PARIS SHOULDER UNIT
INSTITUT PARISIEN DE L'ÉPAULE

3ème COURS D'ARTHROPLASTIE DE FES 2017

BILAN STANDARD D'UNE ARTHROPATHIE CHRONIQUE EN VUE D'UNE ARTHROPLASTIE PROTHÉTIQUE

Imagerie (radios standard, arthro-scanner et IRM)

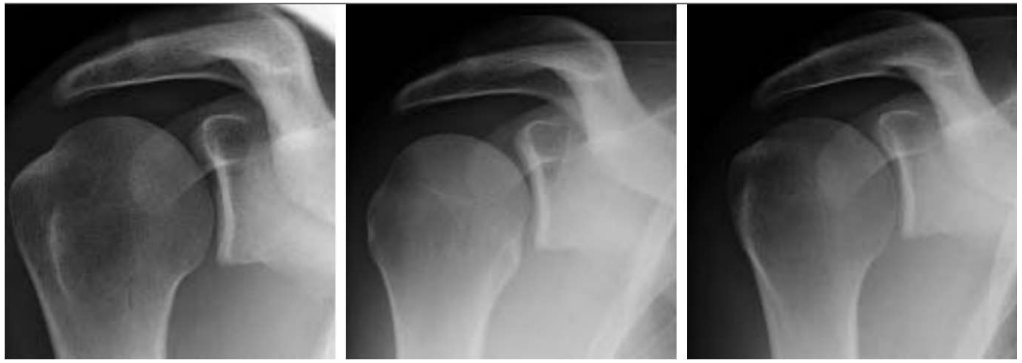
JD Werthel

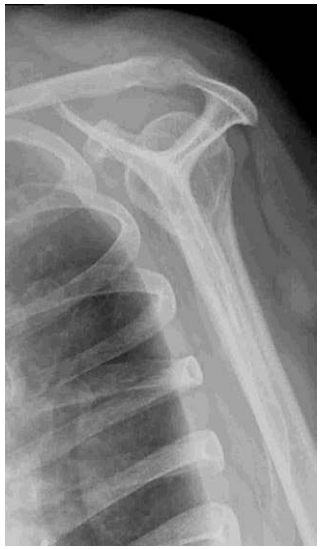
Pourquoi un bilan?

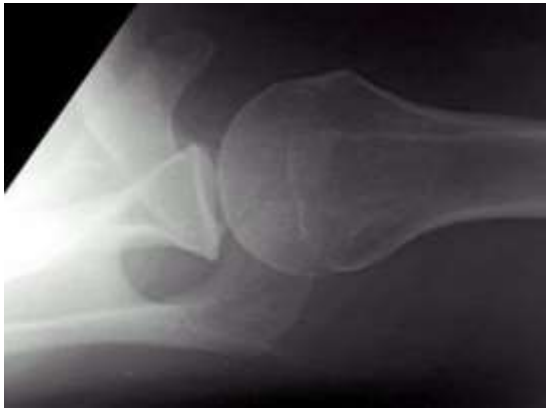
- Diagnostic
  → *omarthrose centrée / excentrée*
- Etiologique
  → *primitive, rupture massive de coiffe, post-traumatique, nécrose*
- Etat de la coiffe (tendons / muscles)
  → *Bonne qualité, fine, rompue, irréparable*
- Stock osseux
  → *huméral, glénoïdien +++*

Radiographies Standard

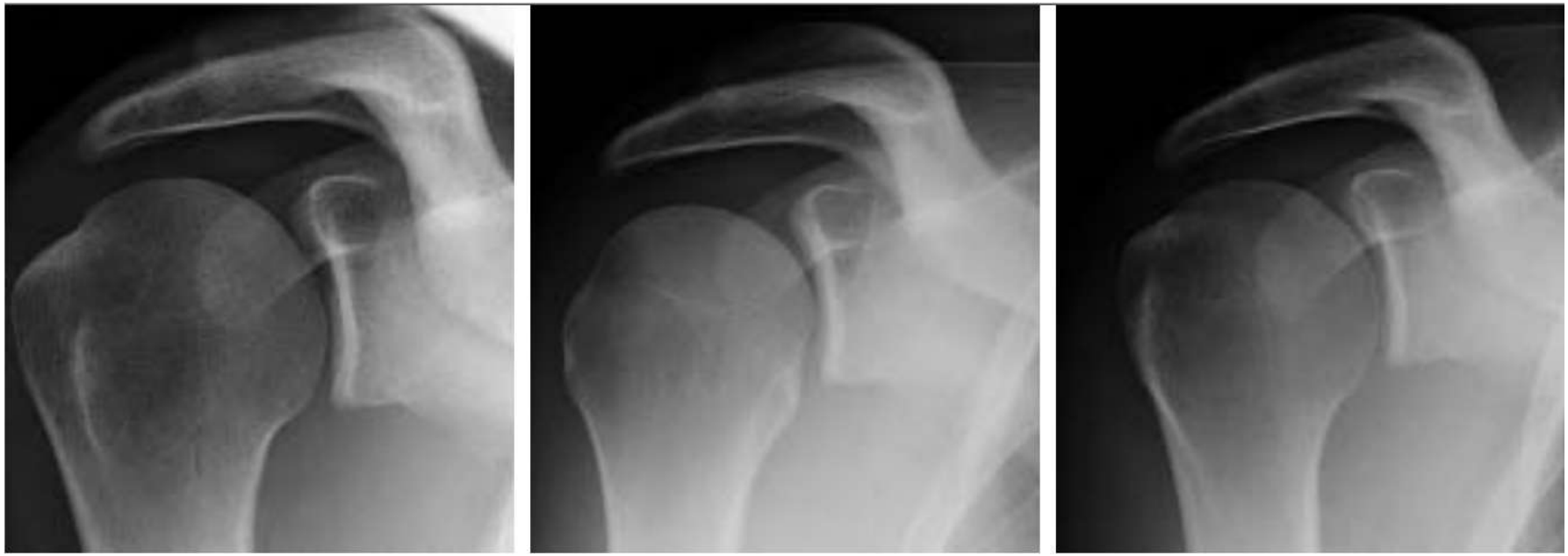
- Face 3 rotations
- Profil (Lamy)
- Profil Axillaire







Face 3 rotations



Que rechercher

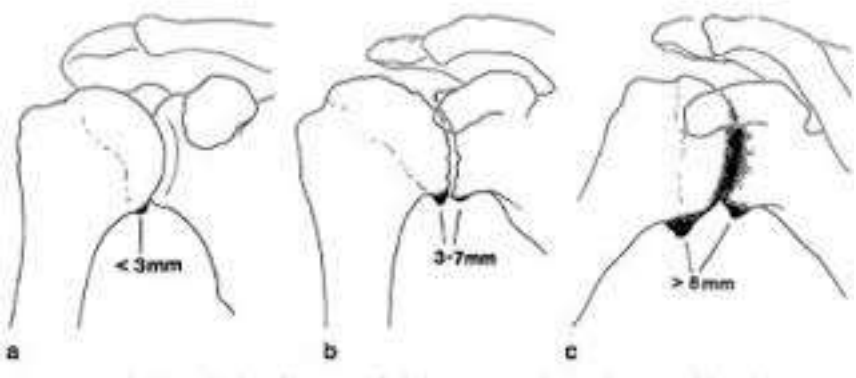
- Omarthrose centrée

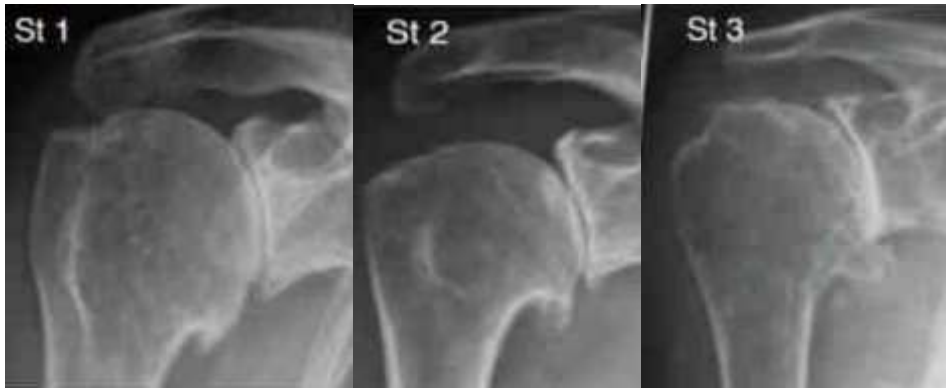
- Signes d'arthrose
  - Samilson et Prieto:

