

MEDISCHE BEELDVORMING VAN DE SCHOUDER

DR. G. NELEN

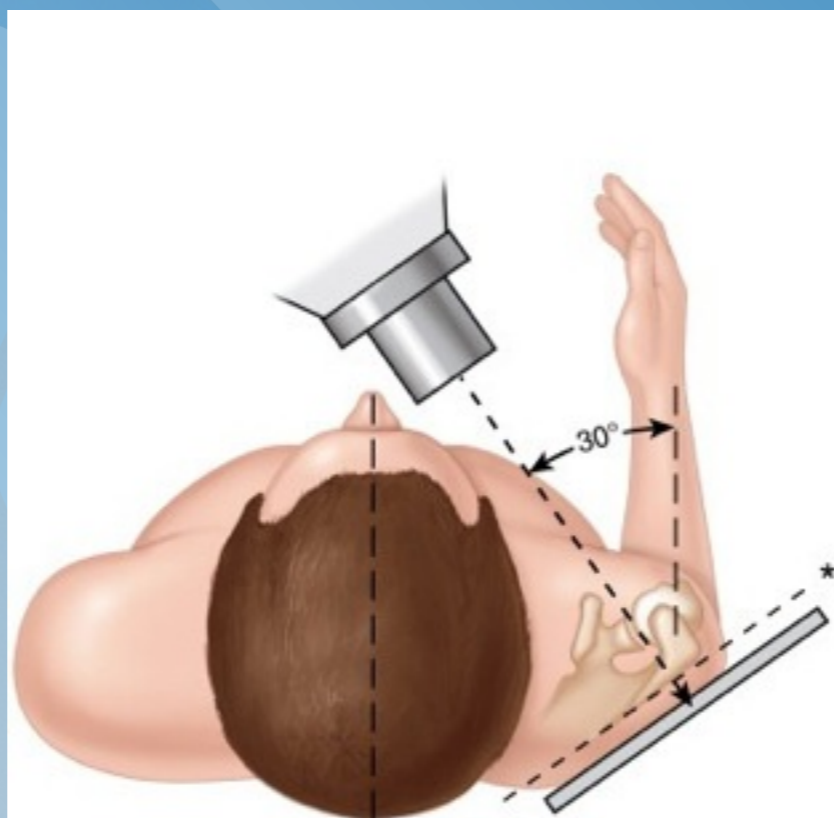
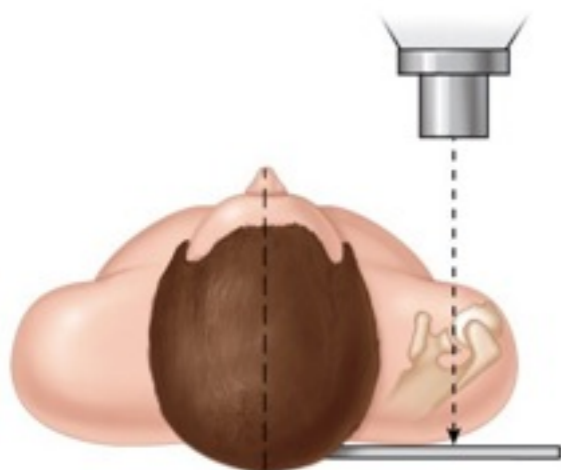
1. Trauma
2. Instabiliteit
3. Calcificaties
4. Rotator Cuff
5. AC - gewricht
6. SC - gewricht

- ✱ RADIOGRAFIE
- ✱ ECHOGRAFIE
- ✱ CT SCAN
- ✱ NMR
- ✱ ARTHRO - NMR
- ✱ ISOTOPENSCAN

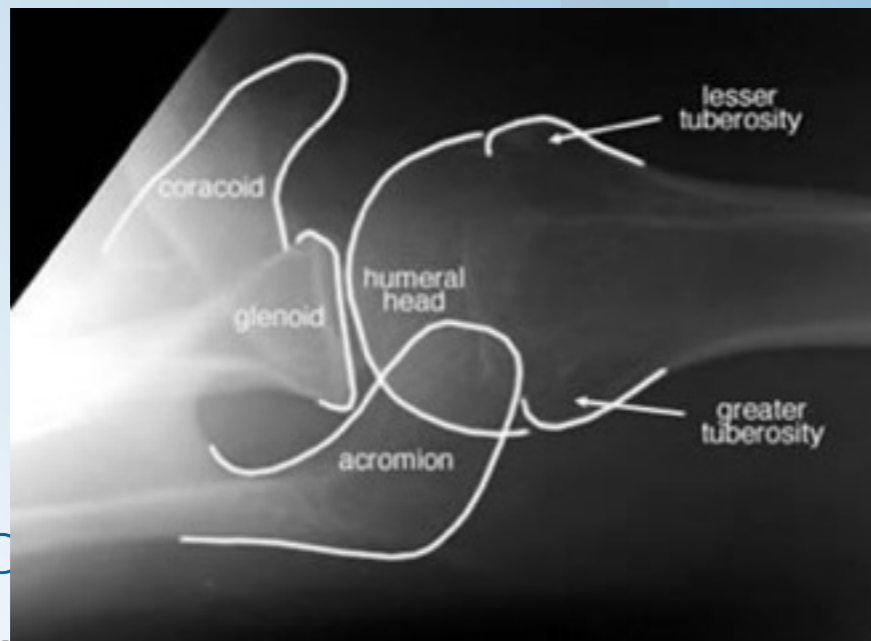
FRACTUREN

- Face opname in vlak van scapula (True AP)
 - Uitwendige rotatie
 - Inwendige rotatie
- Axillaire laterale opname
 - of scapulolaterale opname
- CT scan

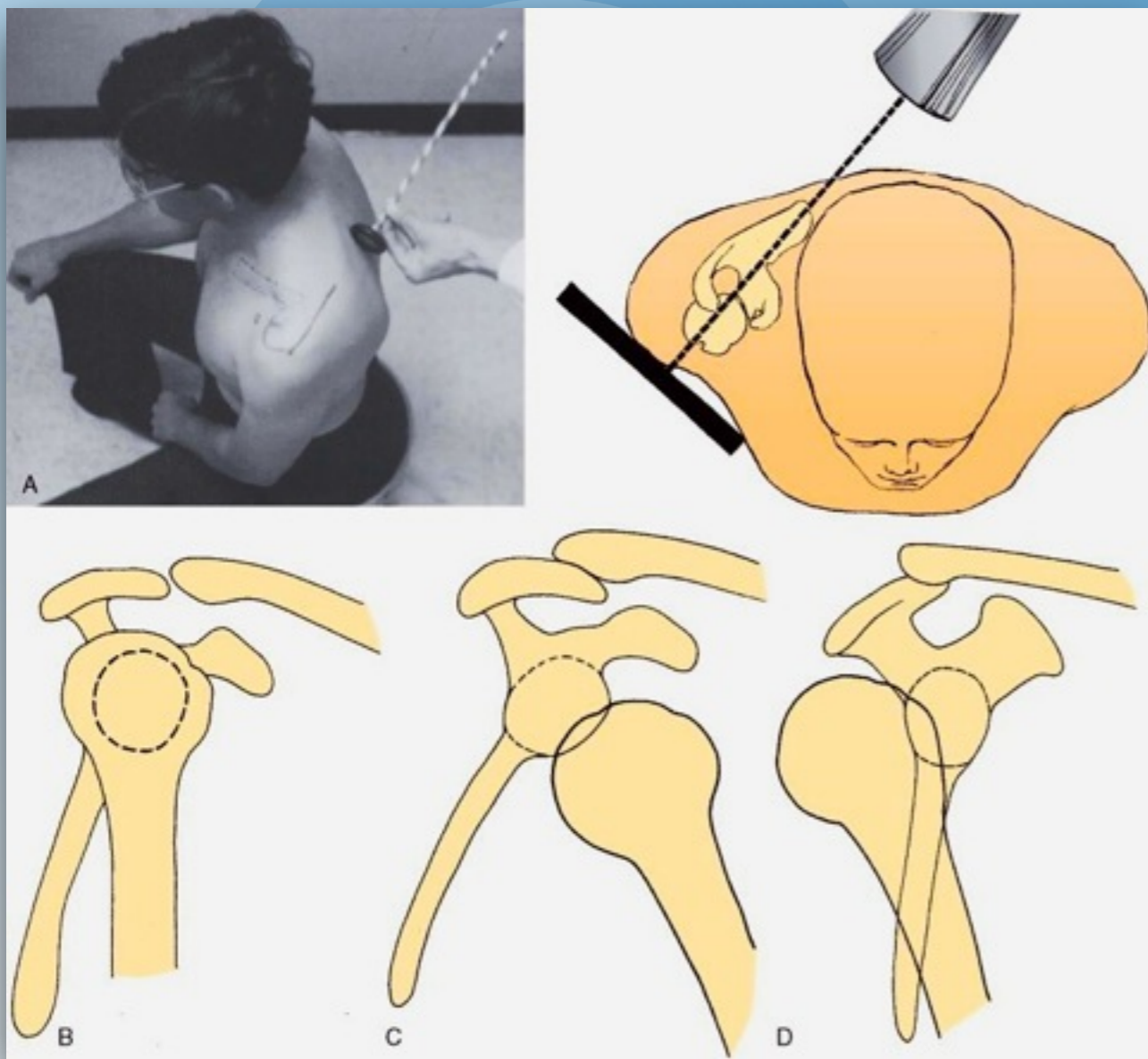
Face



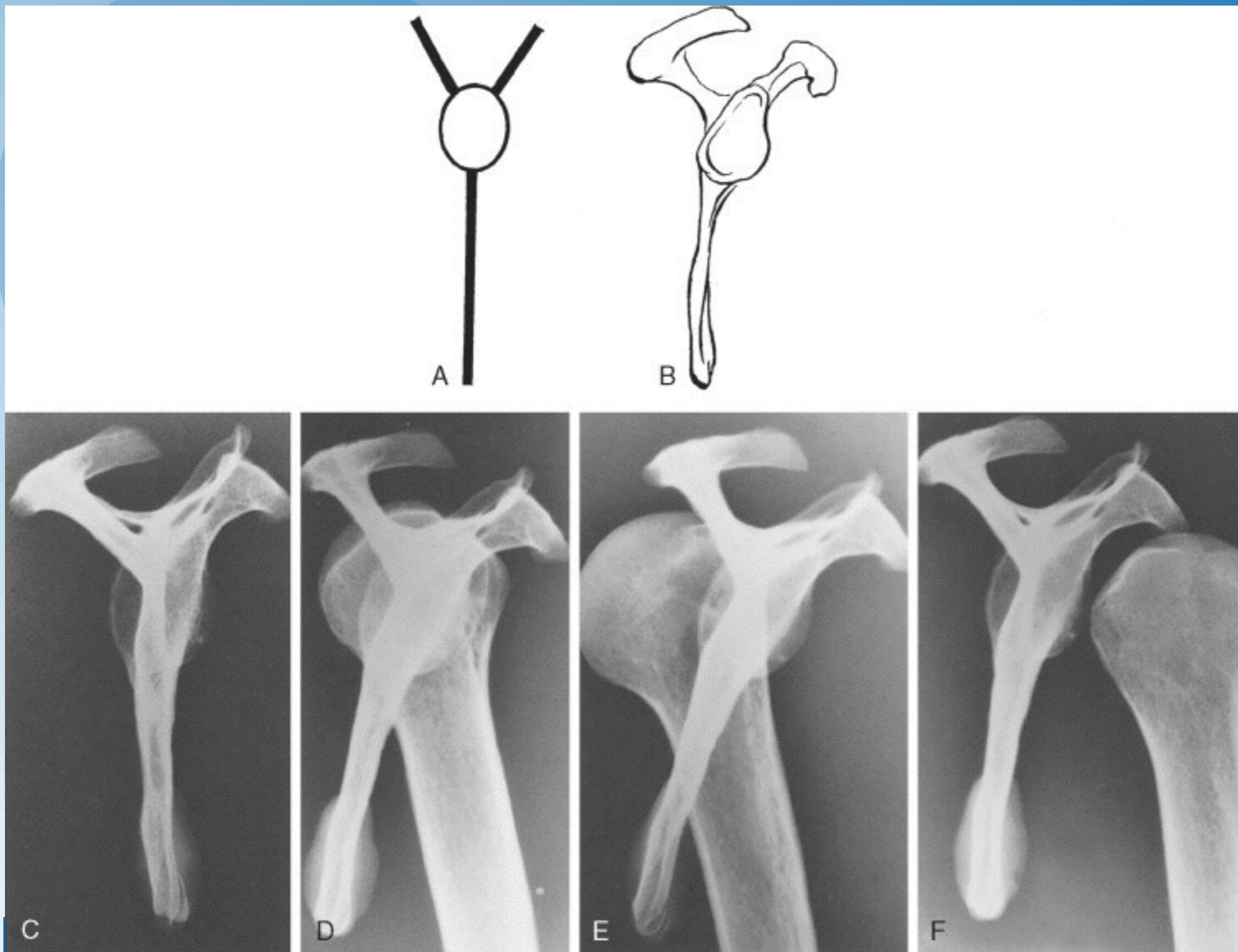
Axillaire opname



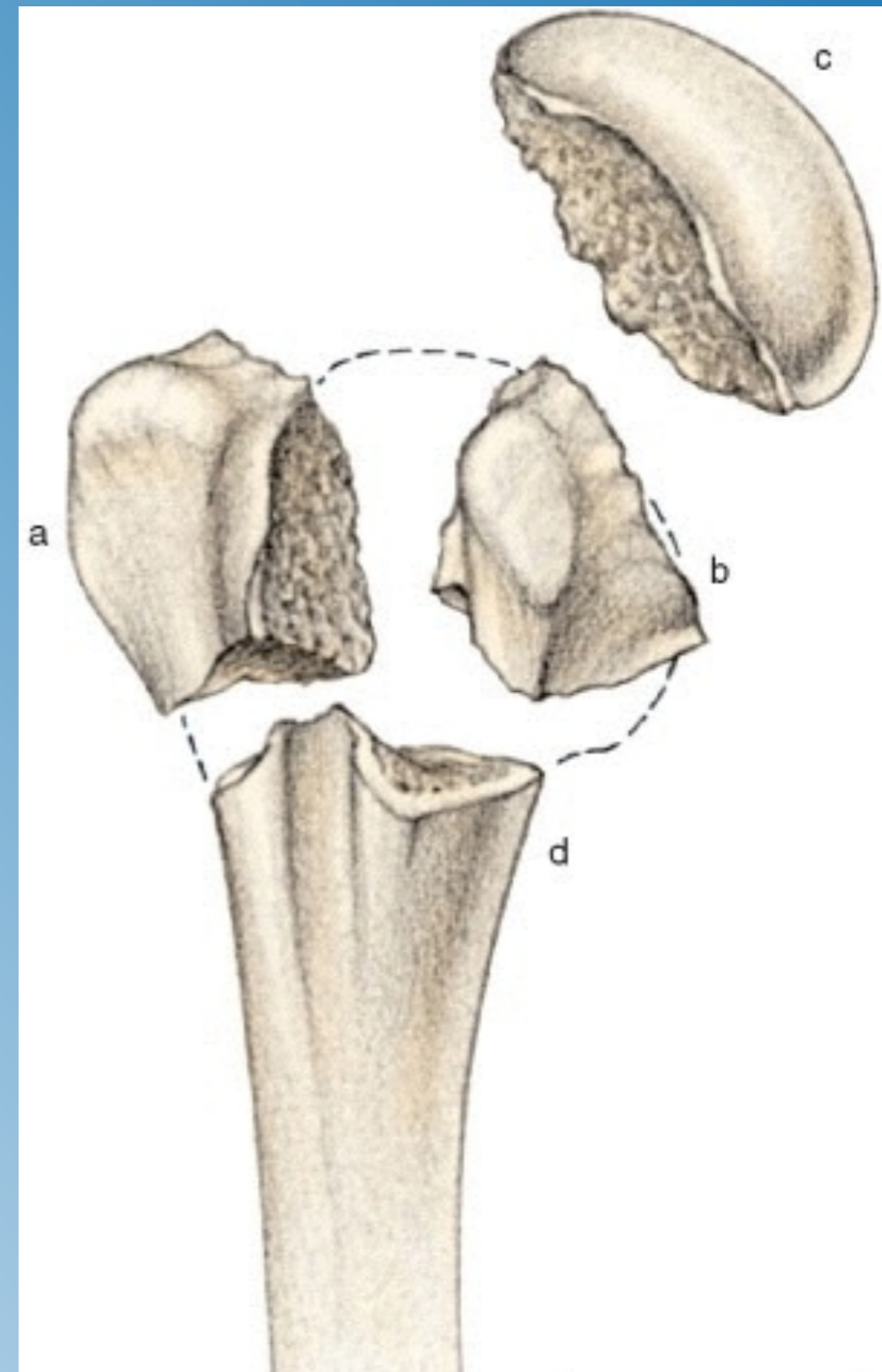
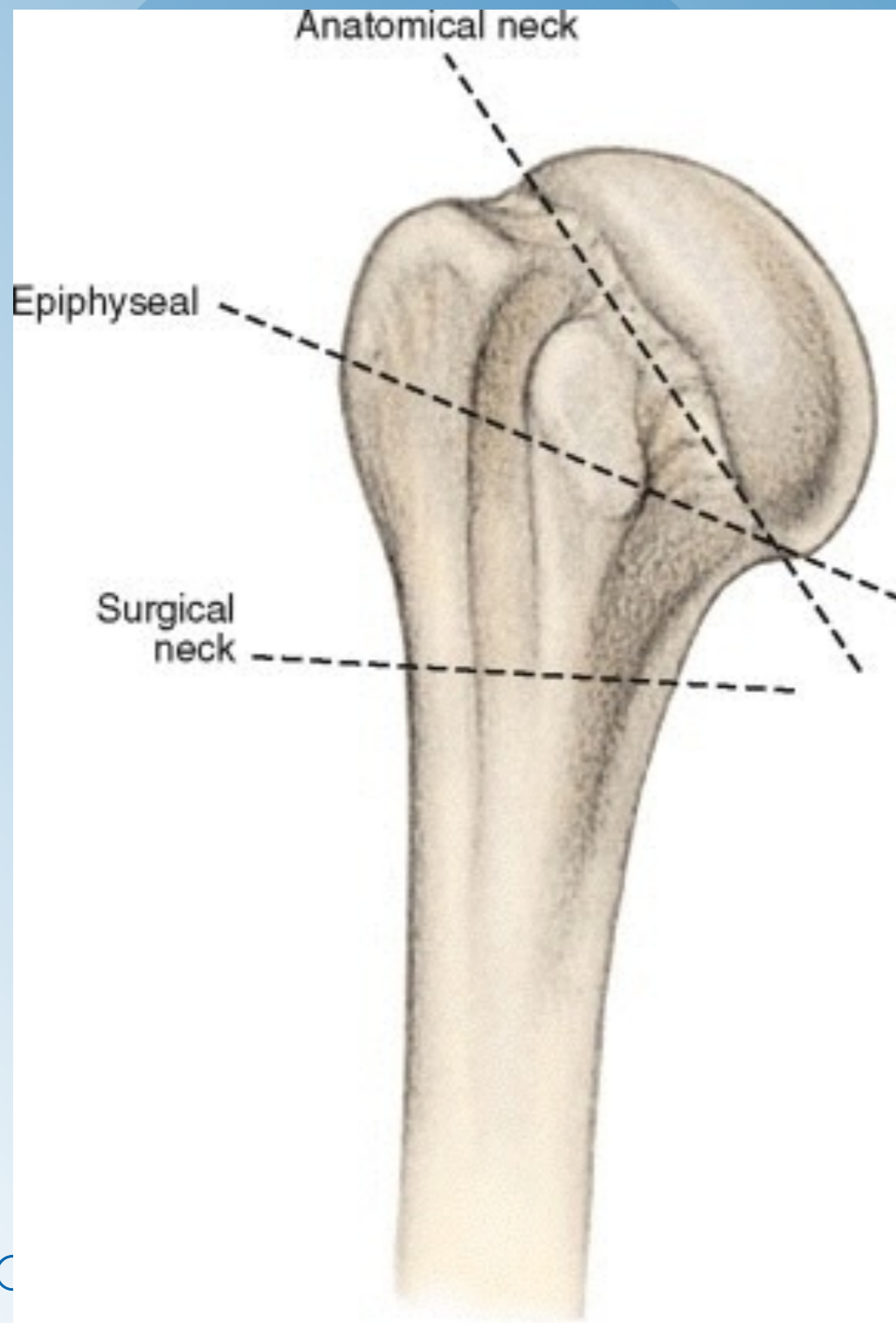
Scapulolaterale opname

