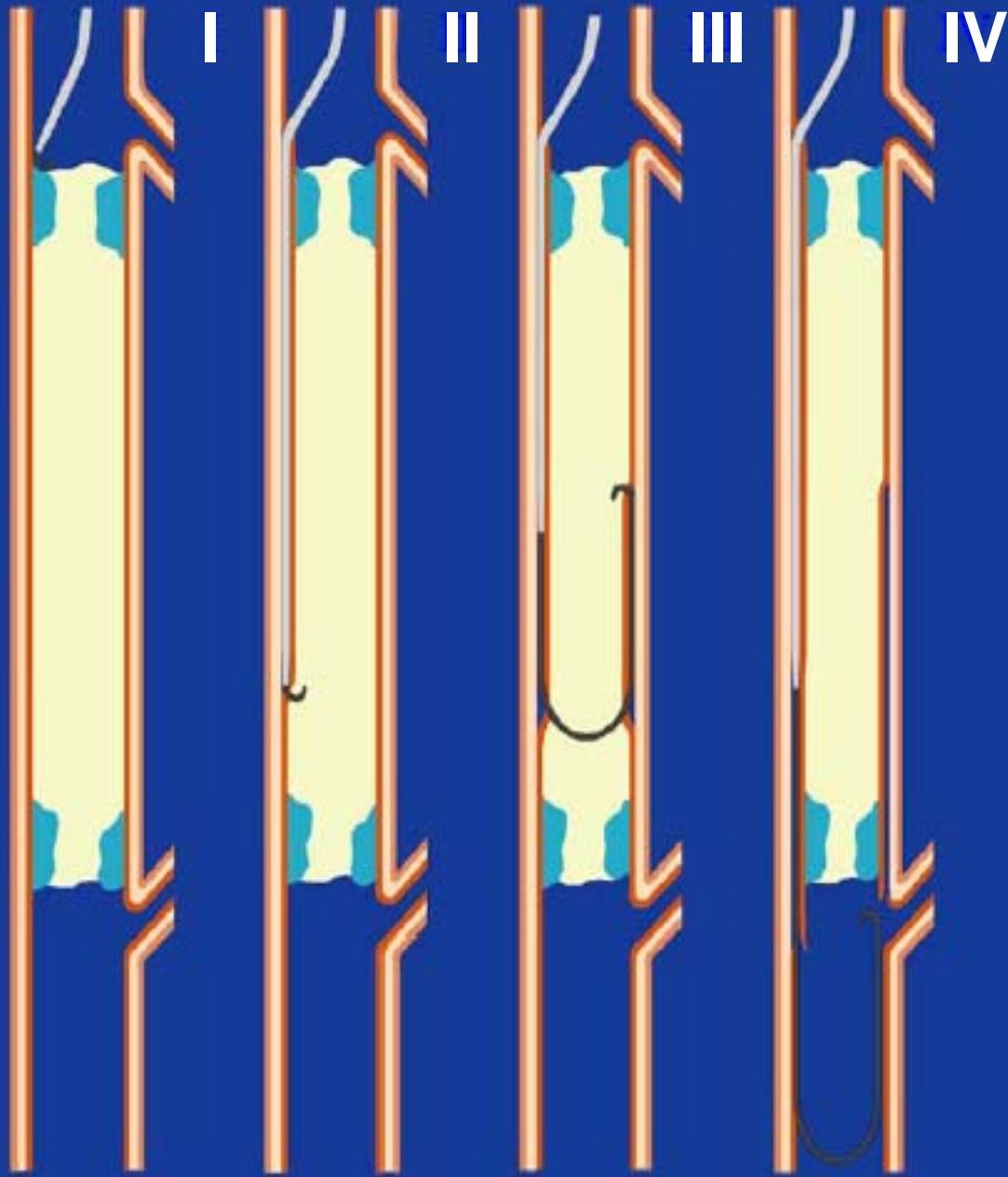




Intraluminal Femoral Angioplasty