  1/ ostéophyte < 3 mm

  2/ ostéophyte 3-7 mm

  3 / ostéophyte > 7 mm

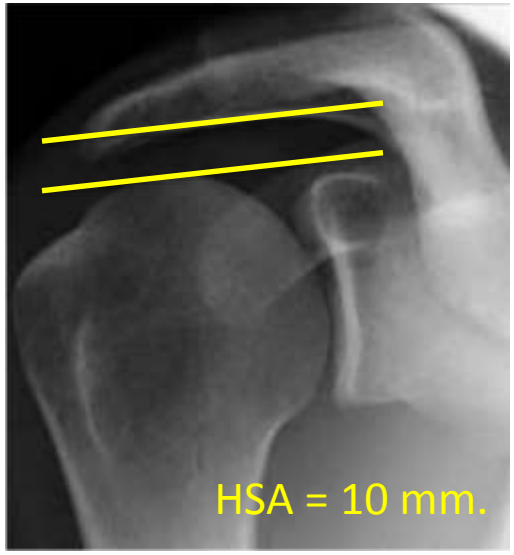


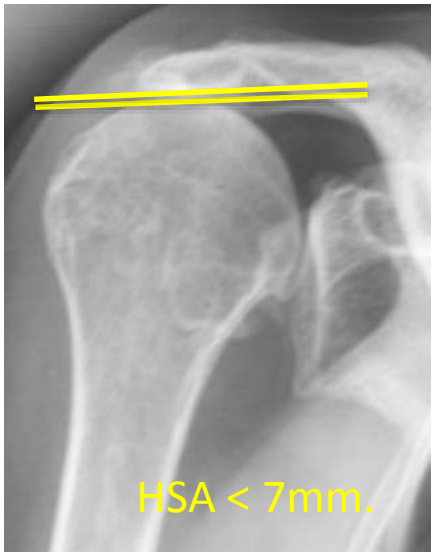


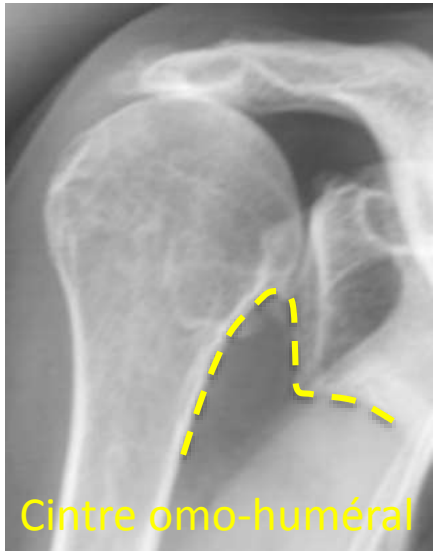
Que rechercher?

- Rupture massive de coiffe:

- HSA < 7mm → rupture large touchant SSP + 1 autre tendon



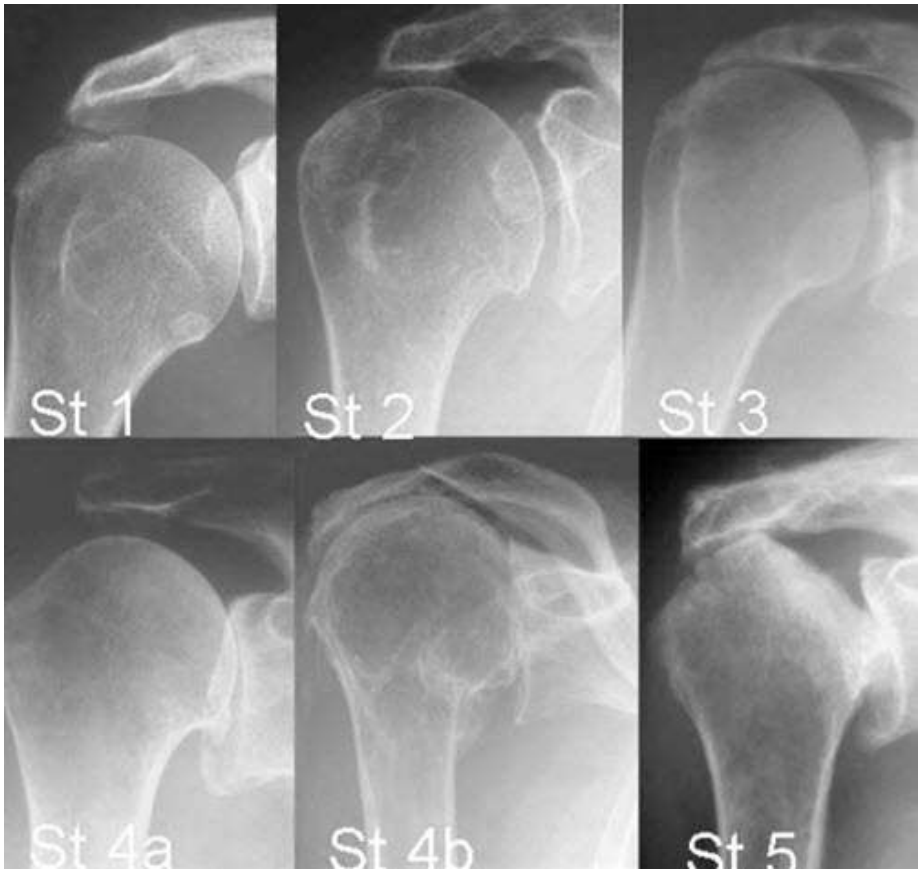




Que rechercher?