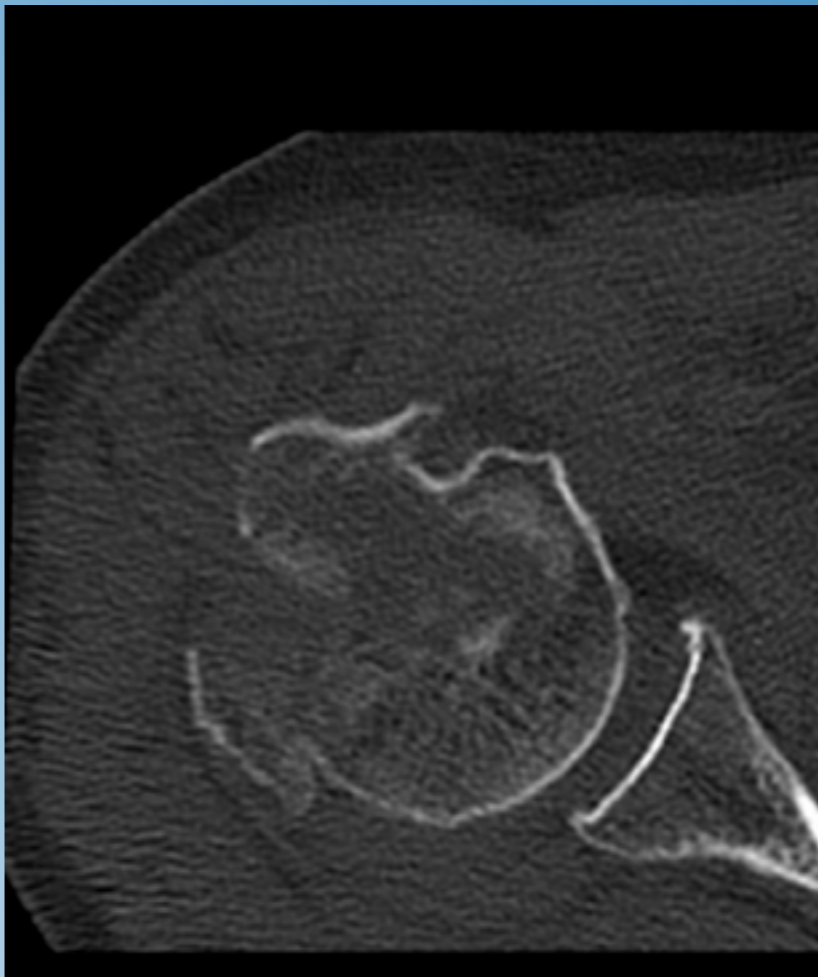


Scapulolaterale opname



CT - SCAN









INSTABILITEIT

1. Acute letsels (luxatie)

A. Traumareeks

B. Stryker notch view, Westpoint view, Garth....

C. CT scan

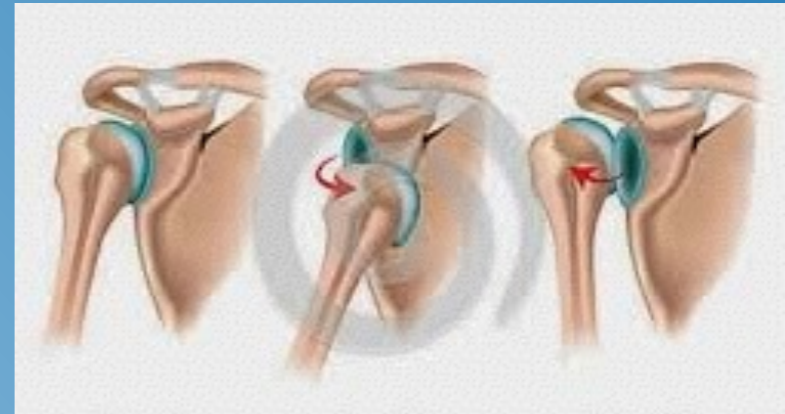
2. Chronische letsels

D. CT scan

E. Arthro - NMR

Acute luxaties

- ◆ richting : anterieur, posterieur, inferieur
- ◆ fractuur : glenoïed, humeruskop, tuberkels
- ◆ Hill Sachs letsel : post. , ant.
- ◆ Beenderig Bankartletsel

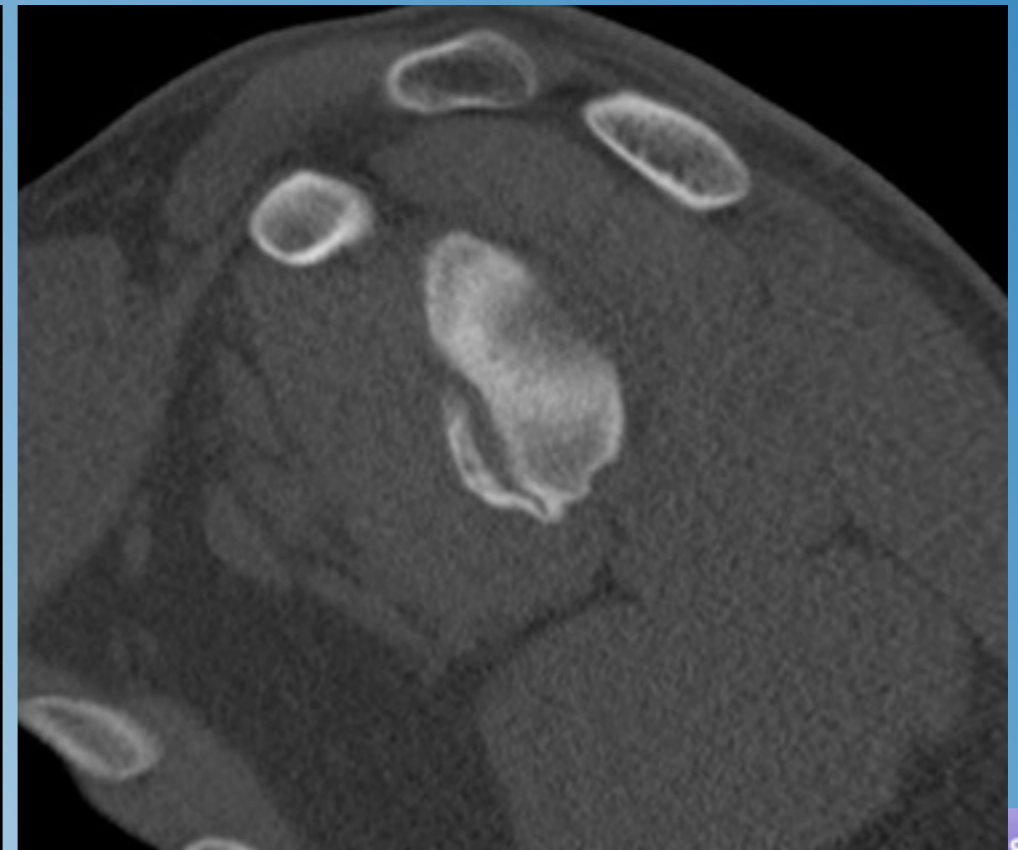
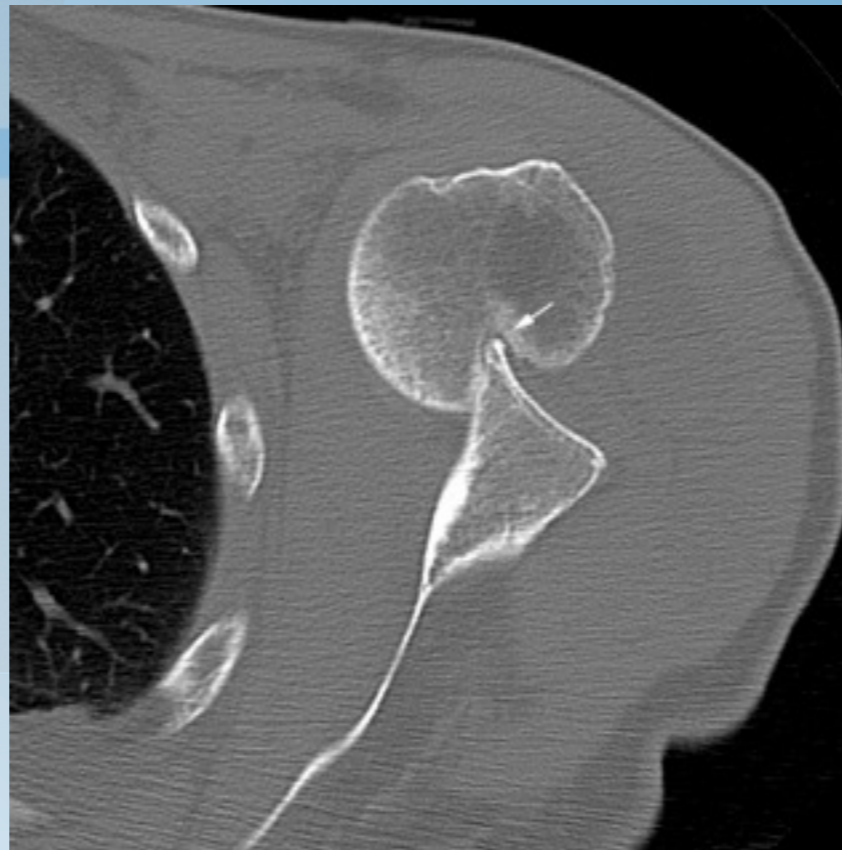


Anterieure luxatie



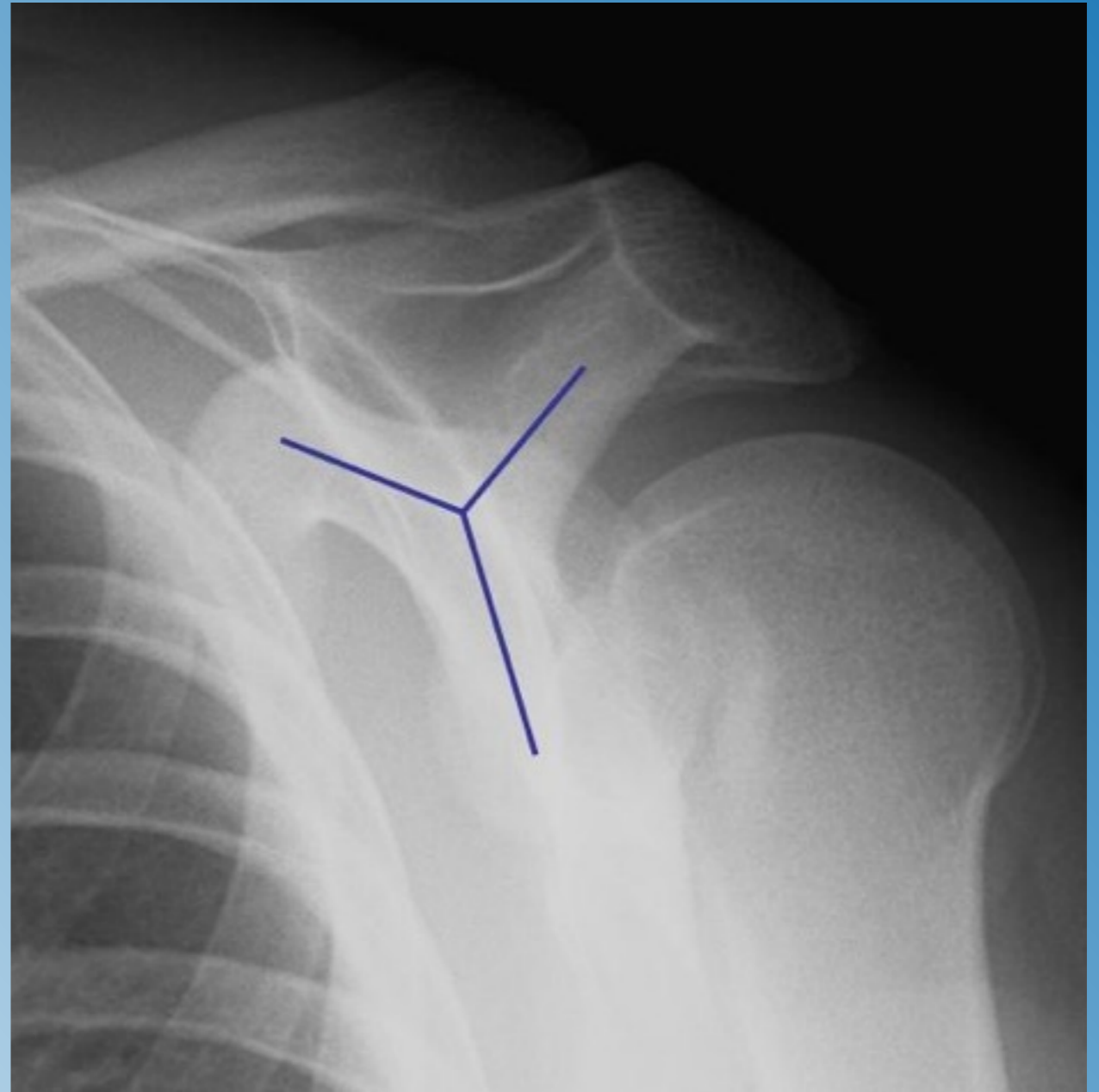
Acute luxatíes

- (Stryker notch view)
- (Westpoint view)
- (Didié view)
- (Garth view)
- **CT scan**