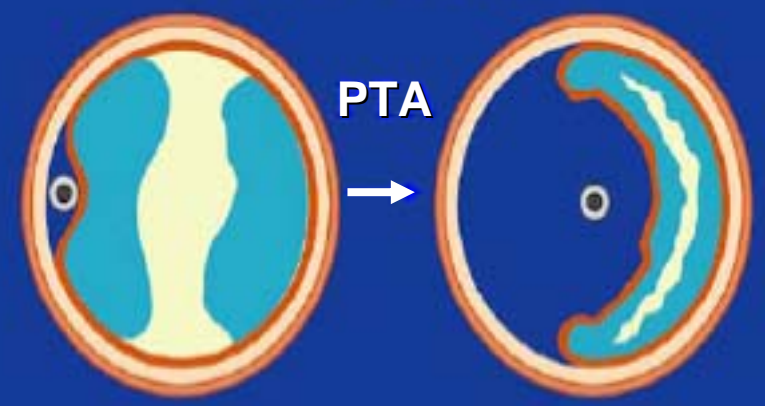
Cross-section





Subintimal Femoral Angioplasty

Cross-section

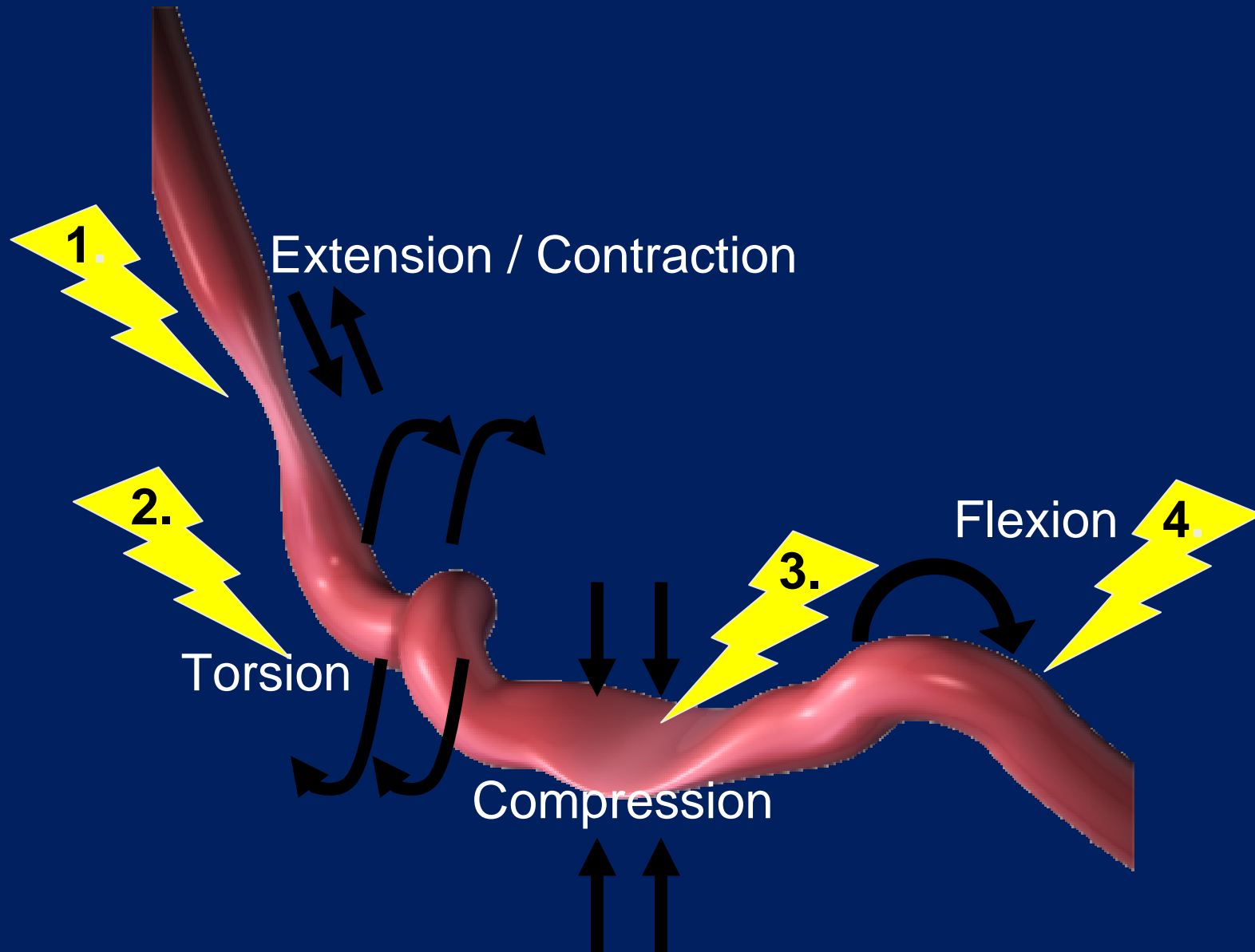


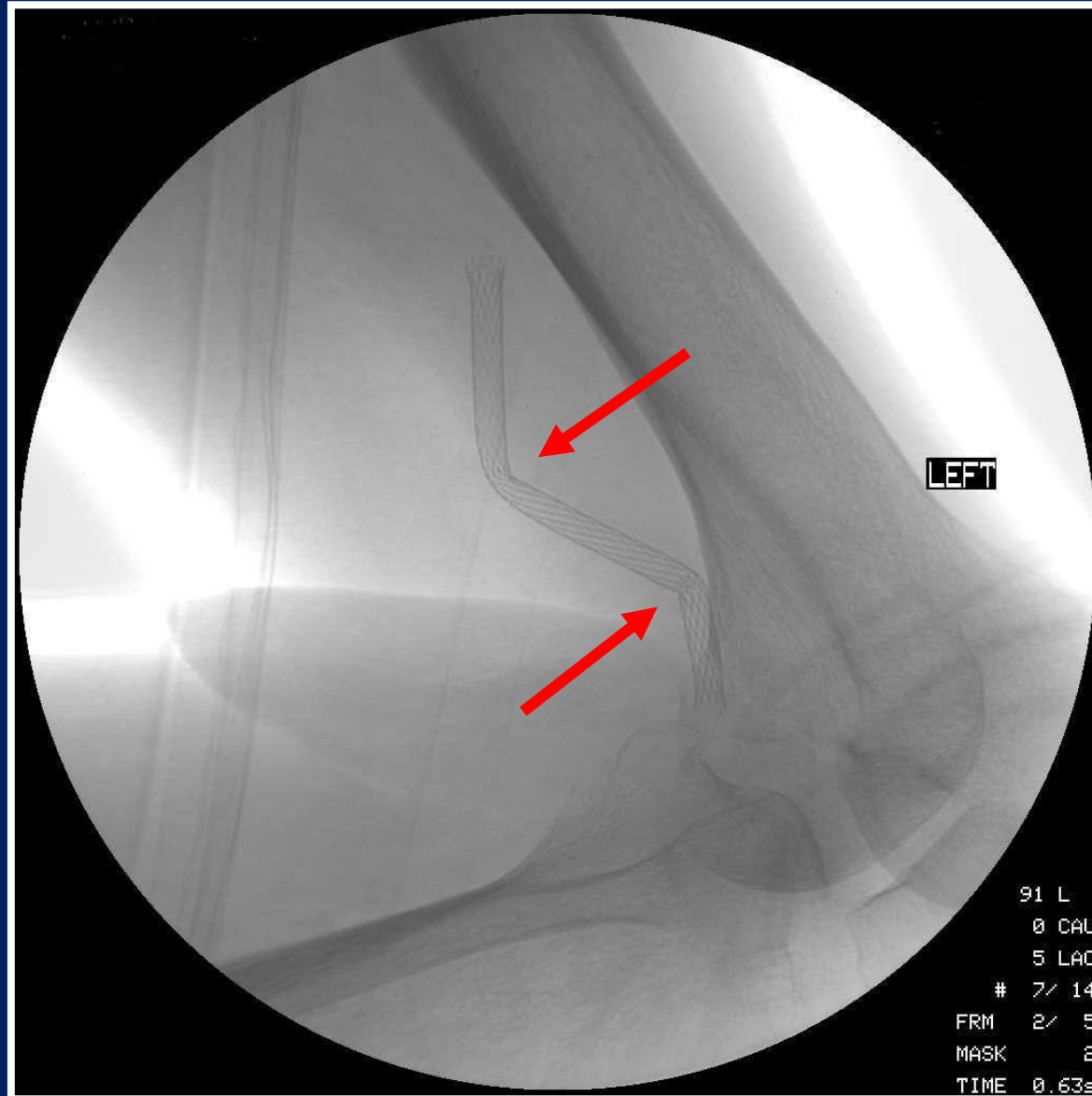
3. SFA

Caution!