- Omarthrose Excentrée
- Classification de Hamada

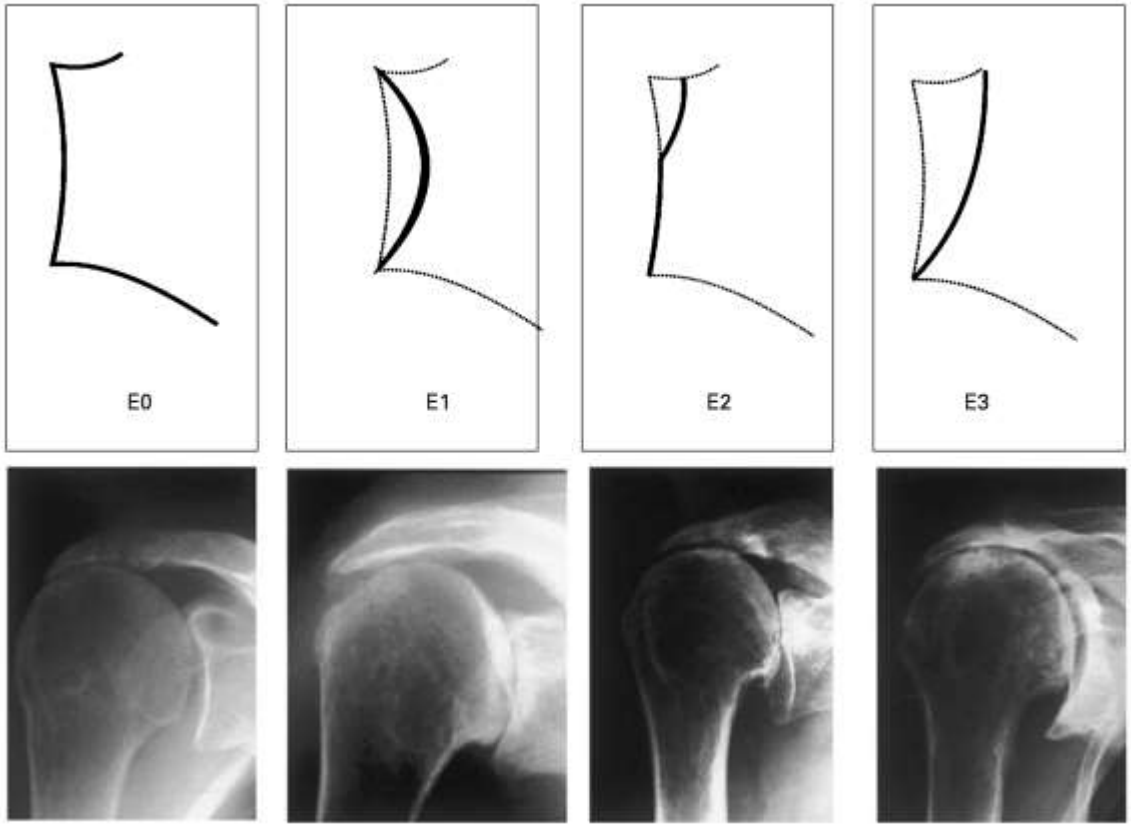
Grade	Espace acromio-huméral	Description
Grade 1	> 6mm	
Grade 2	< 5mm	
Grade 3	< 5mm	acétabulisation de l'acromion (déformation concave de l'acromion inférieure)
Grade 4	< 5mm	4A : pincement gléno-huméral sans acétabulisation 4B : pincement articulaire GH et acétabulisation
Grade 5	< 5mm	effondrement de la tête humérale



Que rechercher?

- Type de glène: usure

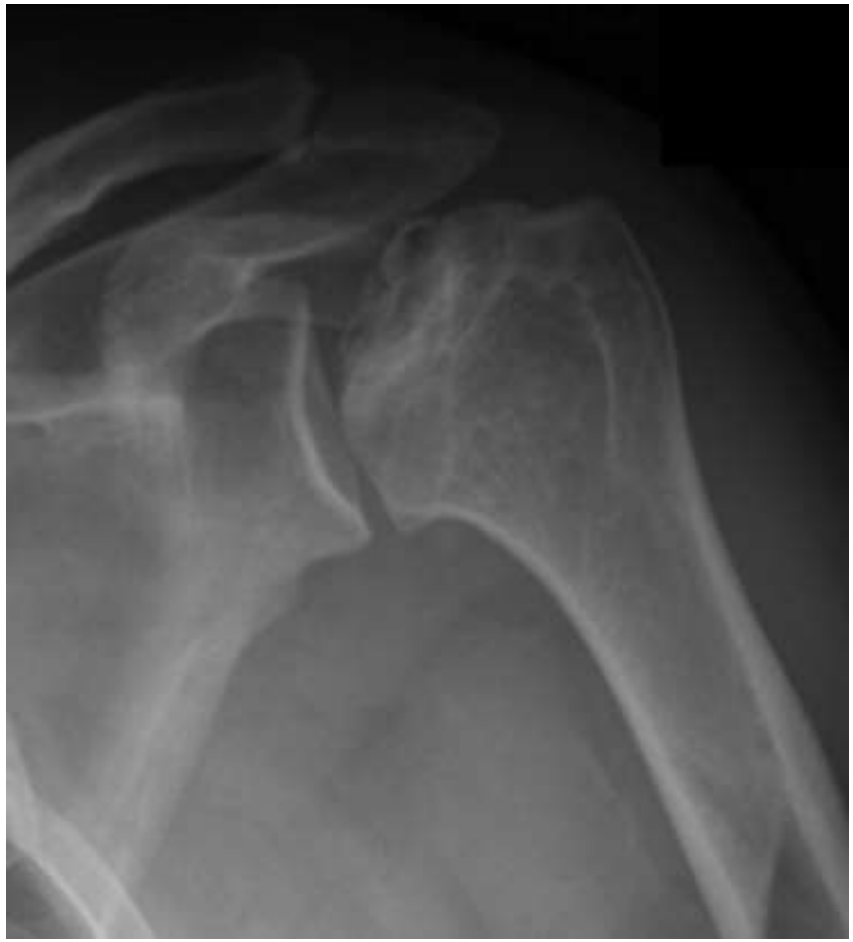
Classification Favard



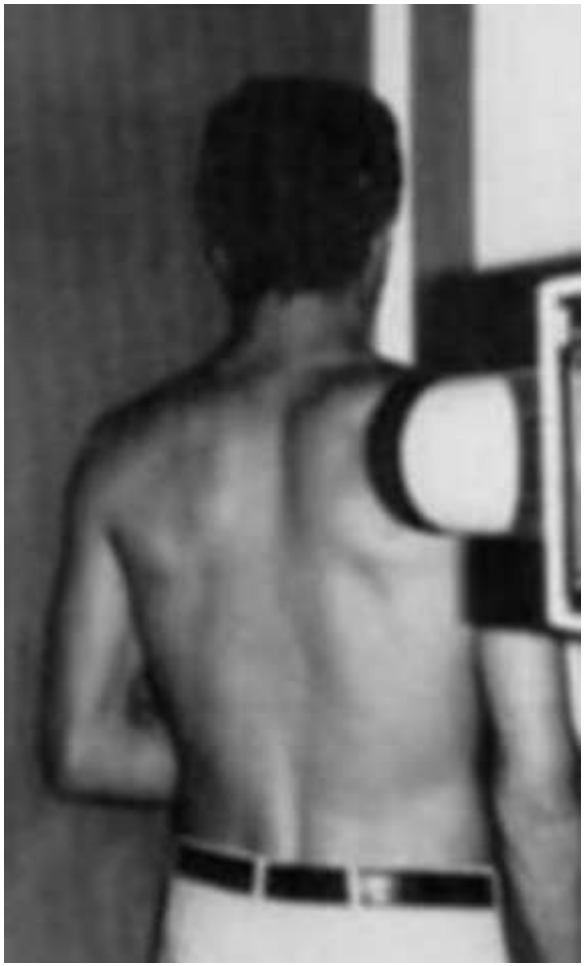
Que rechercher?

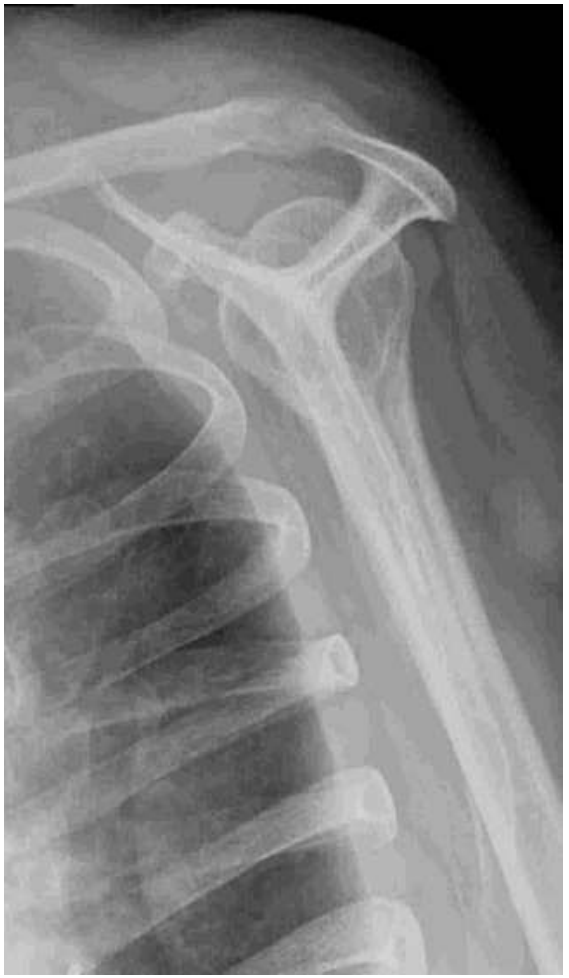
- Signes d'ostéonécrose
  - 1: visible uniquement en IRM
  - 2: condensation sous-chondrale
  - 3: fracture sous-chondrale
  - 4: effondrement tête humérale
  - 5: arthrose versant glénoïdien