Posteriore luxaties

Light bulb sign



Hill Sachs letsel



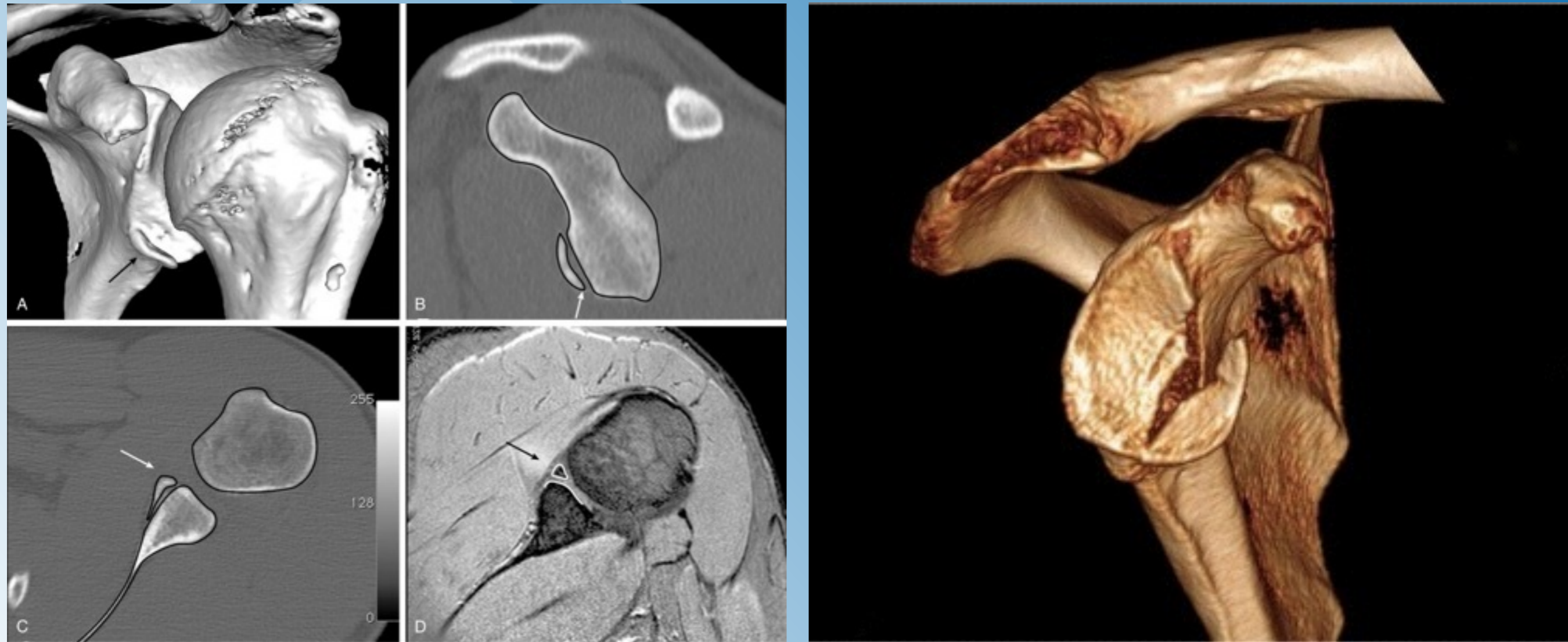
Hill Sachs letsel



Reverse Hill Sachs



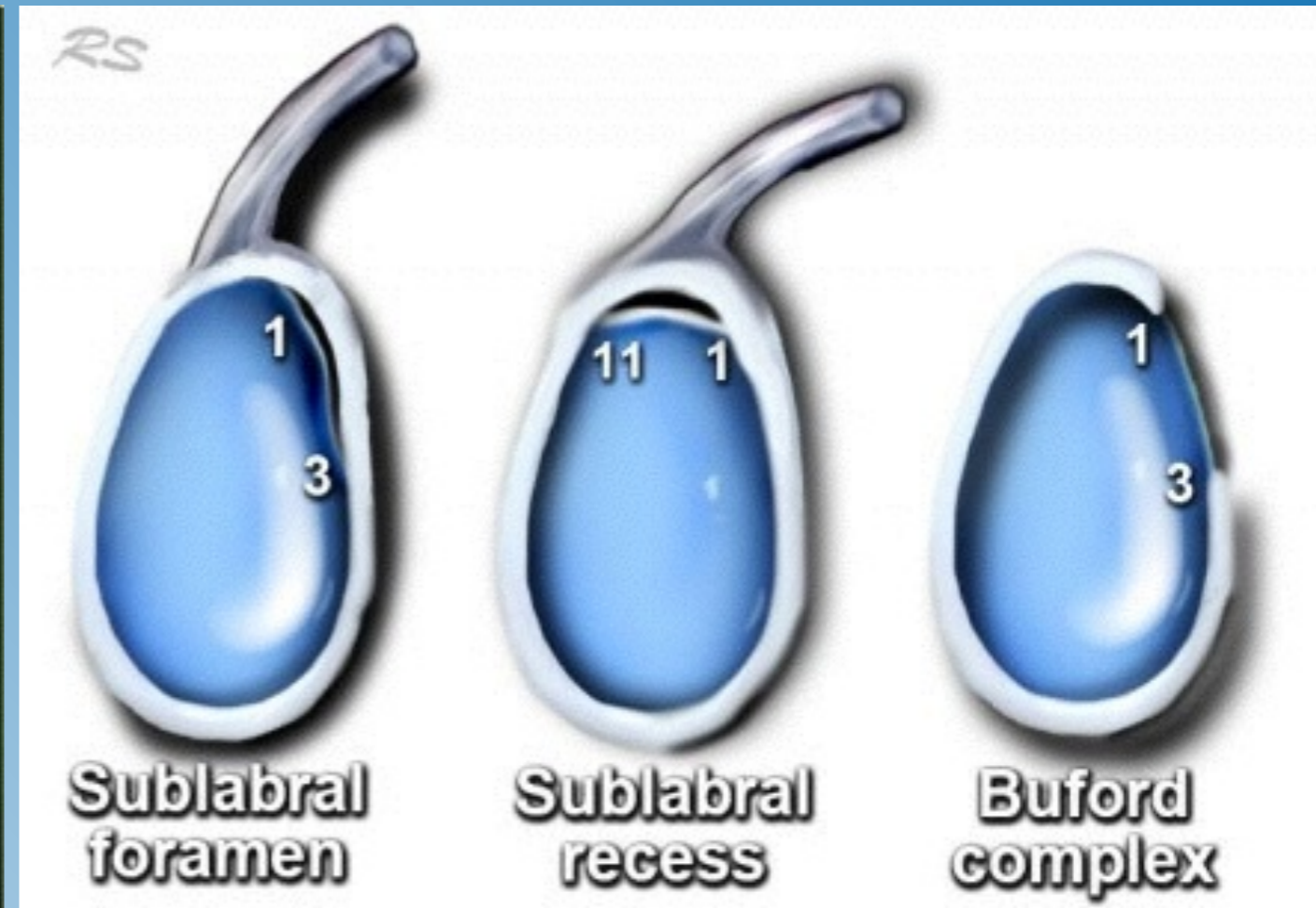
Beenderig Bankartletsel



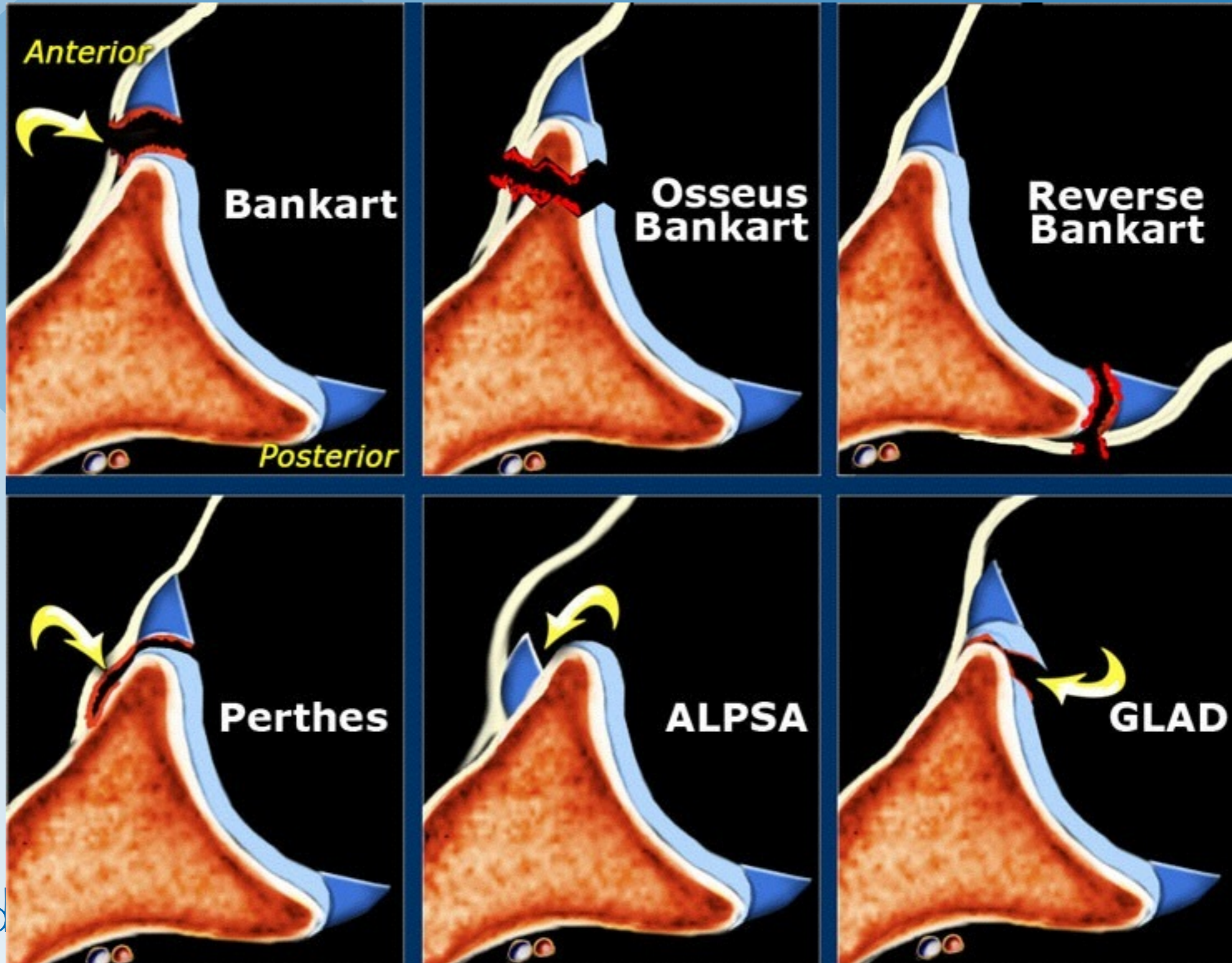
Chronische instabiliteit

- ◆ Radiografie
- ◆ CT - scan : botletsels
- ◆ Arthro-NMR : weke delen
 - labrumletsels
 - kapselletsels : HAGL
 - bicepspees
 - rotatorcuff (ouderen : 30 - 80%)

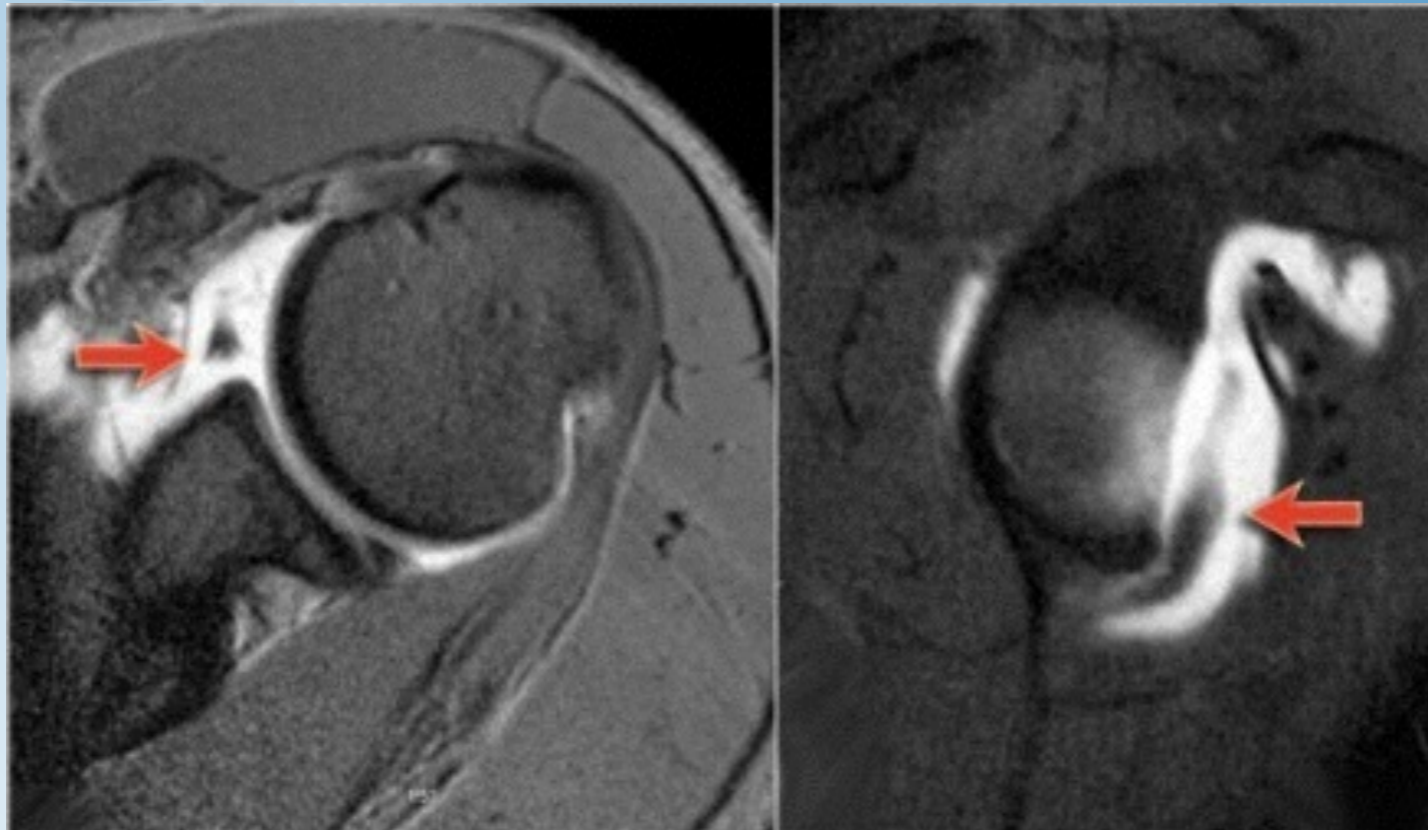
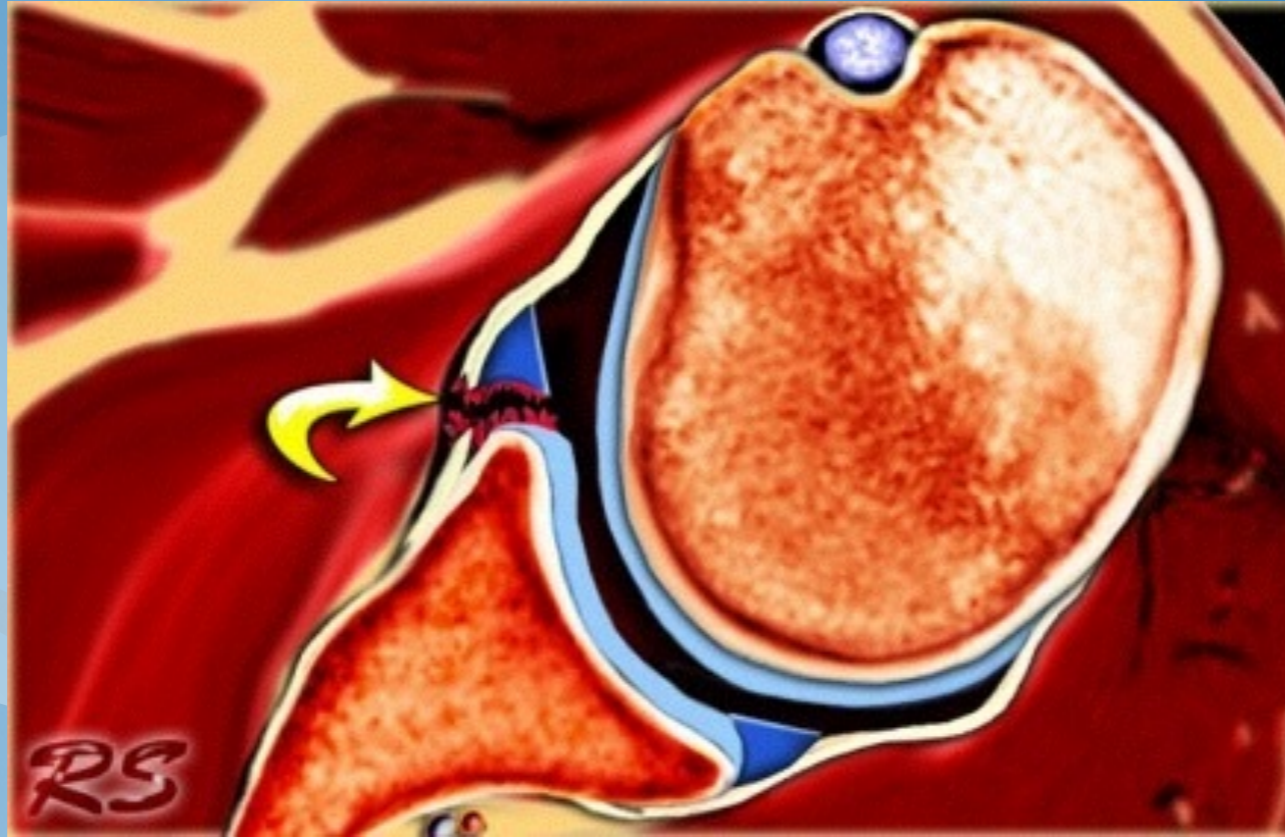
Labrumletsels



