

Why I do not use routine femoral access for CAS

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BACKGROUND on Femoral access for CAS

- Not always possible (2 – 5 %failures)
- Up to 20 % of brain Embolization
- Training is necessary



Goals of Carotid Stenting

- Prevent stroke
- Avoid peri-operation stroke
- ➔ **Appropriate selected indication of CAS**
- ➔ **Appropriate approach and tools**



Approach for CAS

Femoral route = gold standard

Others : ➡ Brachial / radial

➡ cervical

if: contra indication of femoral access (Aortic or bilateral iliac occlusion)

or: As a preference in order to minimize risk of brain embolization



ADVANTAGES

- Quick procedure
- Lower dose of contrast
- No arch manipulation
- No risk of controlateral or vertebral embolisation

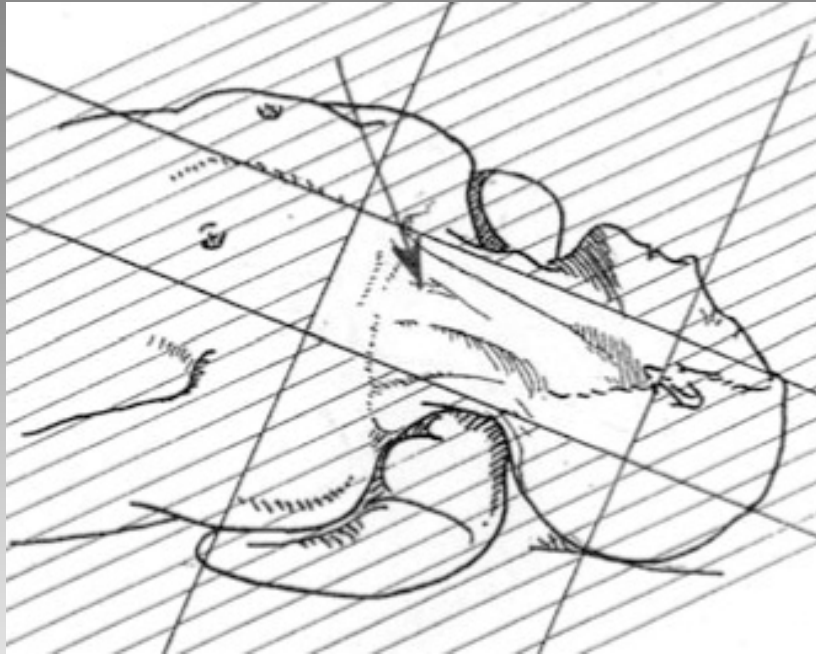


HOW TO DO IT

- **Percutaneous puncture** is safer with the use of preclosing device : "Starclose" system from Abbott
- **General anesthesia** is more comfortable for both patients and surgeons ; allowing to focus only on the procedure
- **A short cut down** (2 cm) for reluctant surgeons is acceptable and allow patient discharge at Day 2
- **Low dose of Heparin** (2000 iu) and its reversal
5 or 6 F short introducer in CCA
- **Placement of PCD** and stenting is easy by this way



Percutaneous puncture



The patient's neck is draped like for surgery and the C arm is placed under the operating table in a profile view.



The needle is advanced about 2 finger's breadth from the clavicle, guided on the arterial pulse



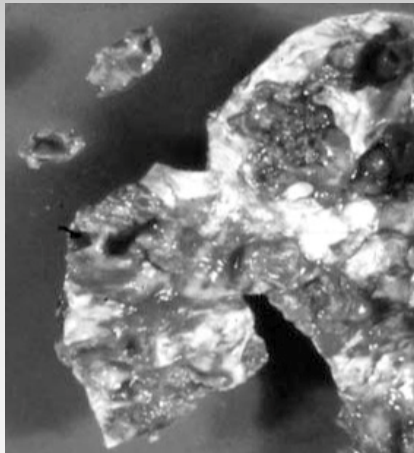
HOW TO DO IT

Video



ANATOMICAL SITUATIONS

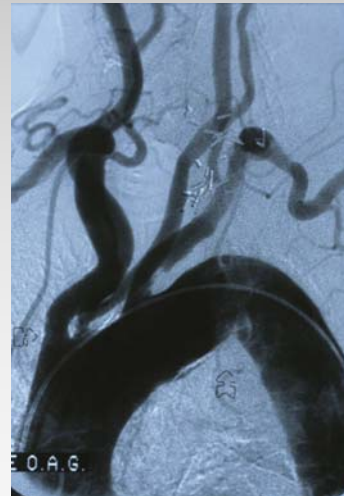
- ↳ Aortic or carotid tortuosities
- ↳ Arch Thrombus



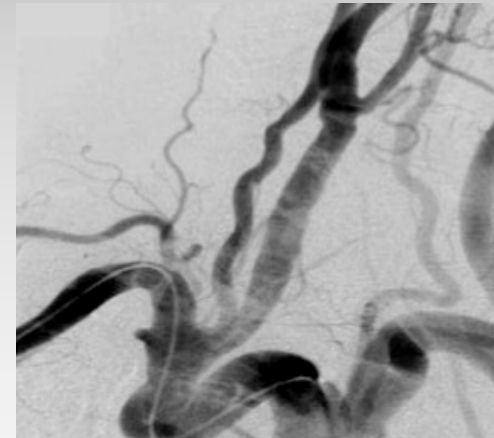
Arch thrombus
(elderly)



Bovine arch



Type III arch



Carotid tortuosities



RISKS AND LIMITATIONS

- **Cervical hematoma :**
Not in our 191 procedures
Reduced risk with the preclosing technique
- **GA is recommended**
- **Not accepted by radiologists and cardiologists**
- **Can be difficult in case of obesity & rigid neck**



SUMMARY

- The **femoral access** is routine but not always safe
- There are **Elective indications** for cervical Access
- It avoid **Arch Catheterization** (not allowed by brachial approach)
- It avoid **cerebral embolization** for difficult or shaggy aortas.
- The **cervical Approach** must be considered rather than converting to surgery in case of **difficult anatomy**



THANK YOU