Crues, JBJS Am 1976



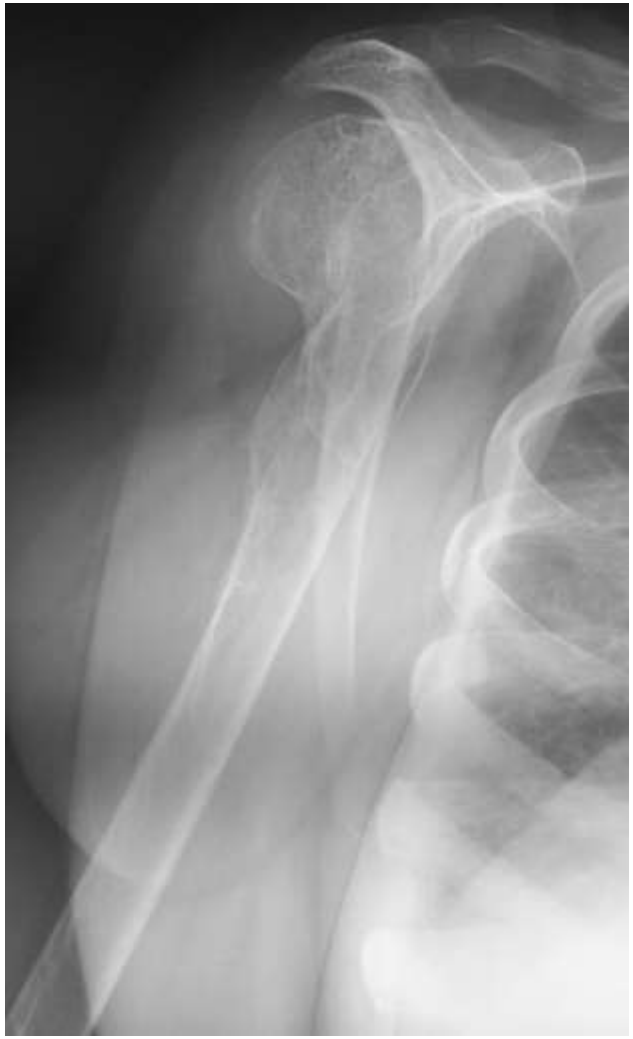
Profil Lamy



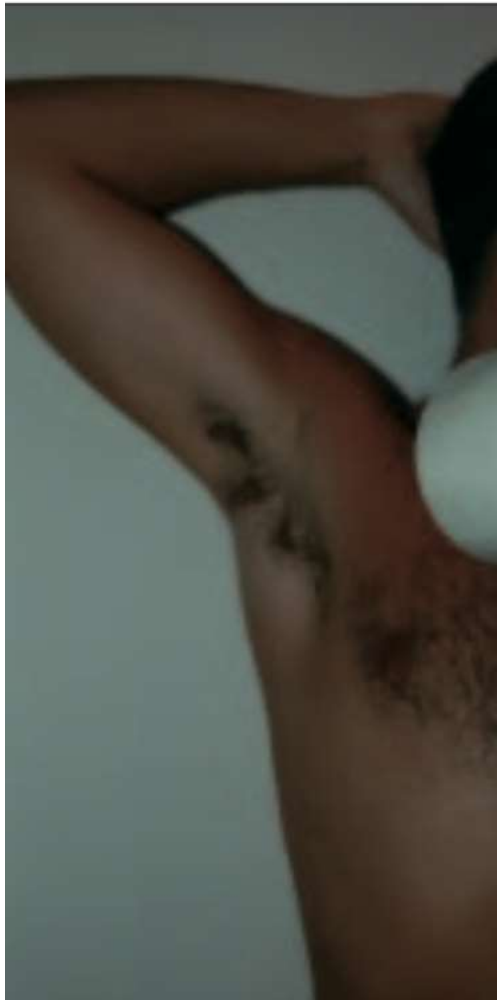


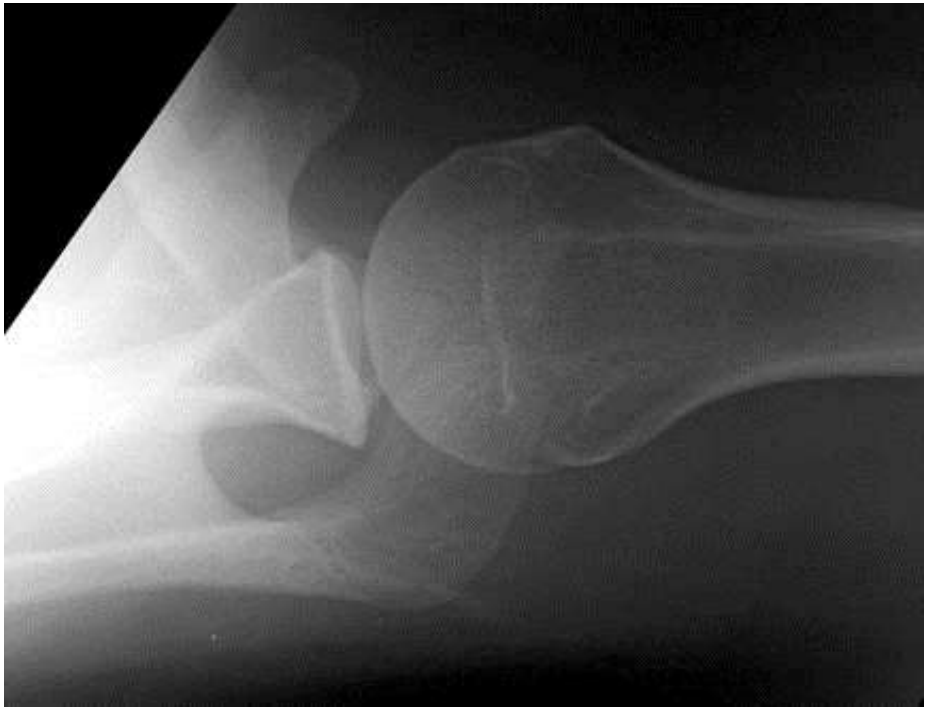
Que rechercher?