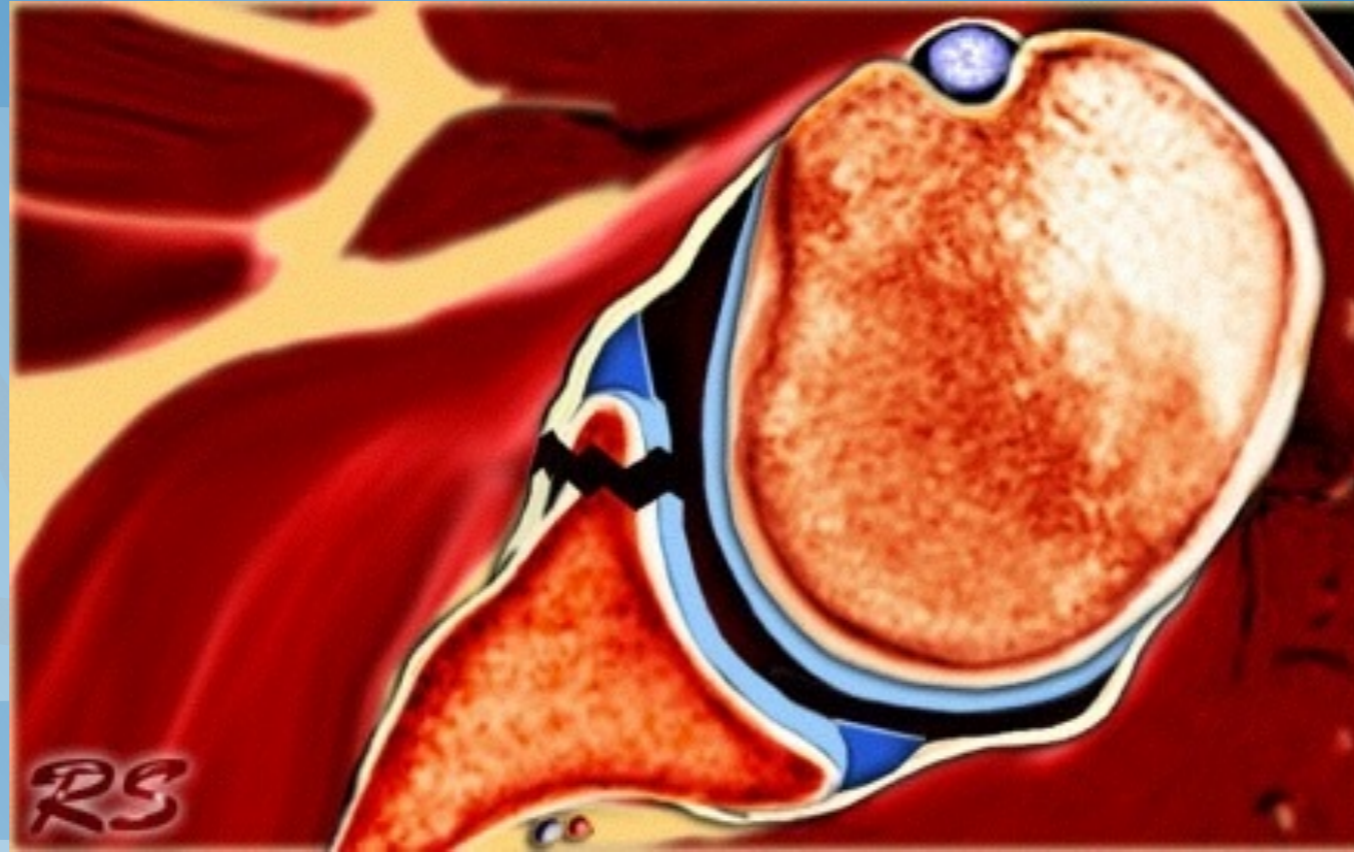
Bankartletsel



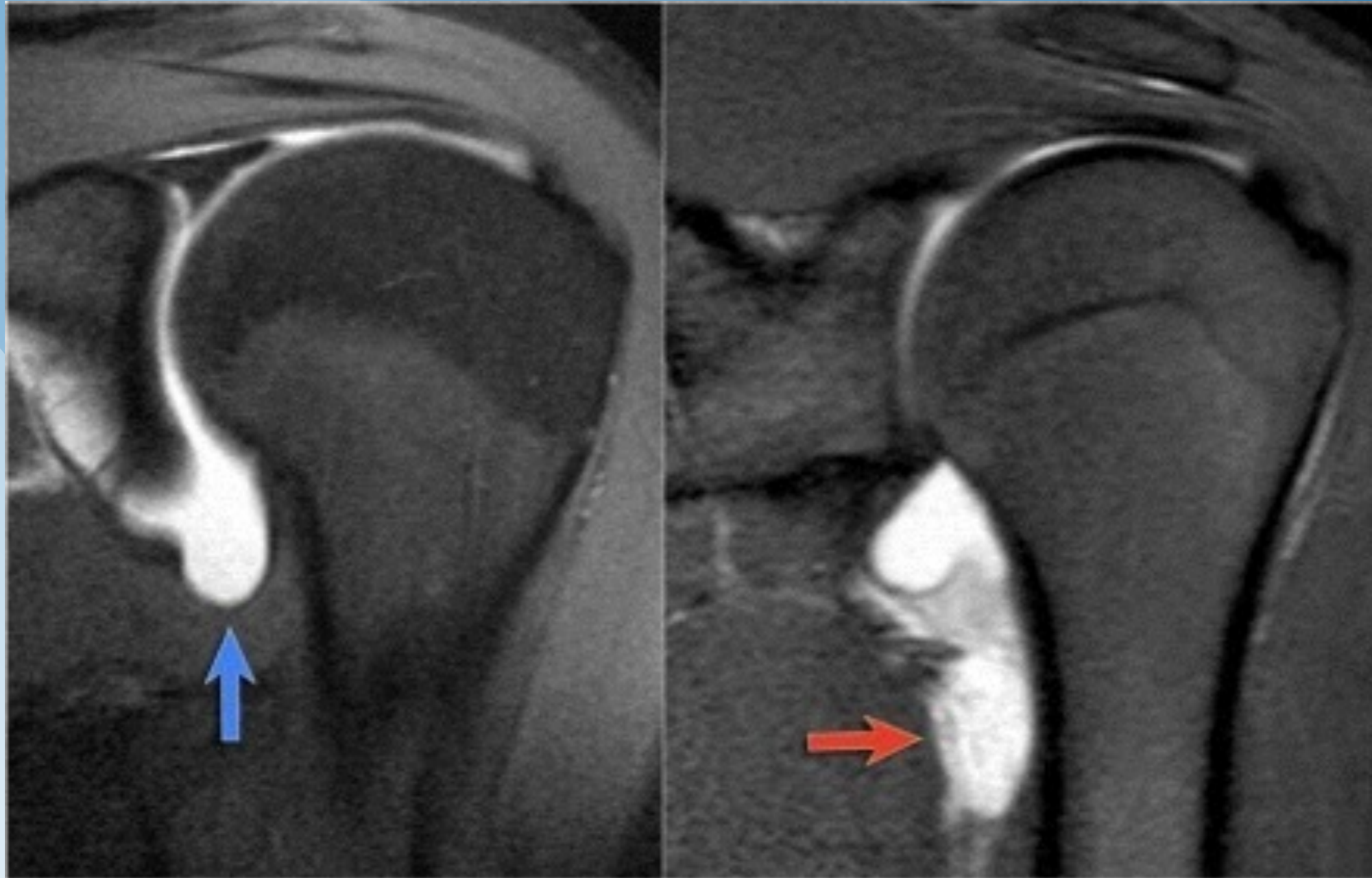
Bankartletsel



Osseus Bankartletsel



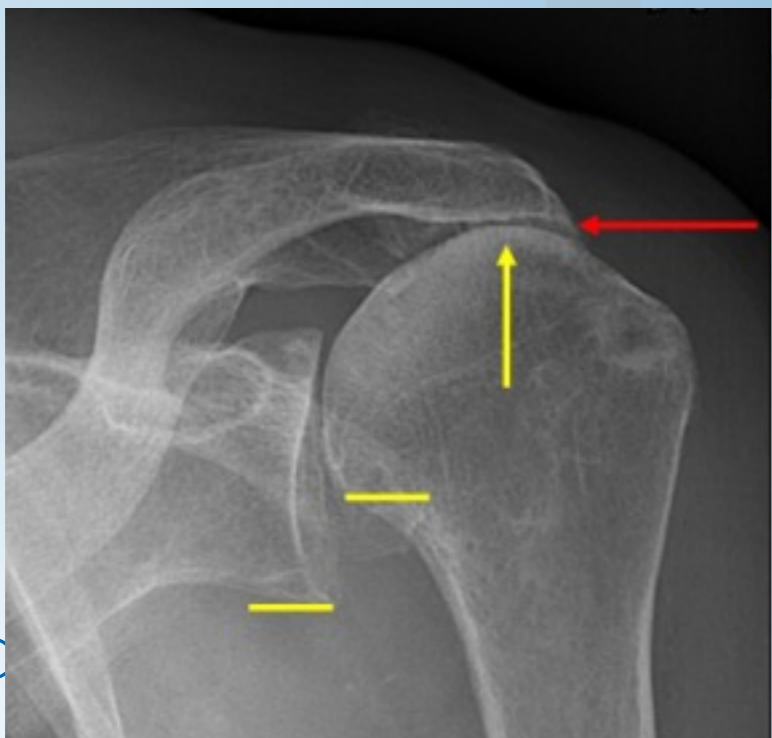
Humeral Avulsion of Glenohumeral Ligament



ROTATOR CUFF

- Radiografie
 1. Face in inw. en uitw. rotatie
 2. Axillaire opname
 3. Face met 30° caudale tilt
 4. Supraspinatus outlet opname
- Echografie
- Arthro - NMR (arthro - CT)

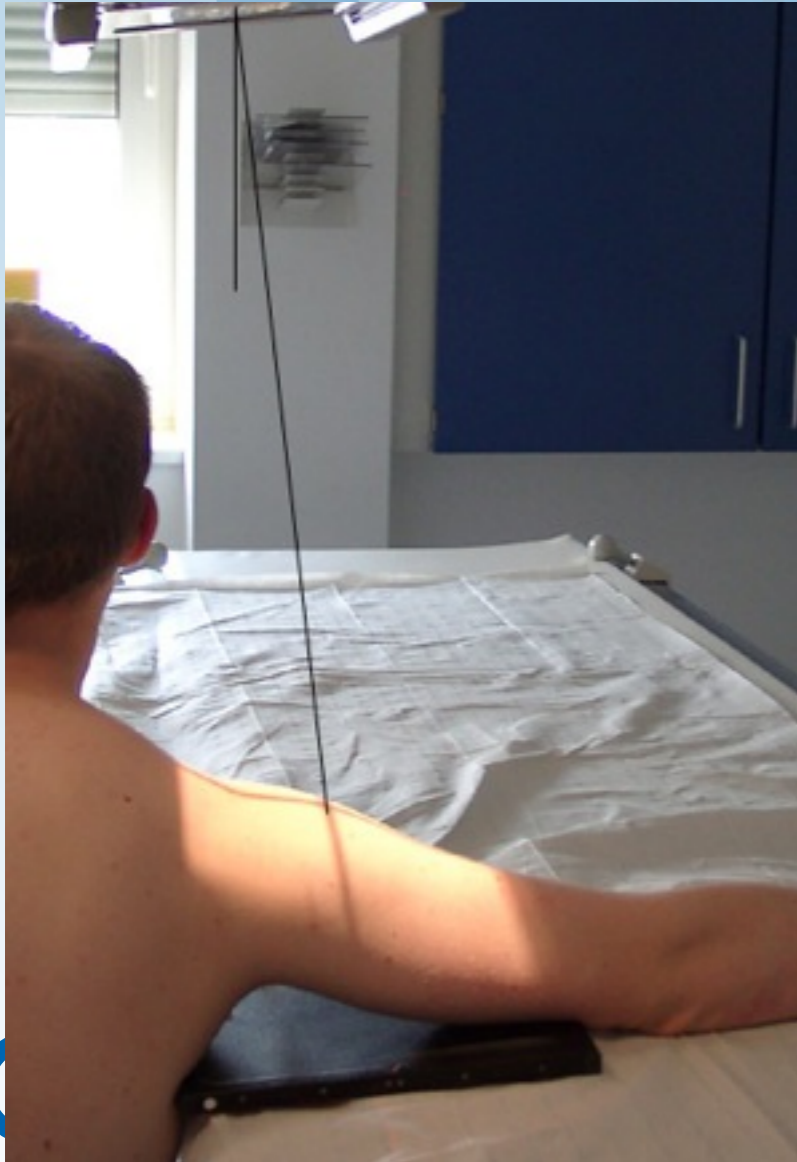
Radiografie : Face



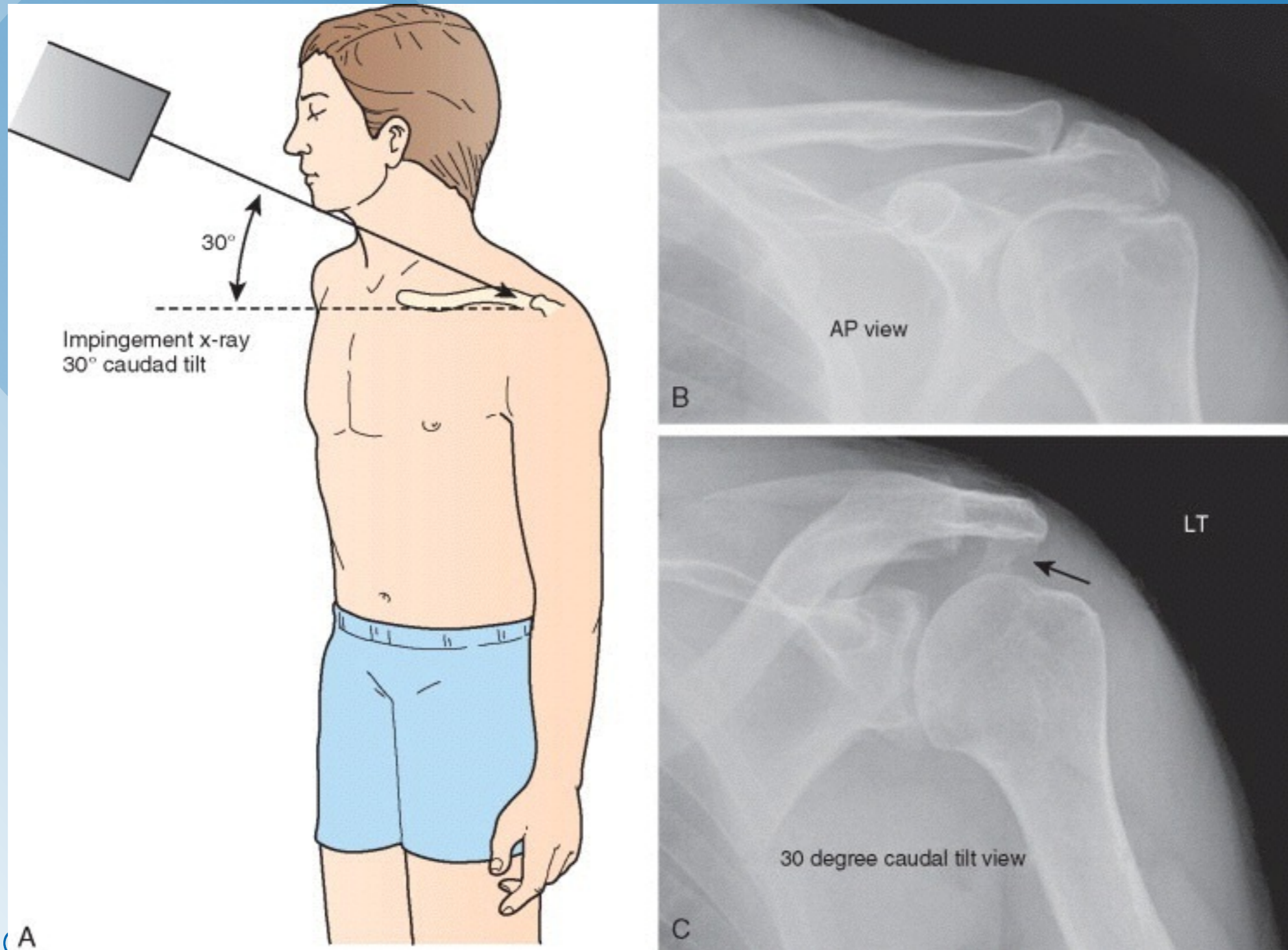
- geassocieerde calcificaties
- sclerose & kysten tub maius
- acromionspoor
- AC artrose
- acromiohumeraal interval