- Flexion site
- Balloon & stent
 - long prolonged balloon
 - unnecessary stent should be avoided
- SFA os – risk of thrombi or plaque shift to Deep FA, embolic risk

Forces Exerted in SFA





Stent kinking with knee flexion

M/70

#5215188

Chief Complaint:

Claudication, Right

Past History:

2yrs ago, Both claudication

Decompression surgery d/t Spinal Stenosis L4-5

Improved Left leg pain,

but sustained right Claudication

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2007.3 CT angiography at OPD

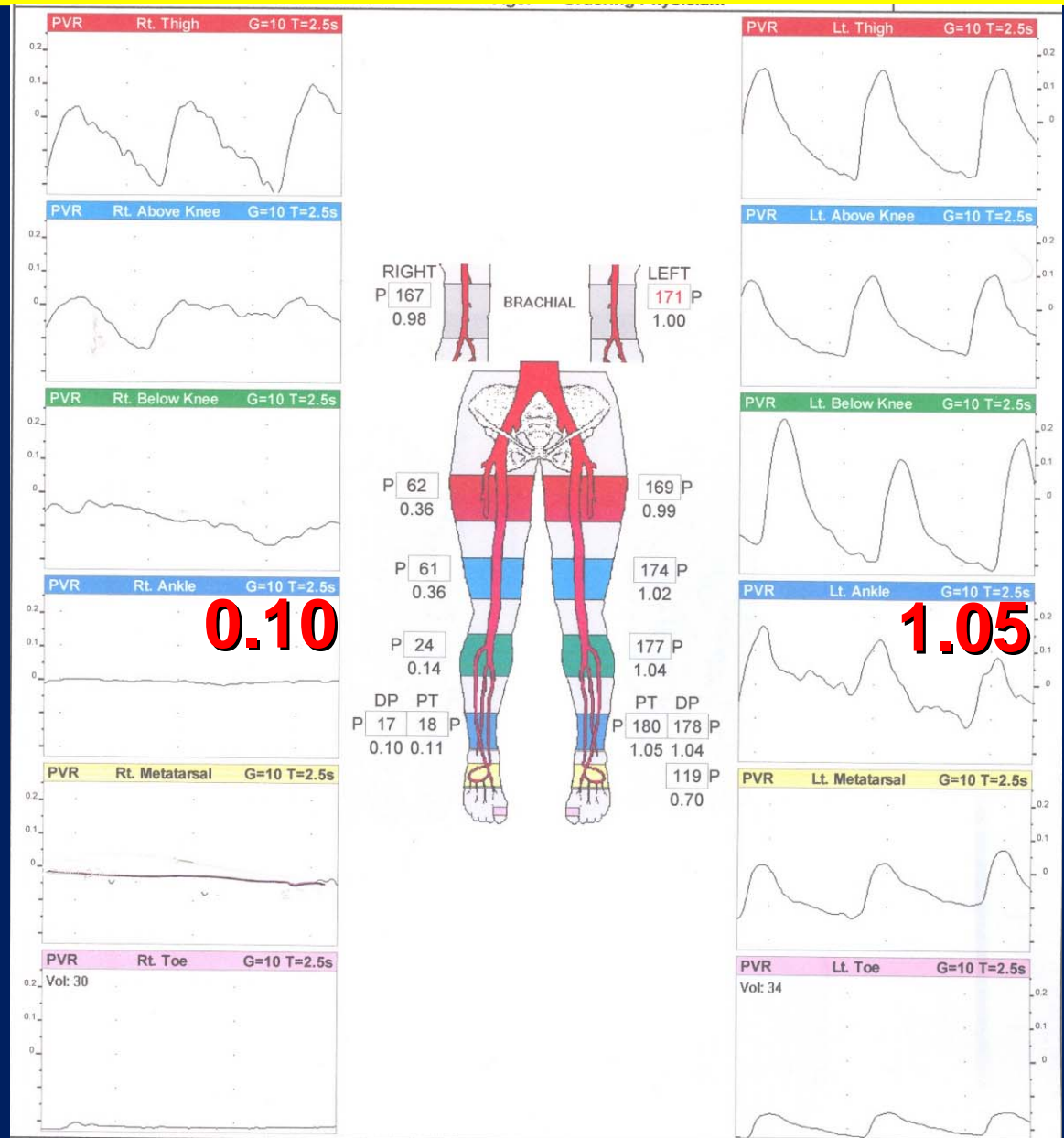


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2008.04

Resting leg pain



Notes

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2008.04.04



conclusion

- Recently, peripheral angioplasty has better success rates and fewer complications.
- However, as still many patients and doctors are not well aware of peripheral angioplasty
- Access site, approach method, Balloon & Stent
- Caution