- Cal vicieux :
  - anomalie version humérale



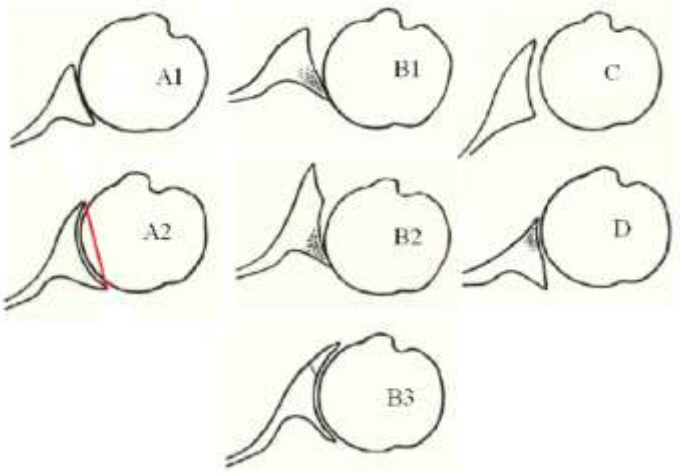
Profil Axillaire



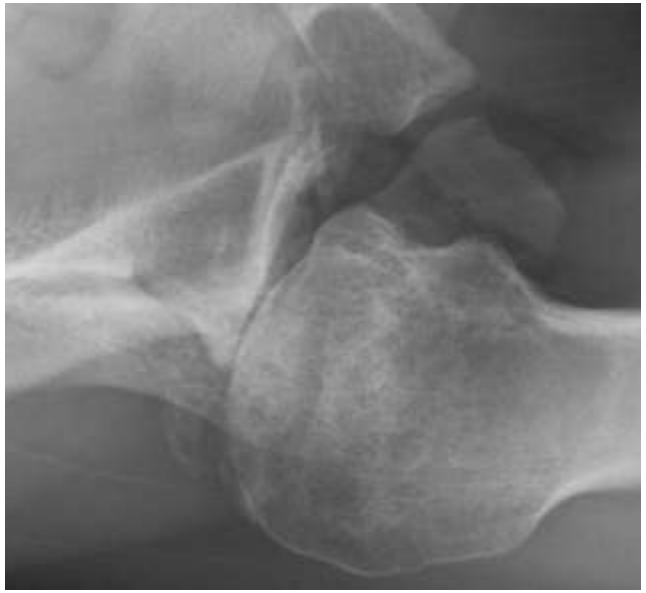


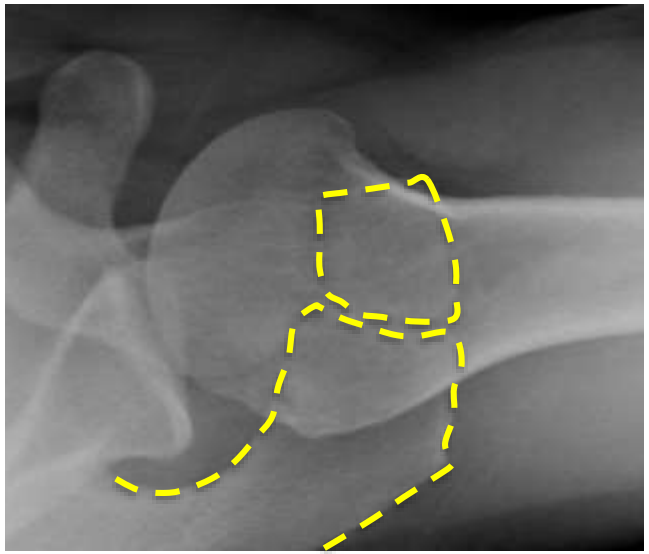
Que rechercher?