Axillaire opname

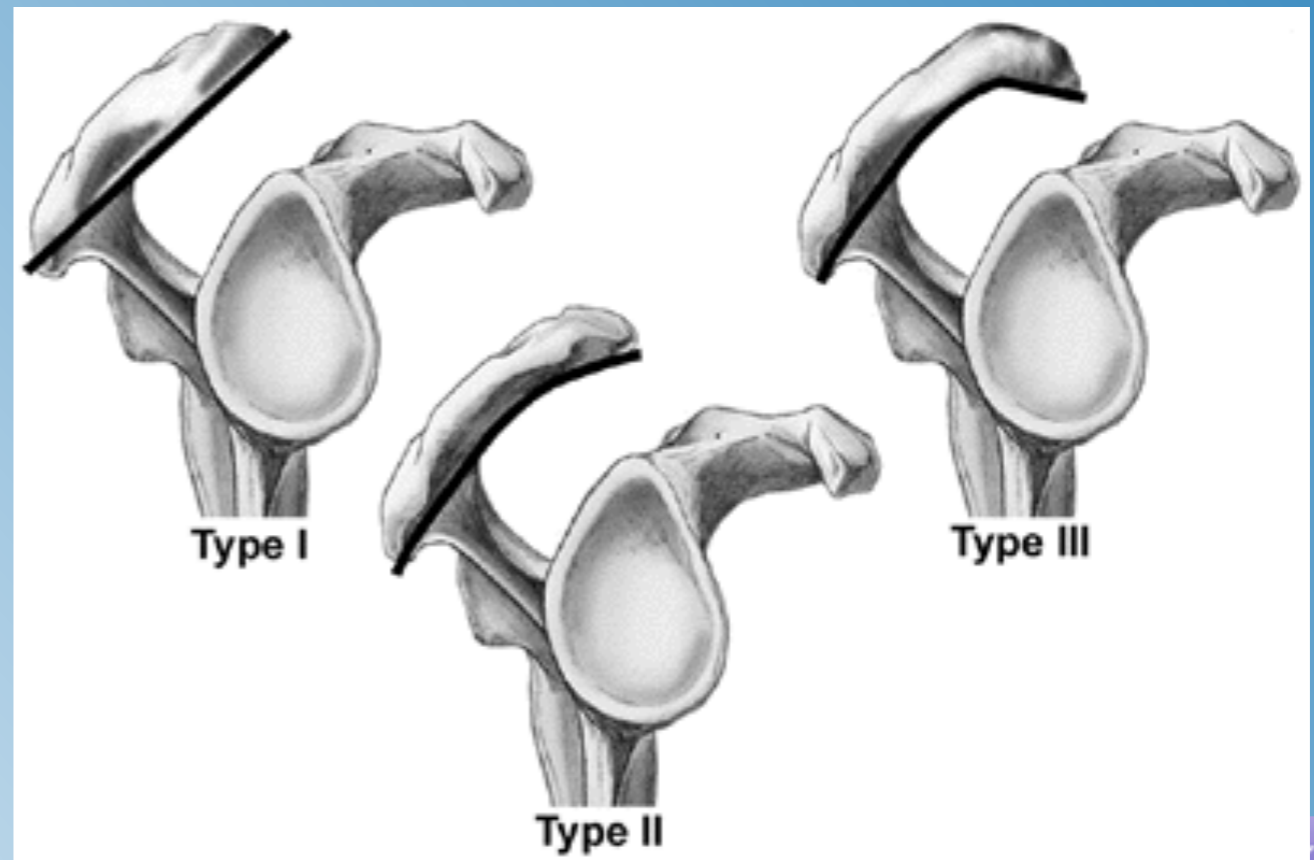
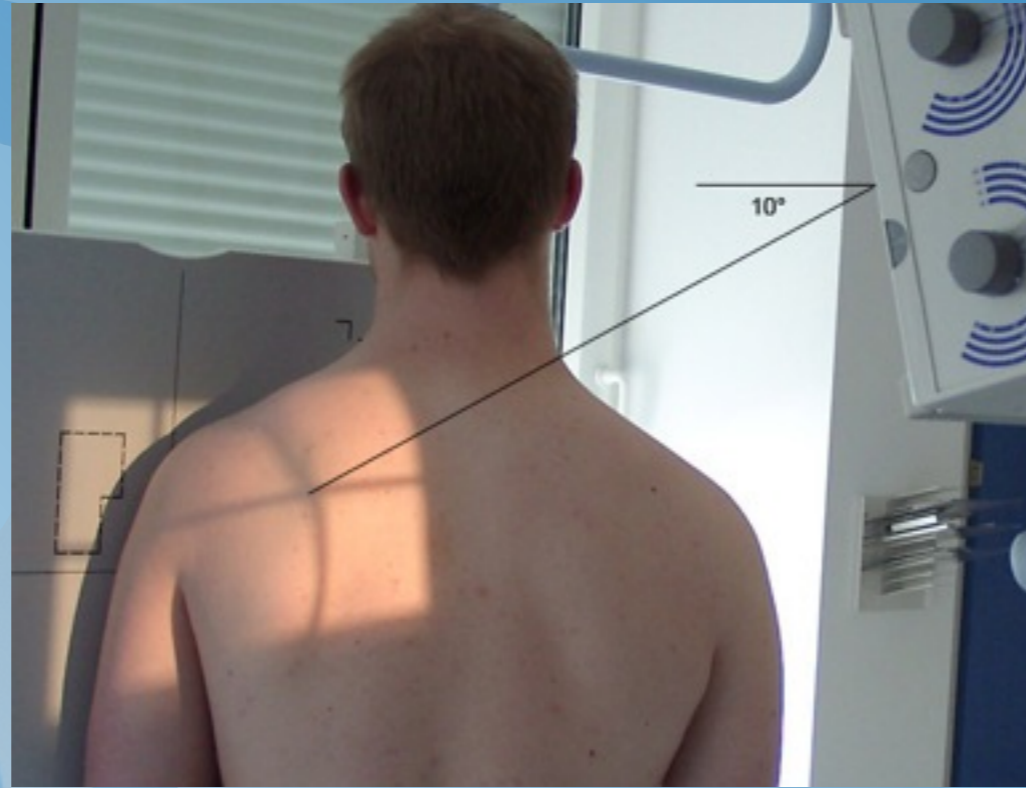
- glenohumerale artrose
- Os Acromiale
- AC artrose



30° caudale tilt opname



Supraspinatus outlet view



ECHOGRAFIE

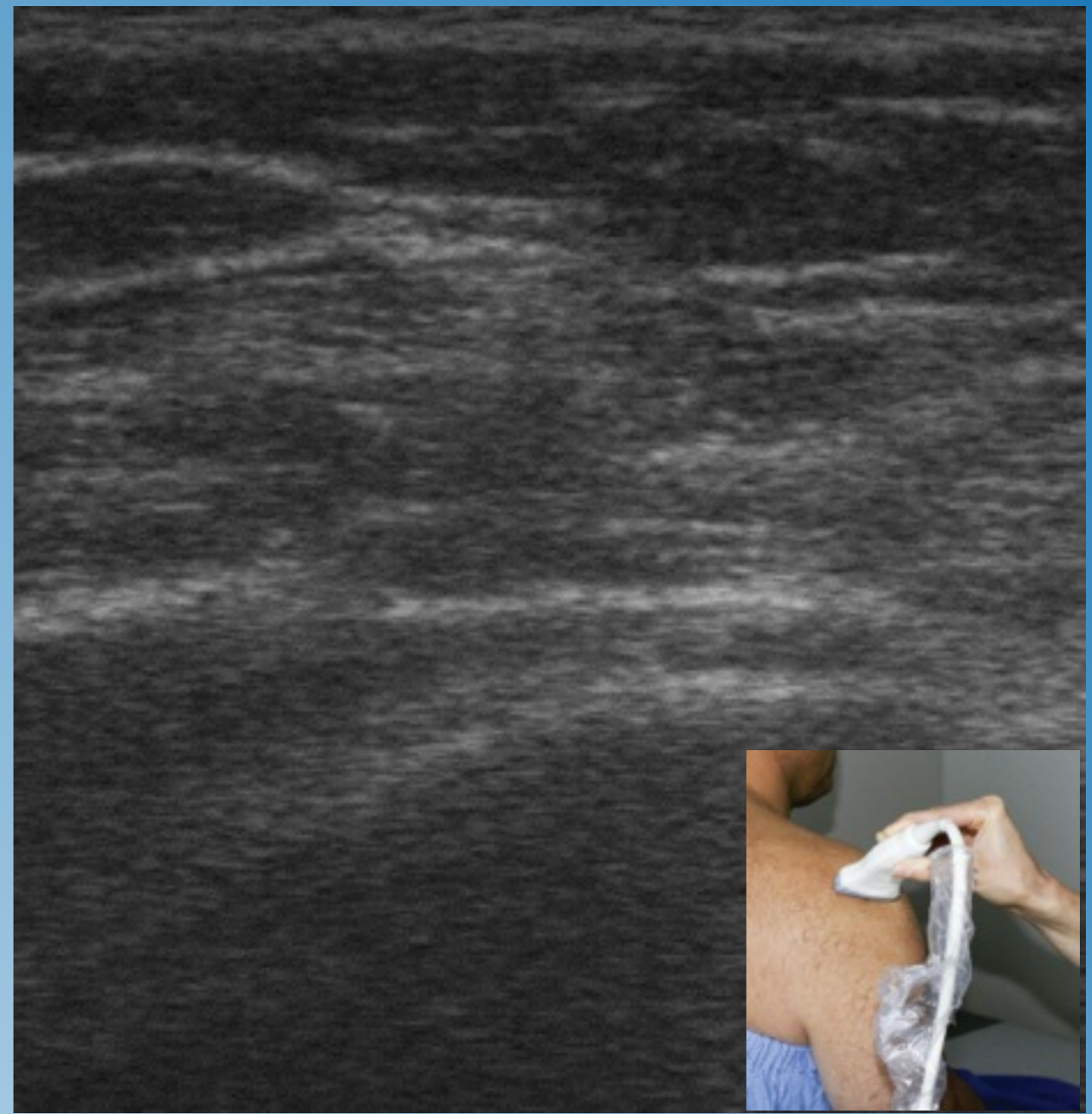
PRO :

- niet invasief
- geen ioniserende stralen
- geen contra indicaties (vs NMR : claustrofobie, metalen implant)
- relatief goedkoop
- snel verkrijgbaar
- vergelijking met normale schouder mogelijk

CONTRA :

- sterk onderzoeker-afhankelijk
- interpretatie van normale verouderingsletsels als pathologie
- beelden moeilijk te beoordelen door niet-onderzoeker

ECHOGRAFIE



ARTHRO - NMR

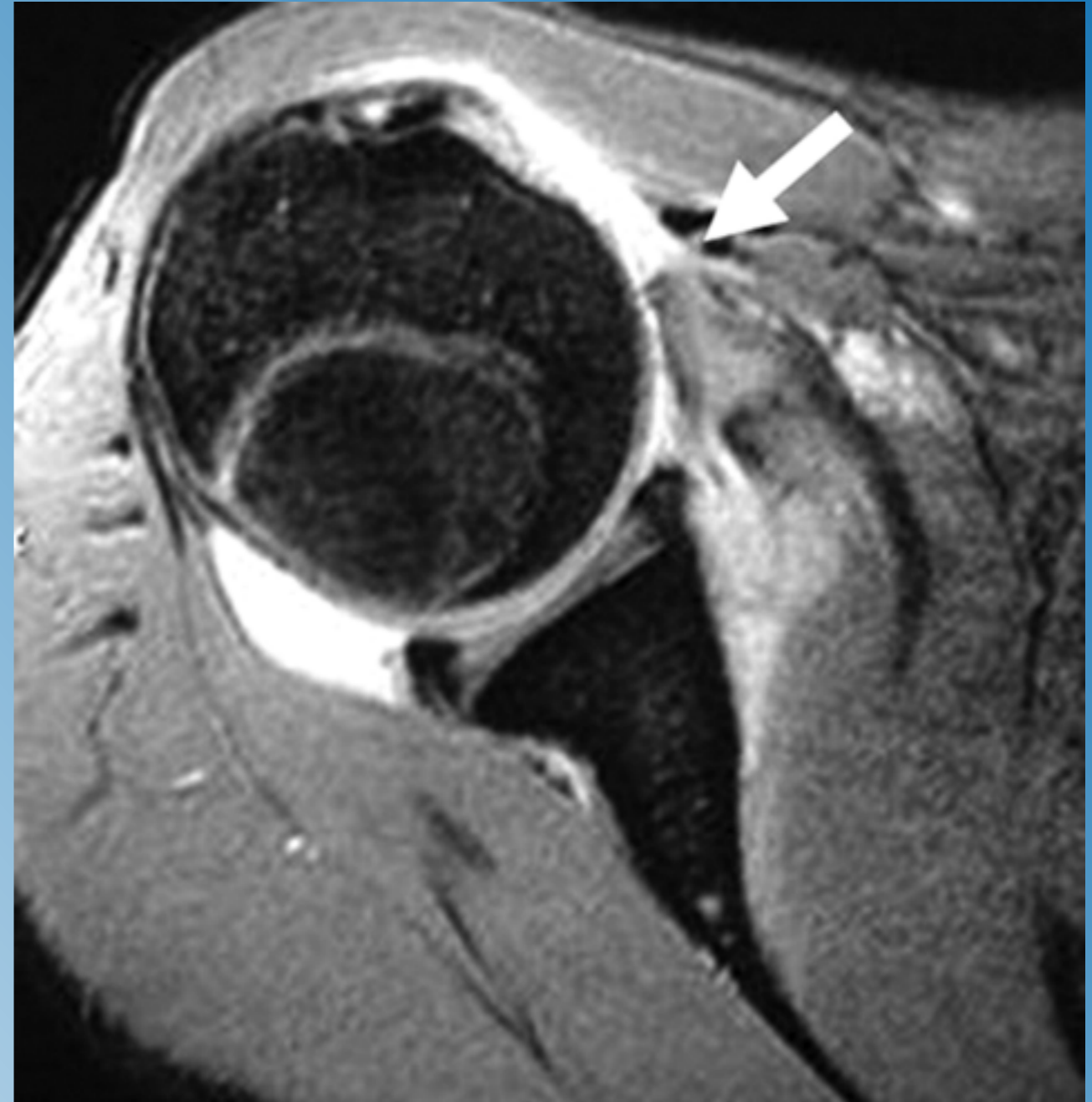
PRO :

- Accuraat & betrouwbaar
- overvloed aan informatie
- kwaliteit van cuff
- grootte en configuratie scheur
- retractie
- bicepspees
- partial thicknessletsels

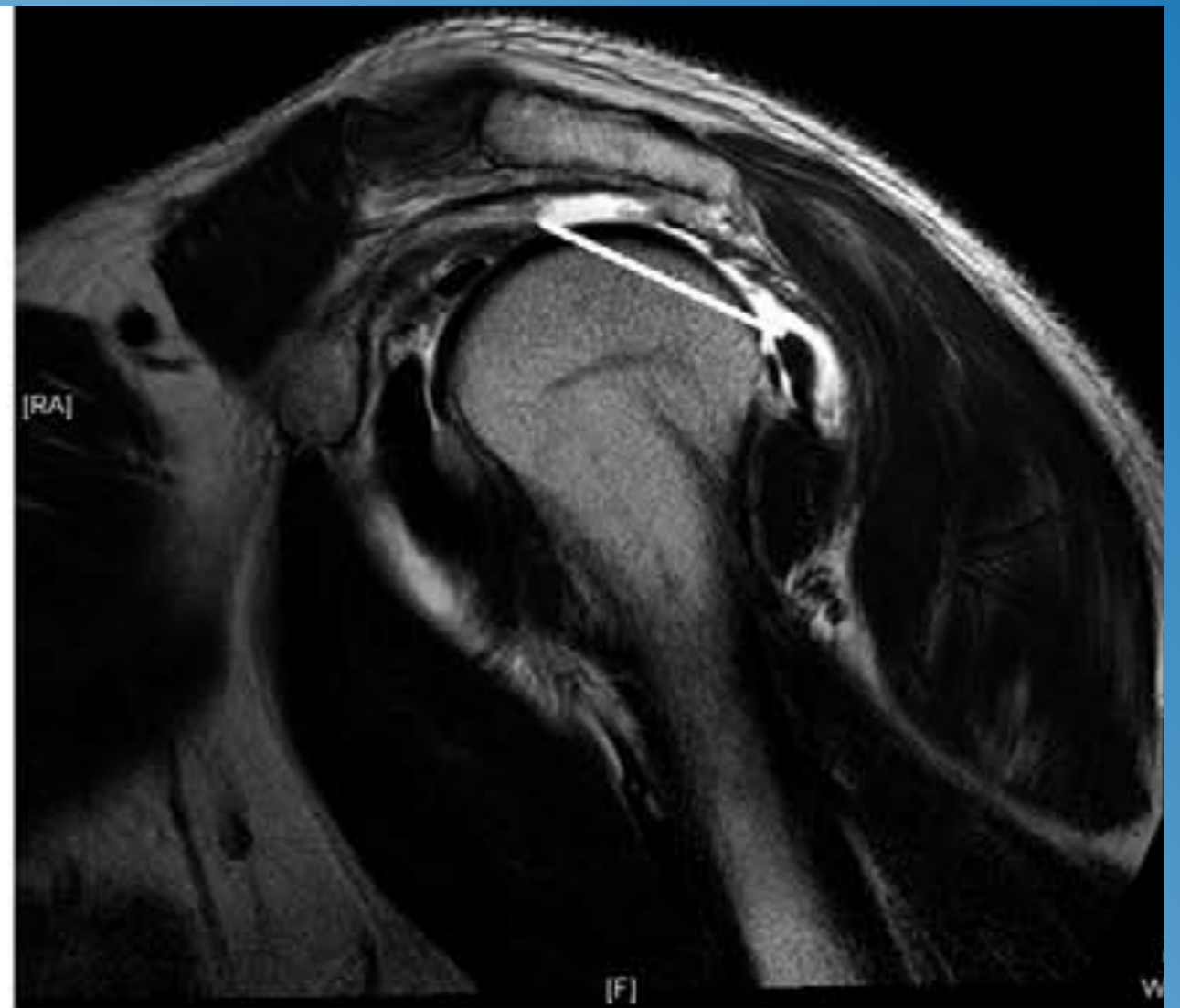
CONTRA :