- Subluxation postérieure
- Type de glène : usure
  - Walch

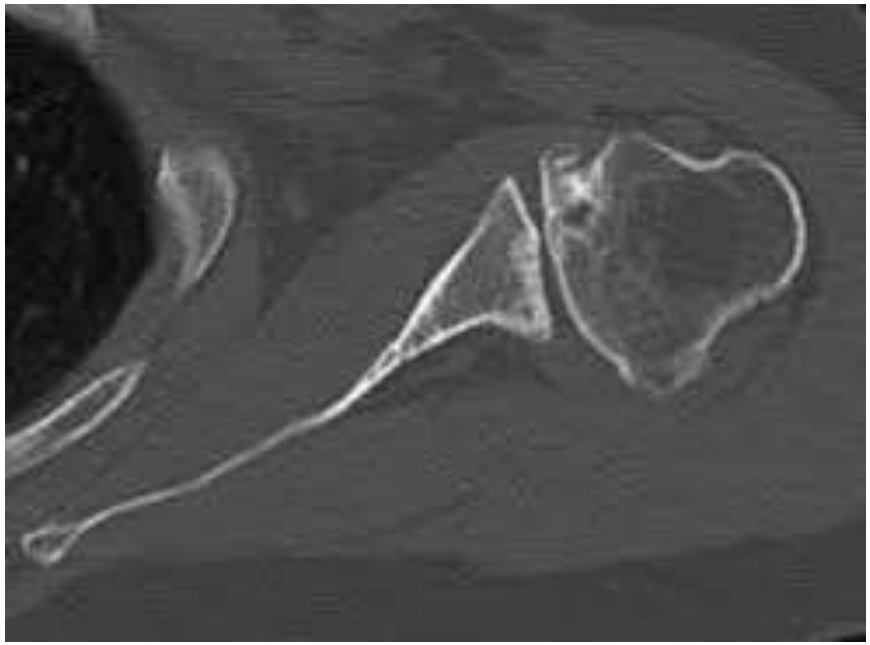


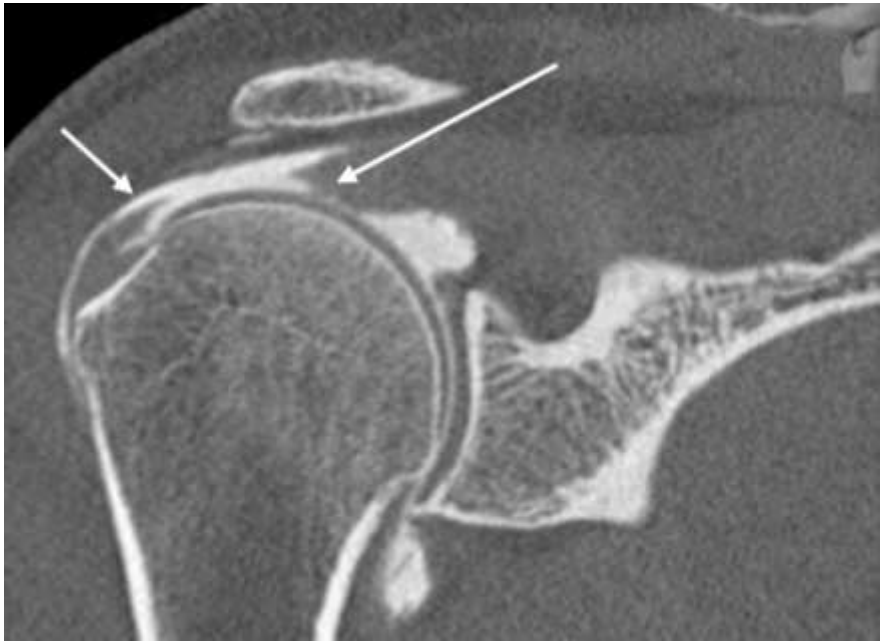
- Acromion bipartita





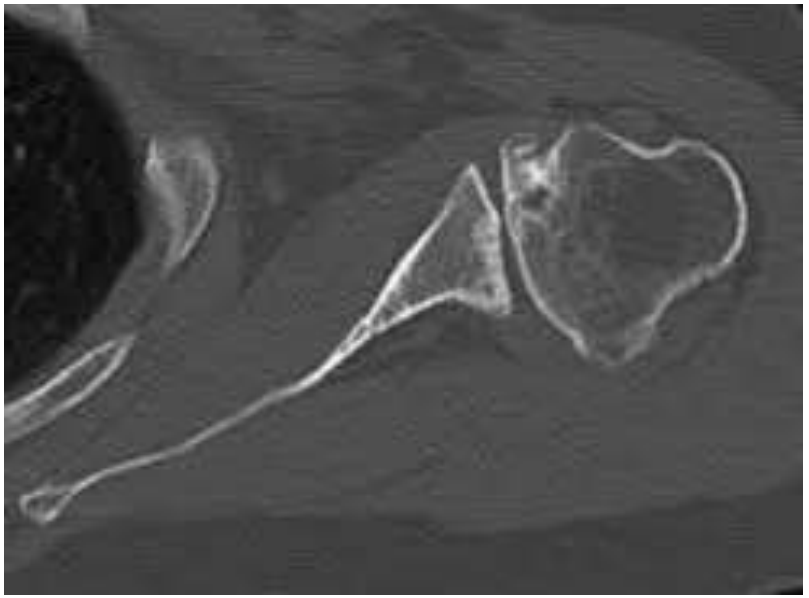
Scanner / Arthroscanner

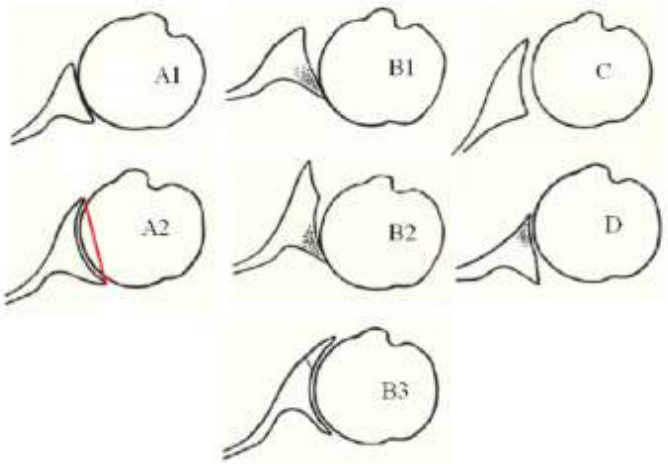




Que rechercher

- Coupes transversales:
- Mesure de la version glénoïdienne
- Quantification de la subluxation postérieure de la tête
- Forme de la glène : biconcave / dysplasique

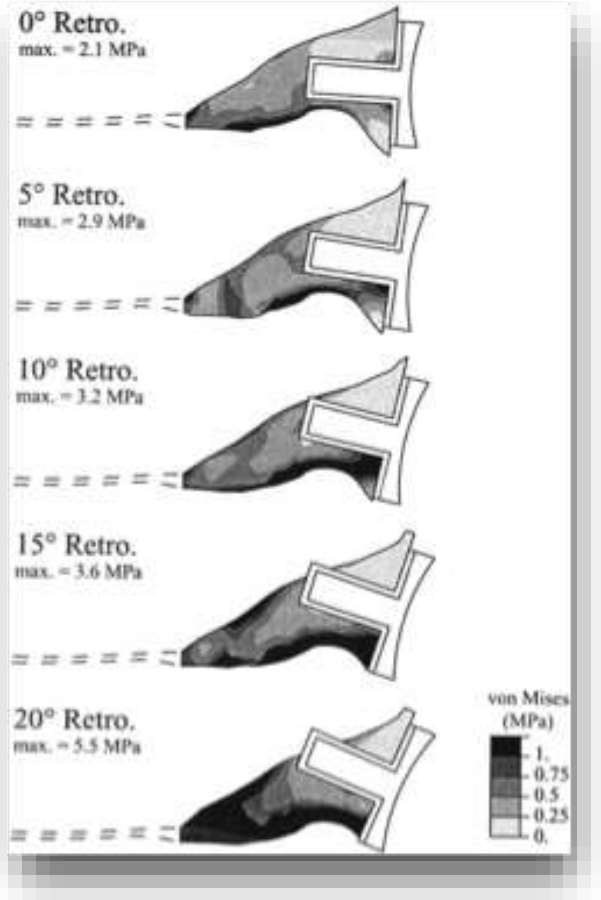




Que rechercher

- Positionnement de l'implant glénoïdien —> capital dans PTE +++

- Retroversion +++ risque élevé de faillite mécanique —> corriger version si retroversion >10°

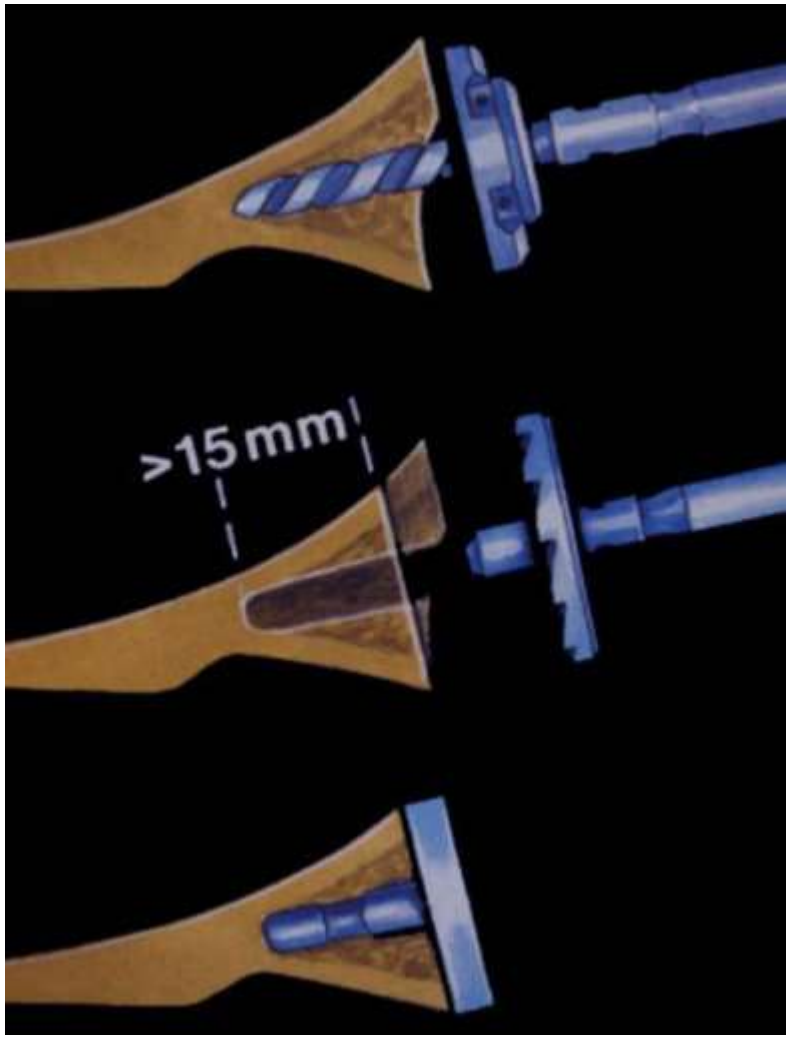


Risks of loosening of a prosthetic glenoid implanted in retroversion

Alain Farron, MD,[a] Alexandre Terrier, PhD,[b] and Philippe Büchler, PhD,[b] *Lausanne, Switzerland*

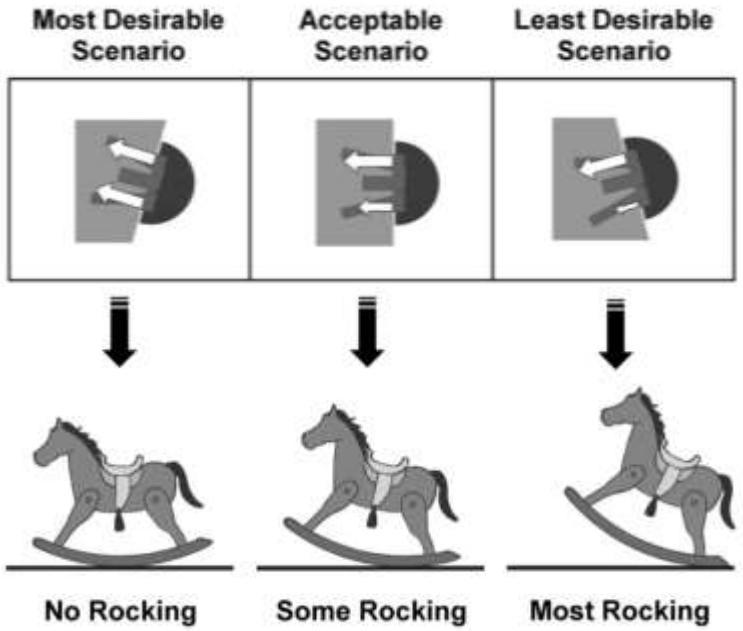
Que rechercher?

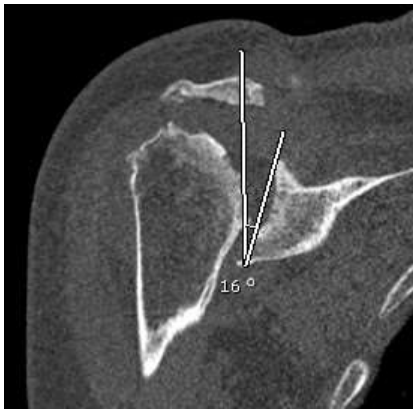
- Evaluation du stock osseux glénoïdien
  - Glenoid vault
  - Plot central / Quille 15 mm.
  - Prévoir éventuelle perforation

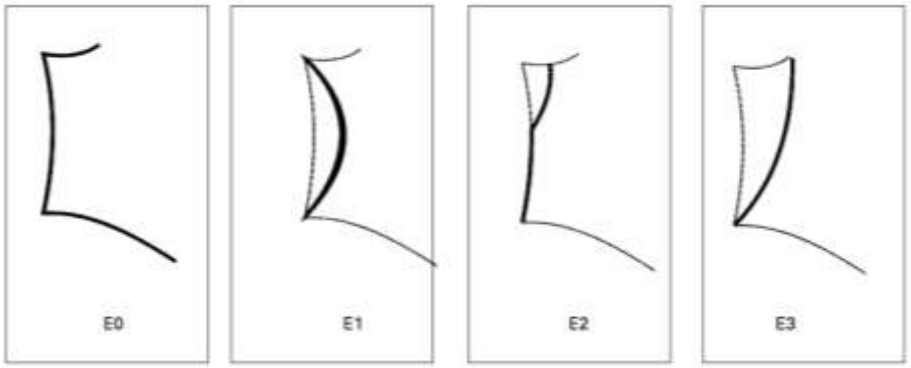


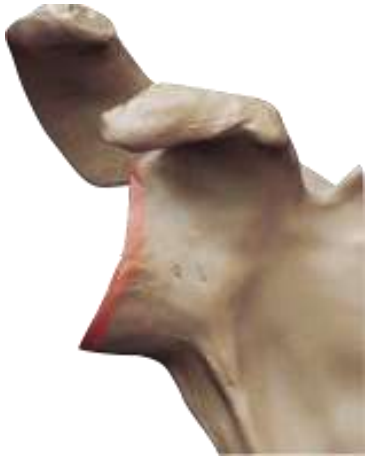
Que rechercher?

- Coupes Frontales
  - Usure supérieure de glène.
  - Mesure du tilt



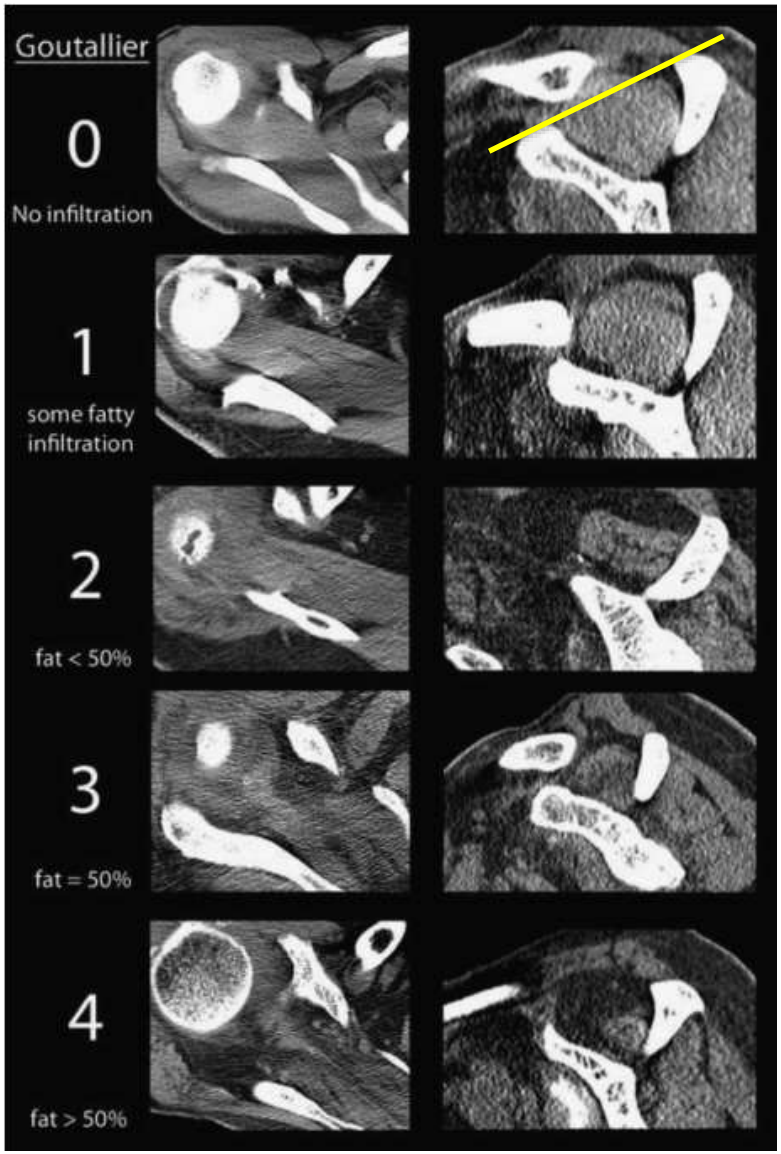




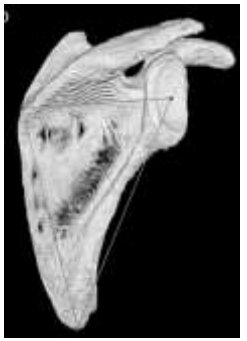


Que rechercher?

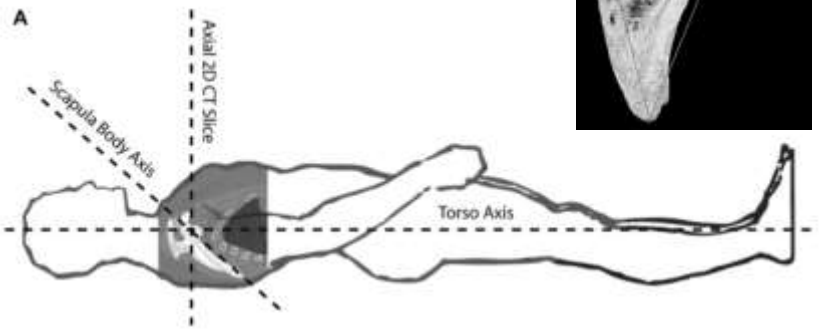
- Coupes Transversales/ Coronales
  - Etat musculaire de la coiffe des rotateurs
    - Infiltration graisseuse
    - Atrophie musculaire