- invasief
- contraindicaties(claustrofobie, pacemaker, klep,....)
- duur
- lange wachttijden
- mogelijke allergie tov Iodium

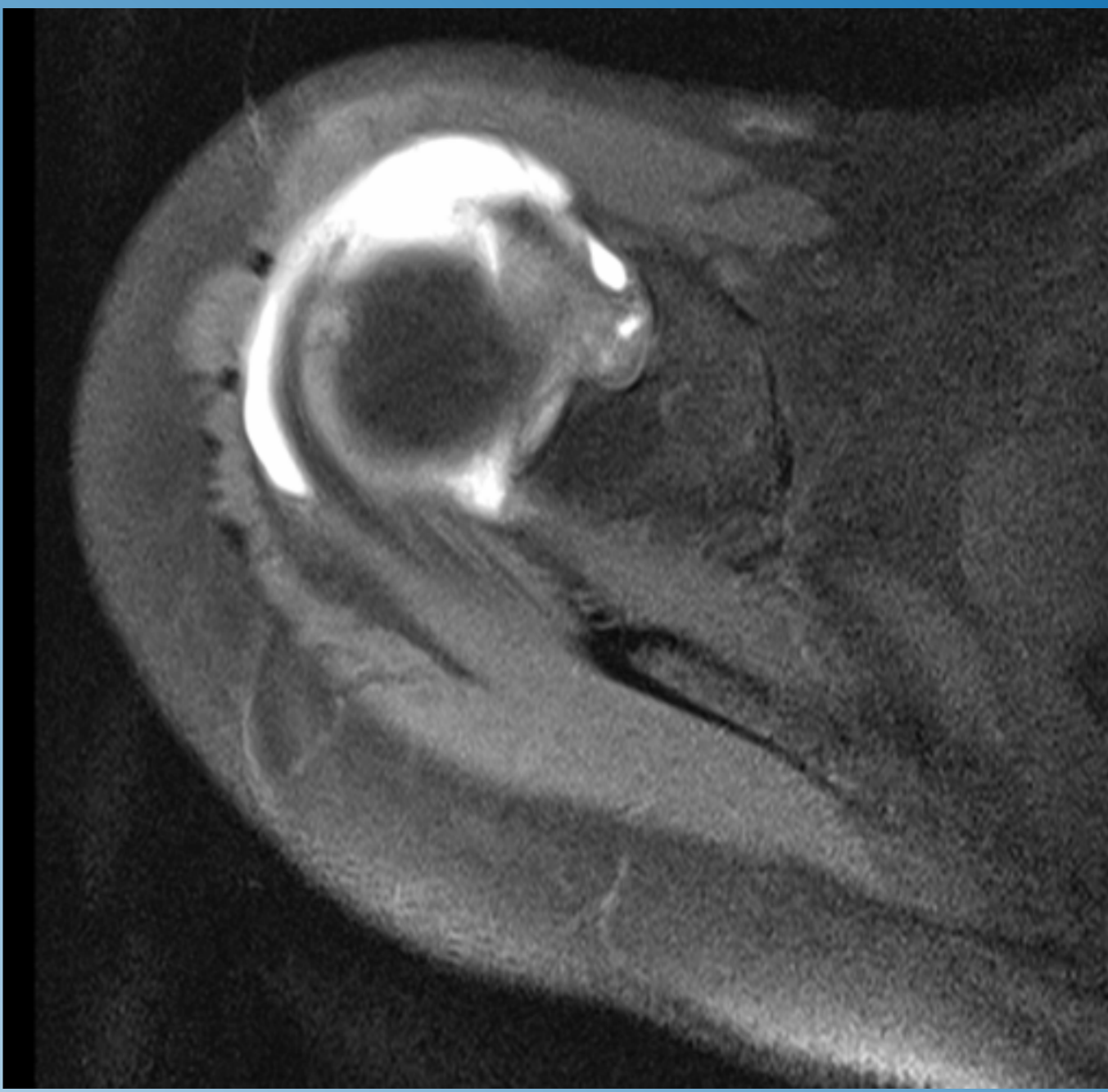
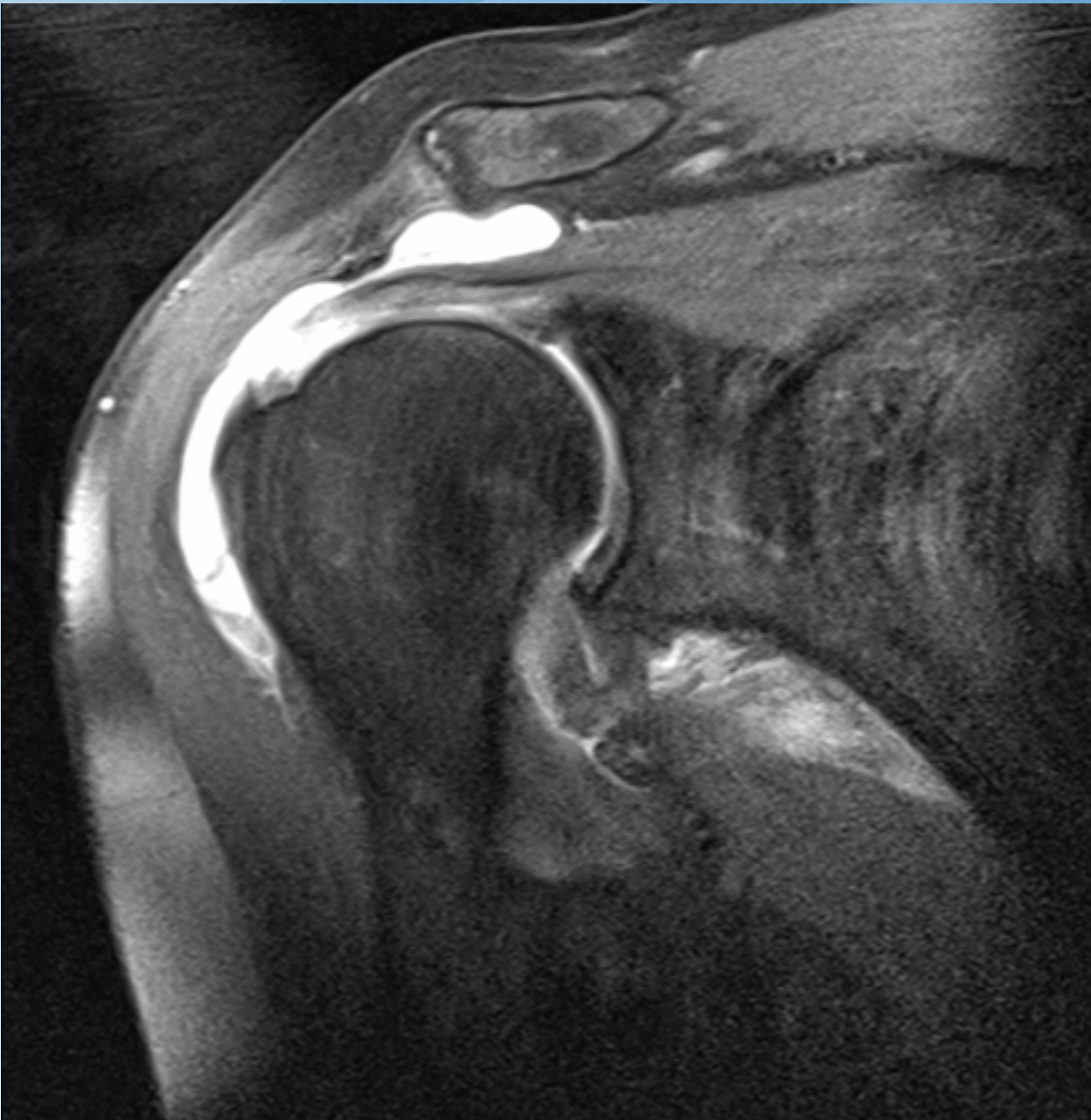
Arthro - NMR



Arthro - NMR



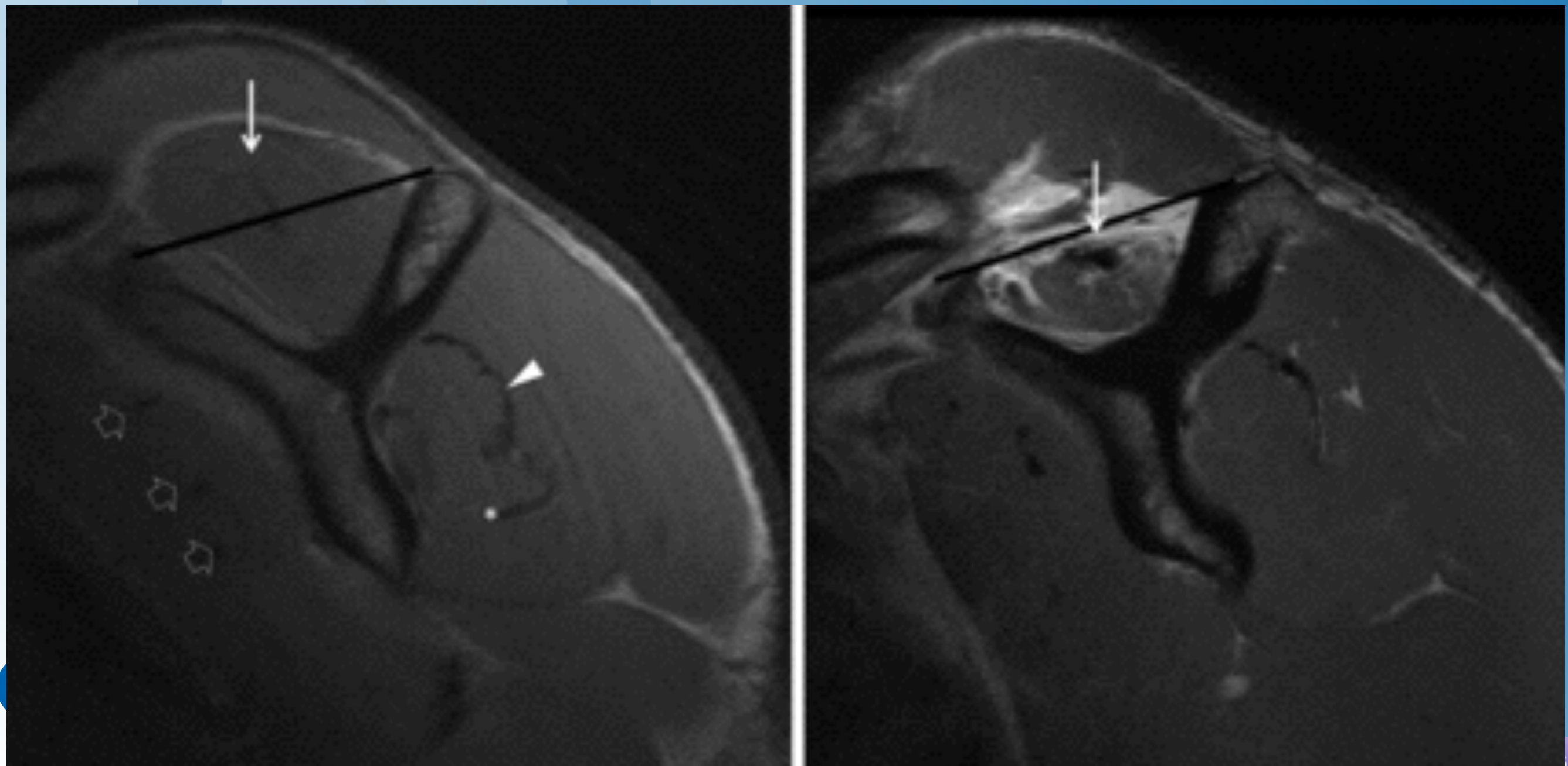
Arthro - NMR



NMR : Fatty degeneration



NMR : Tangent sign



Rotator Cuff calcificaties

- vooral in Supraspinatus, infraspinatus en zeldzaam in teres minor en subscapularis
- Face in IR en ER
- Supraspinatus outlet opname
- Cave echografie : micro- vs. macrocalcificaties



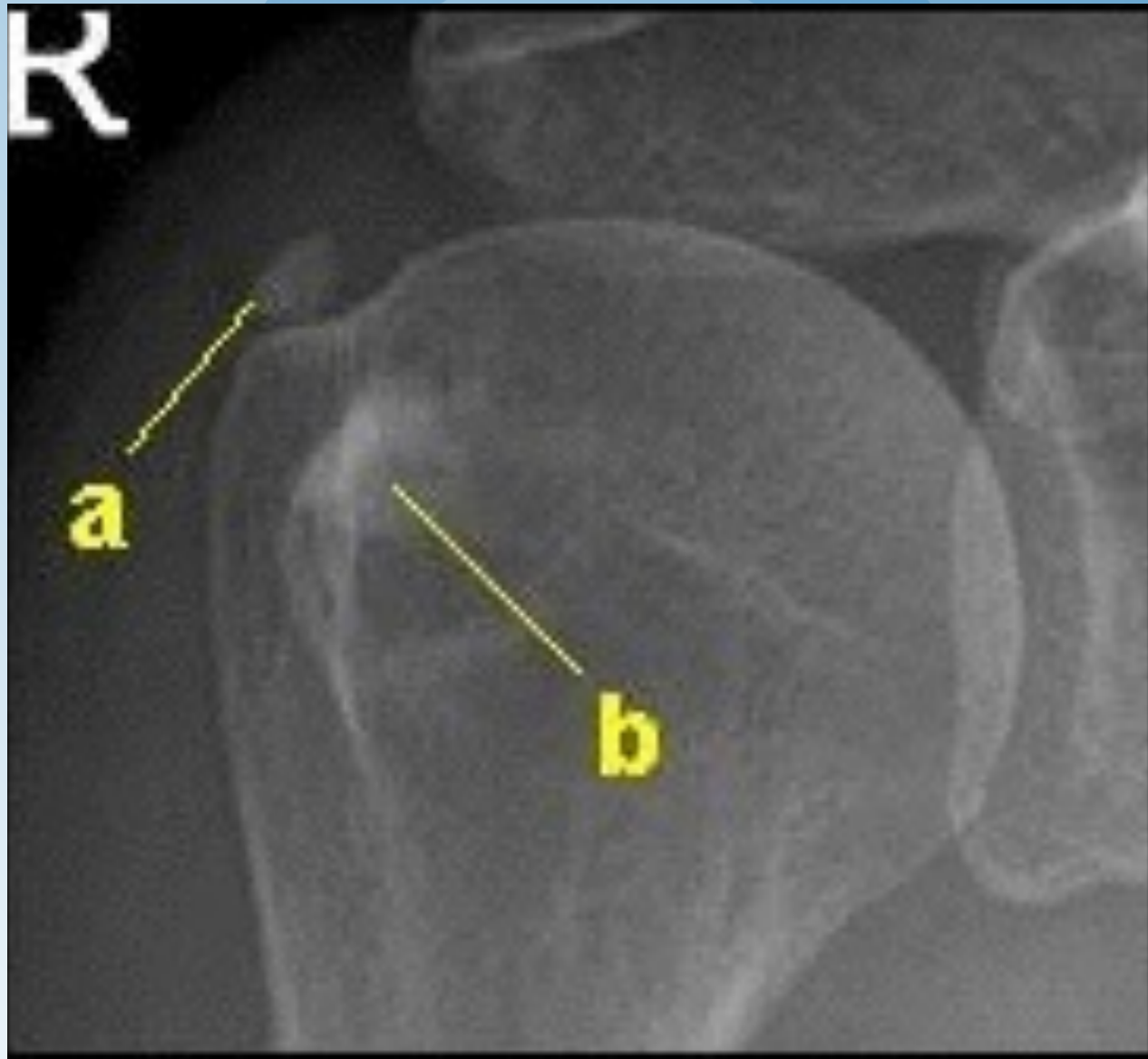
Rotator Cuff calcifications



Rotator Cuff calcifications



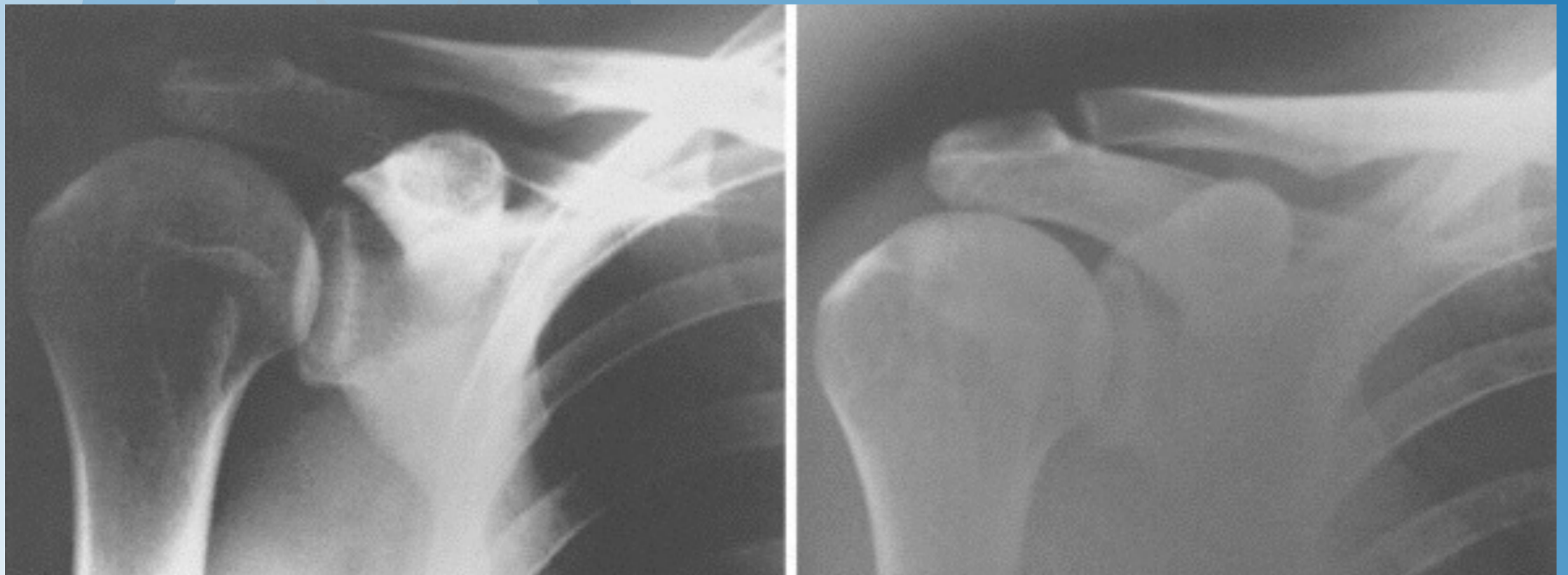
Rotator Cuff calcifications



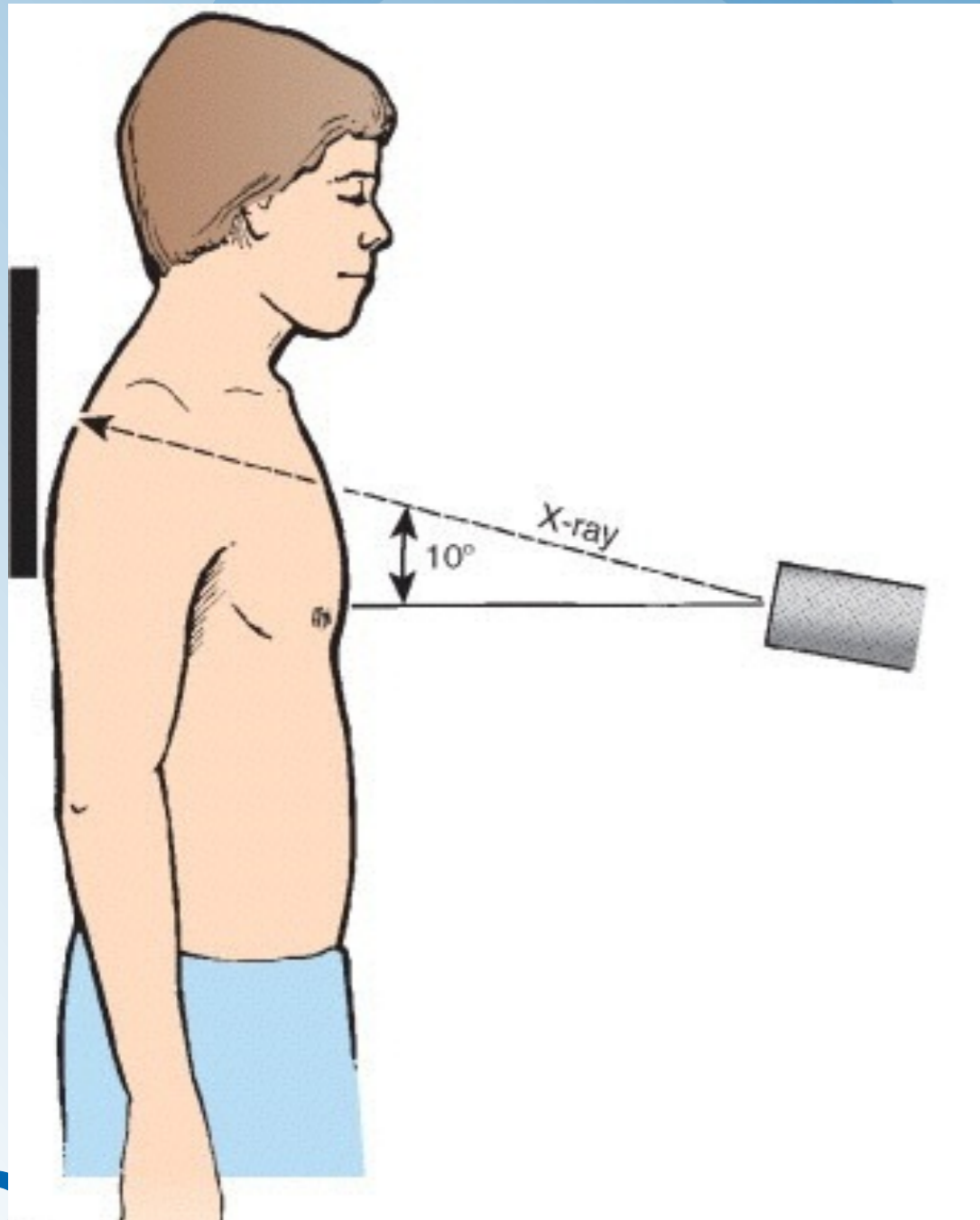
AC gewricht

- Faceopname in vlak van thorax
 - gereduceerde voltage 50% (overexpositie!)
- Zanca opname (10° craniale tilt)
- Axillaire opname
- Botscan

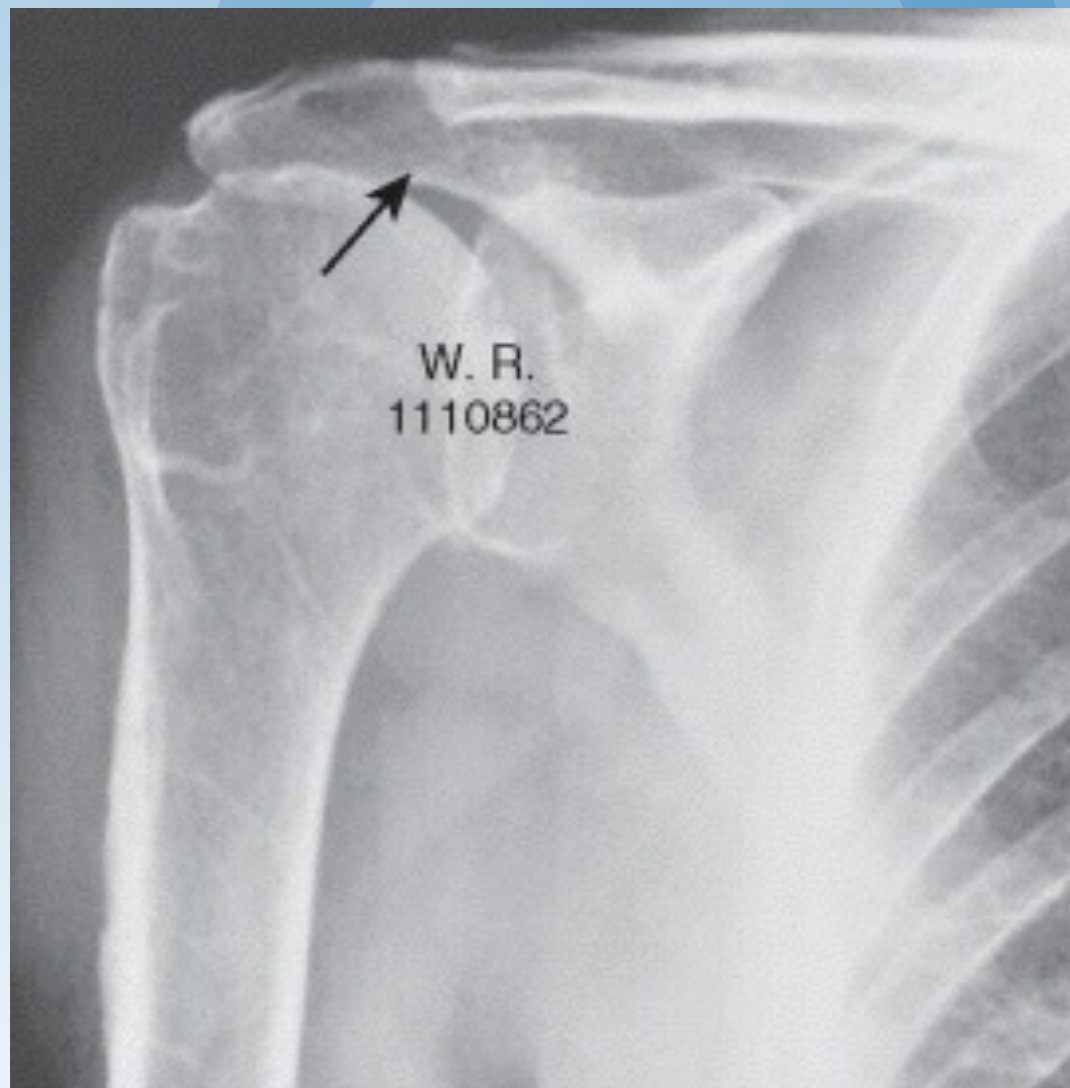
AC : Face opname



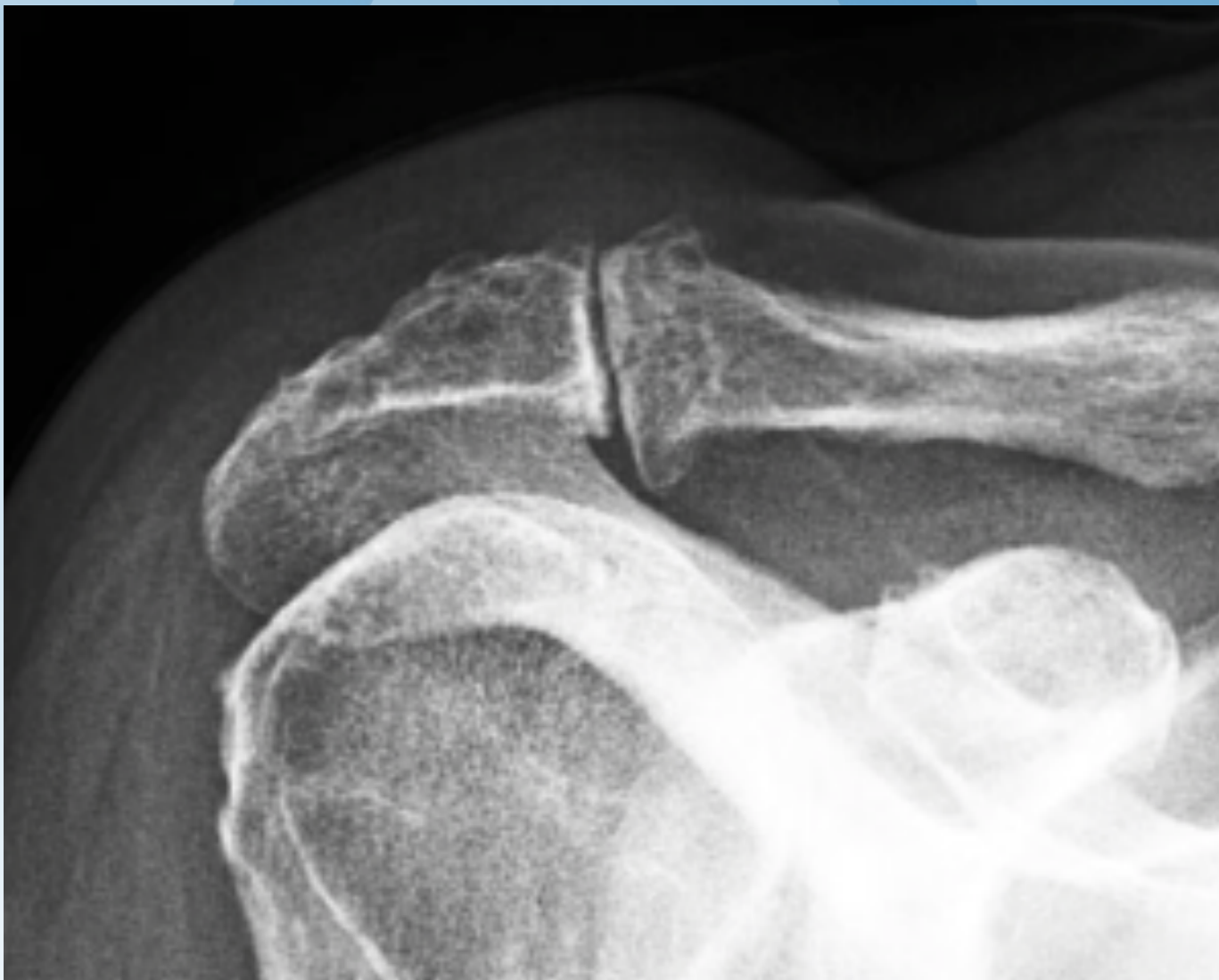
Zanca opname



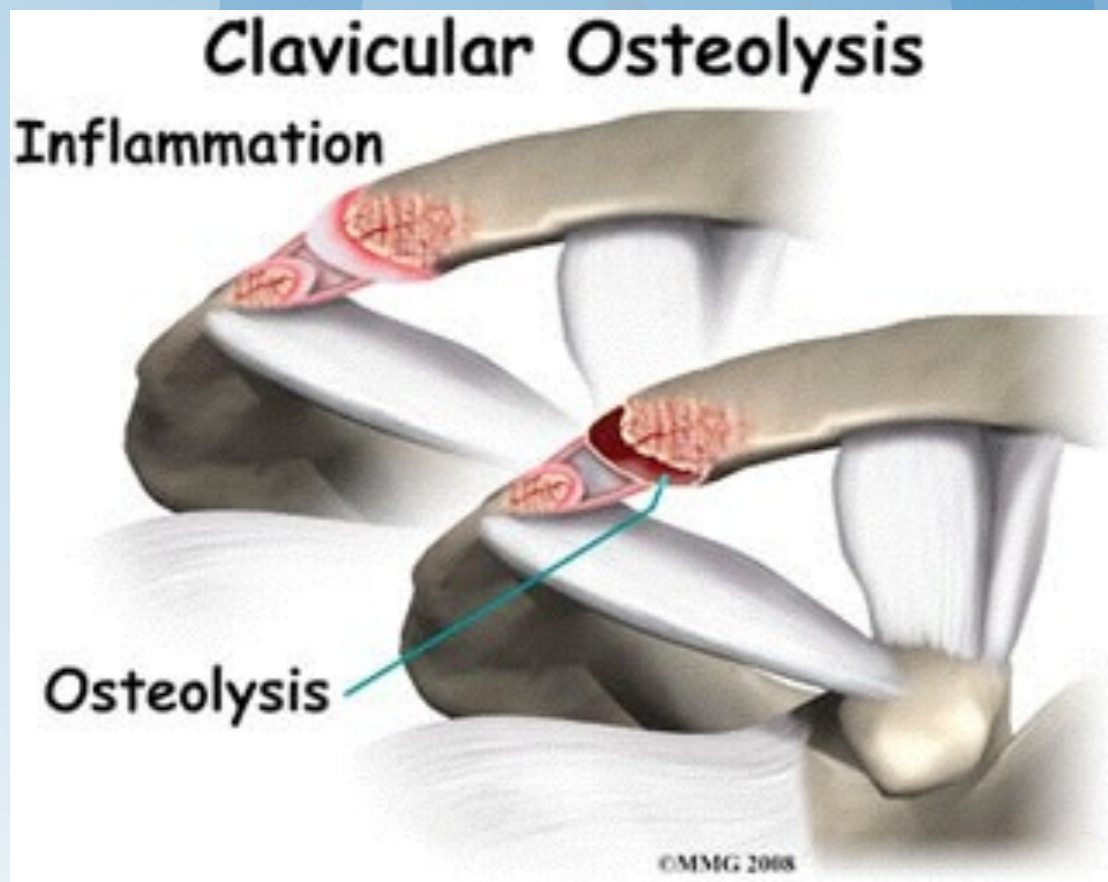
Zanca opname



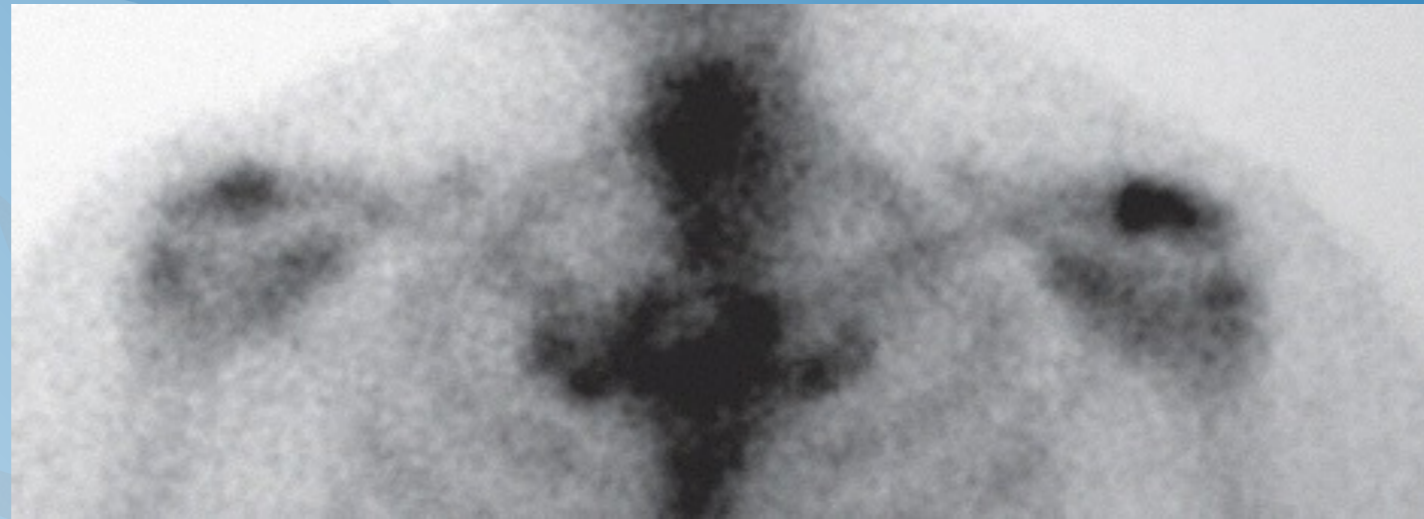
AC artrose



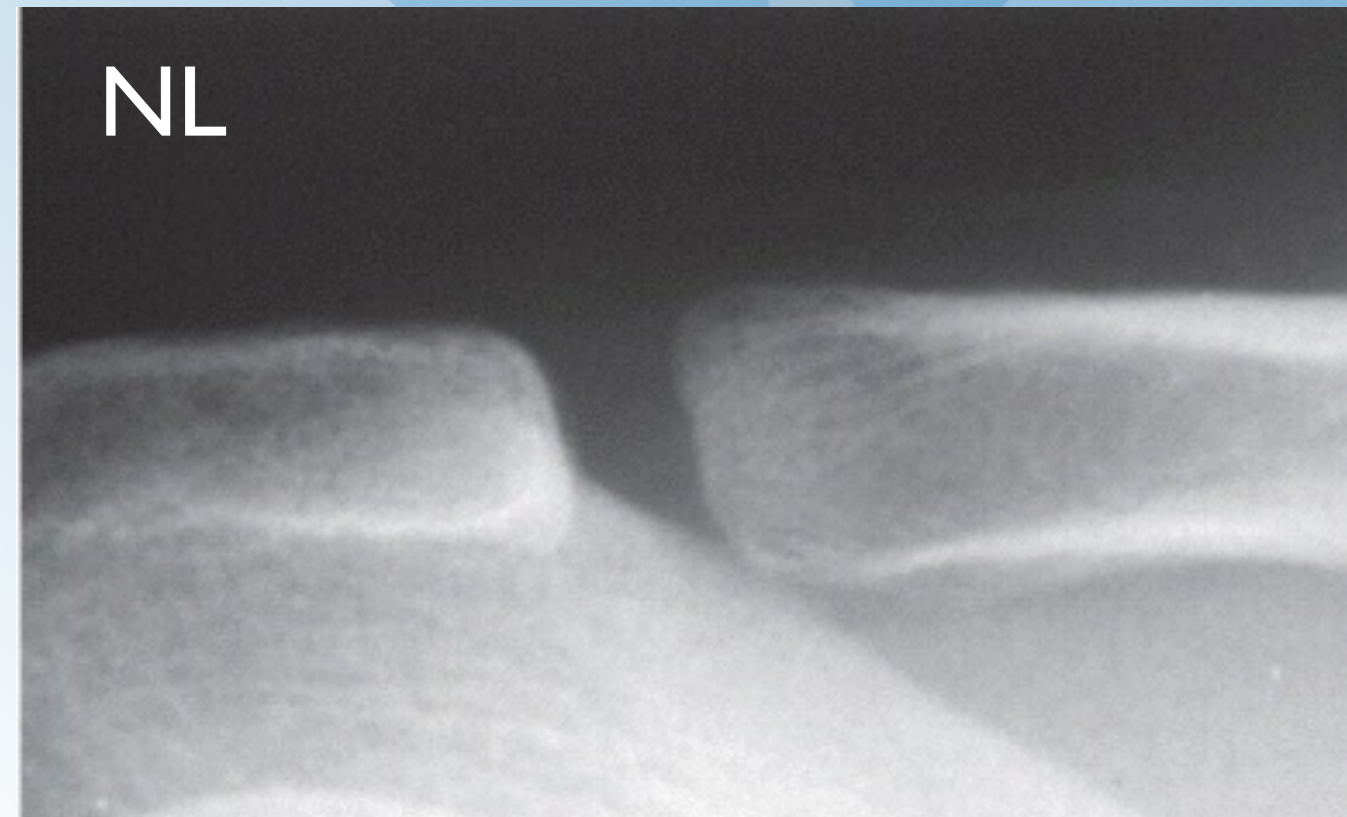
Weight lifters shoulder



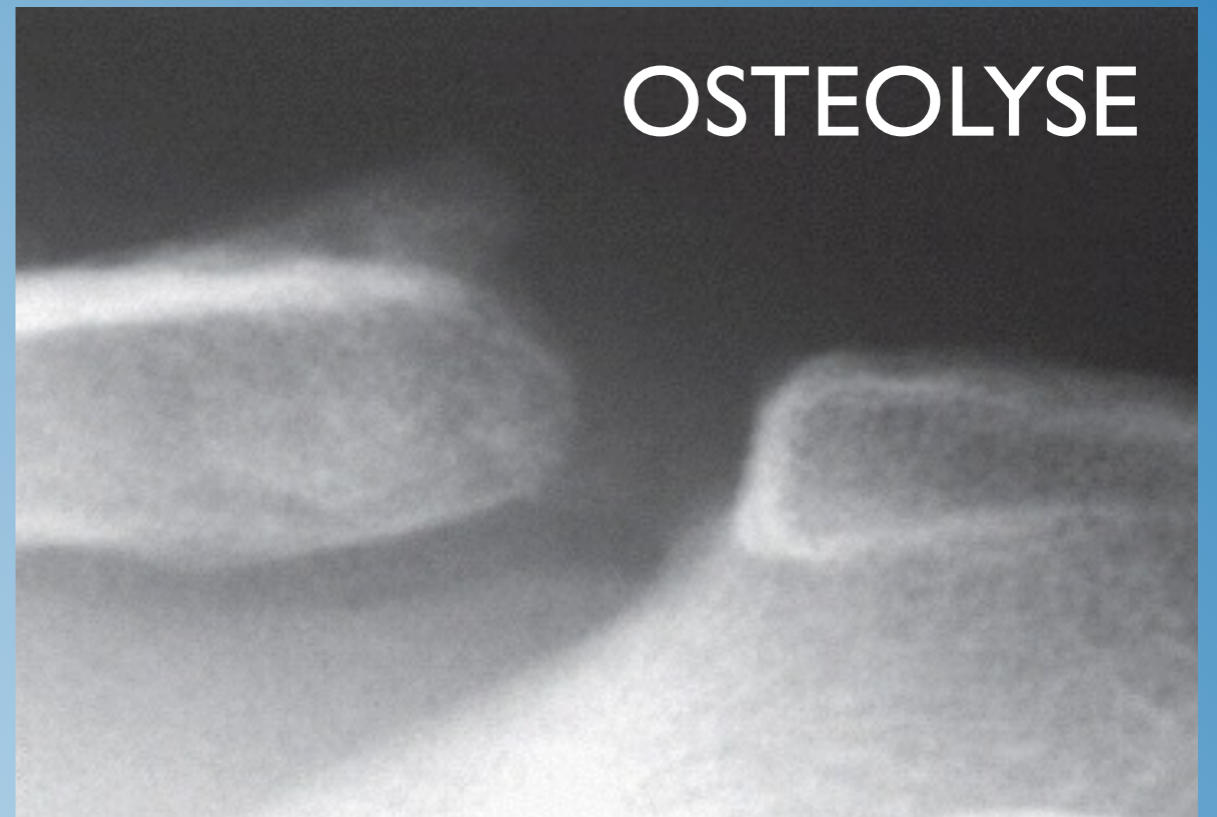
Weight lifters shoulder



NL



OSTEOLYSE

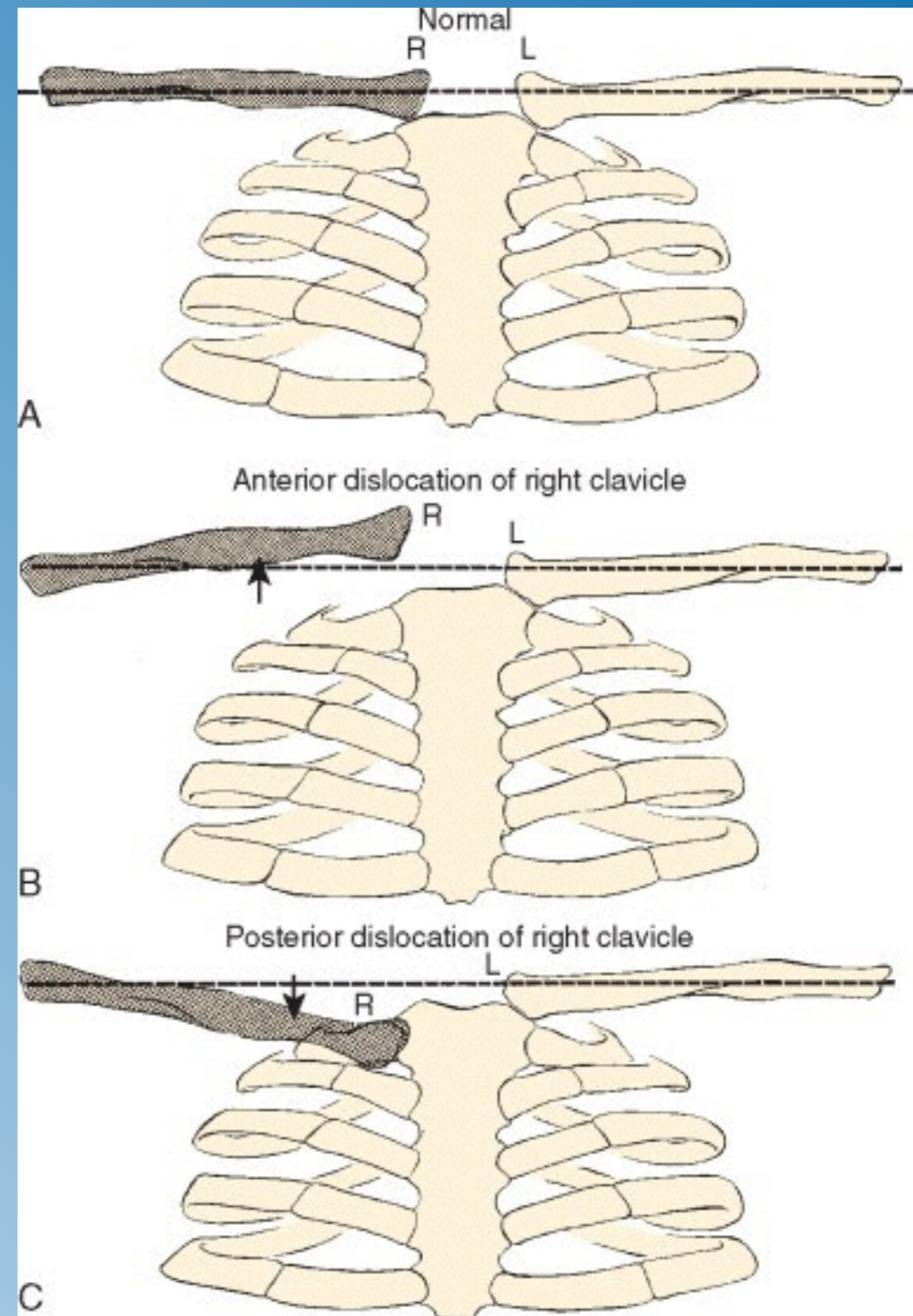
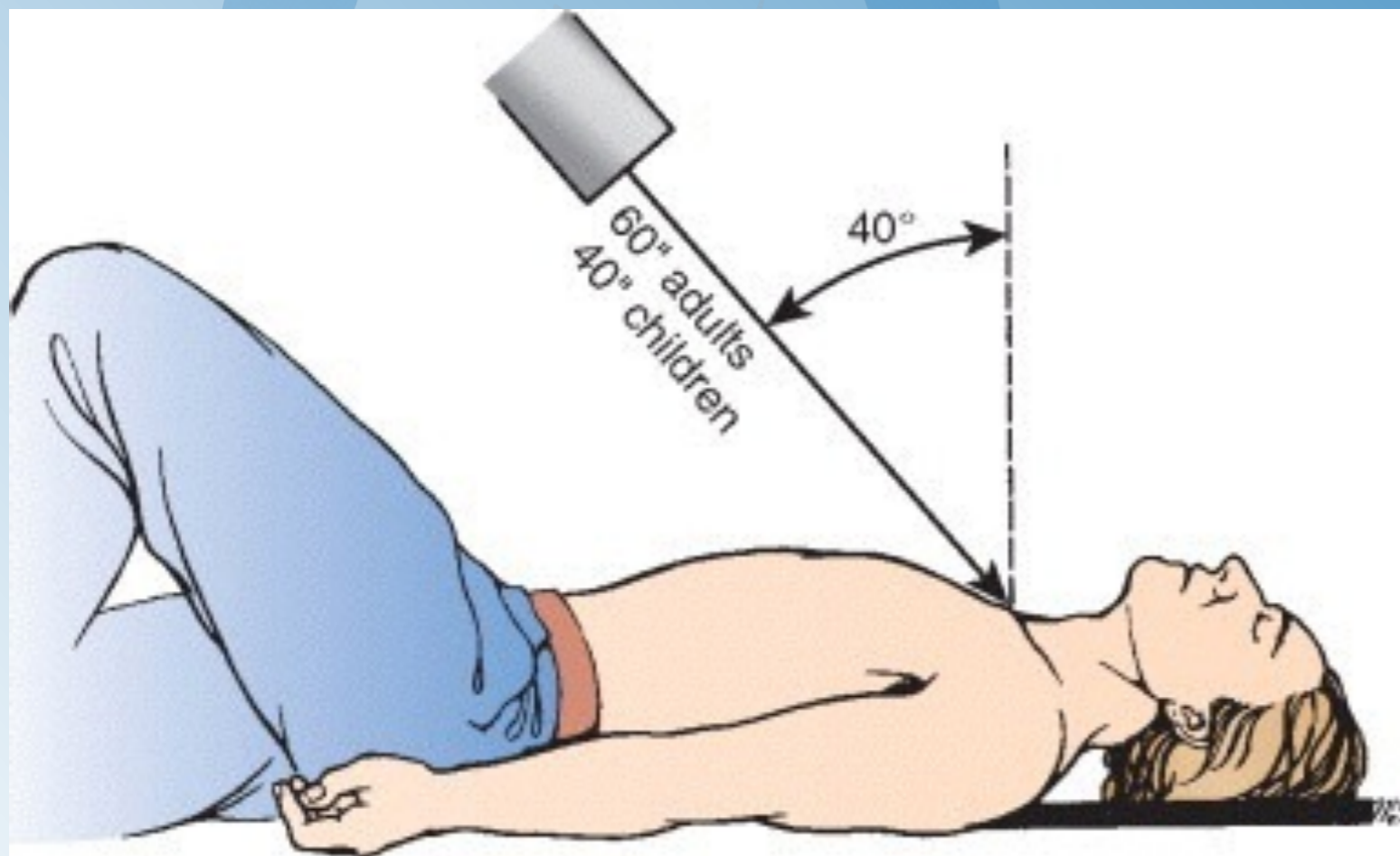


Sternoclaviculair gewricht

- Serendipity view (40° caudale tilt)
- CT - scan : gold standard



Serendipity opname



CT - Scan