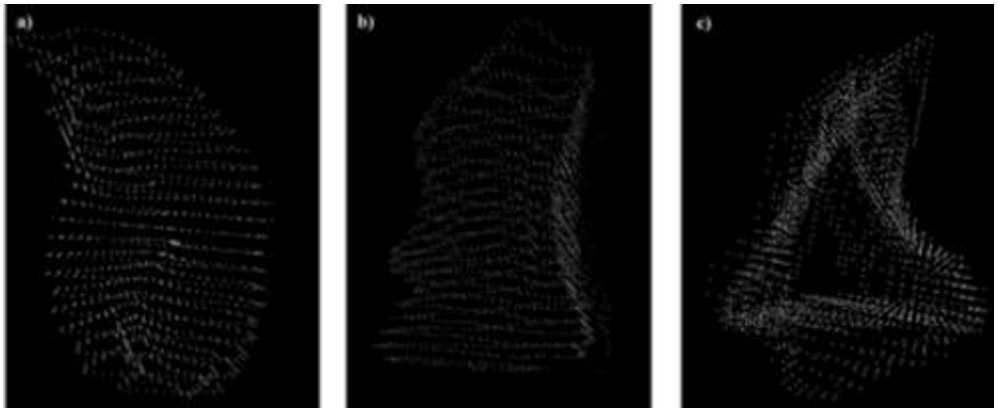


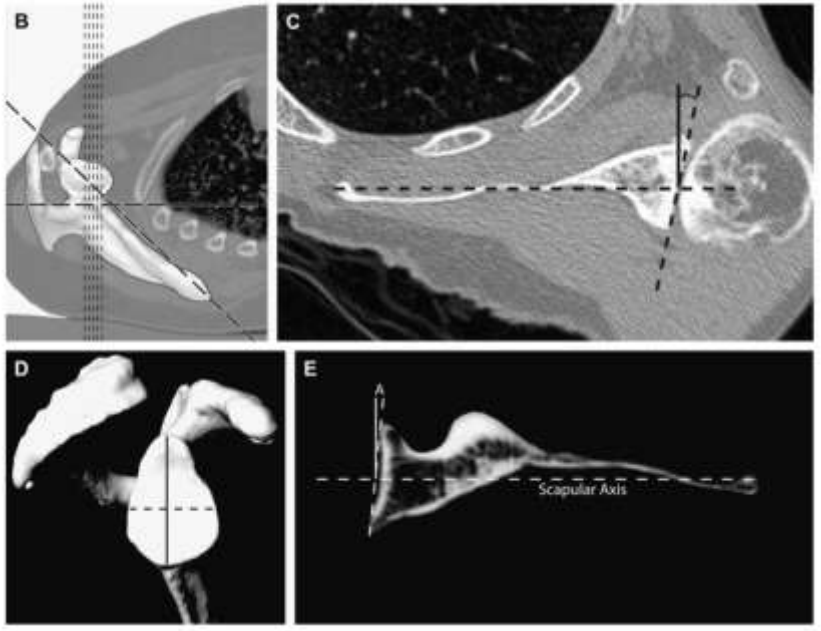
Que rechercher?



- Reconstruction 3D
  - Evaluation précise de la déformation glénoïdienne

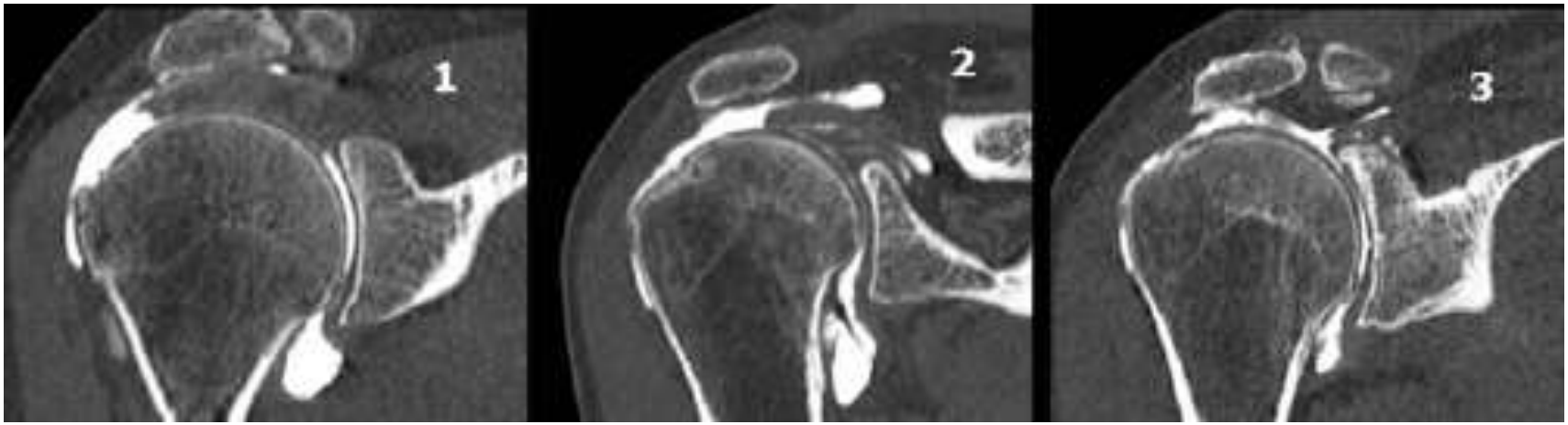




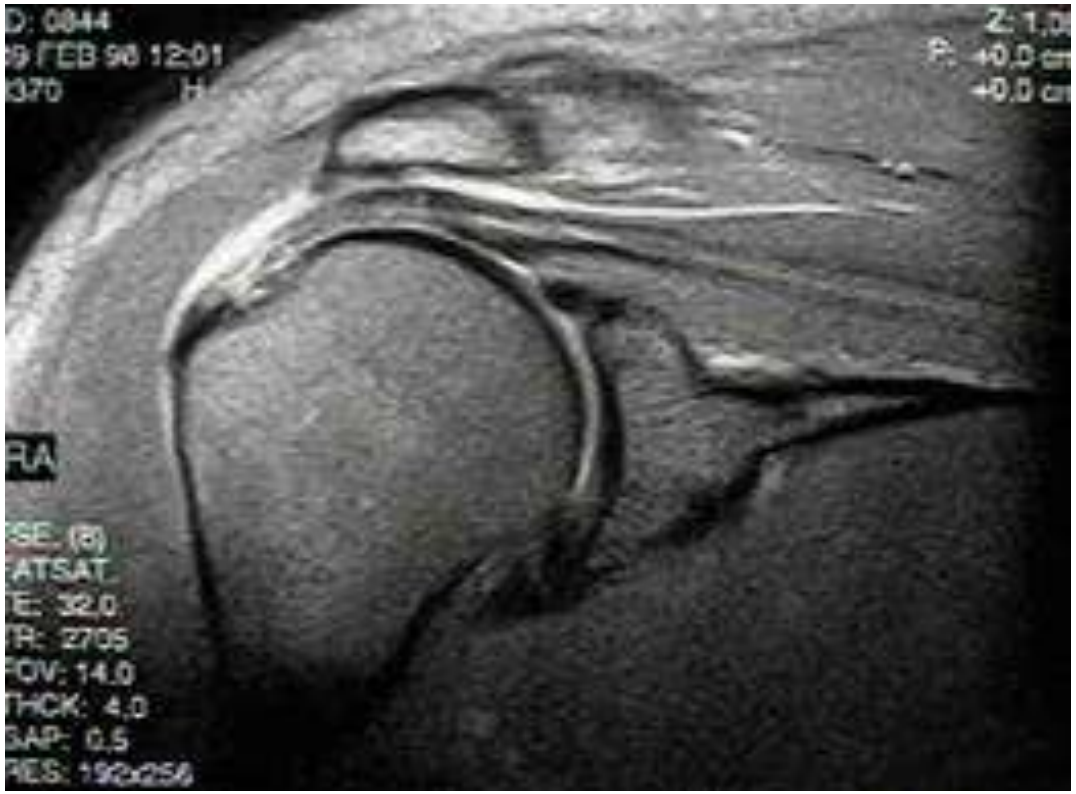


Que rechercher?

- Arthro-scanner
  - Visualiser éventuelle rupture (réparabilité)



IRM

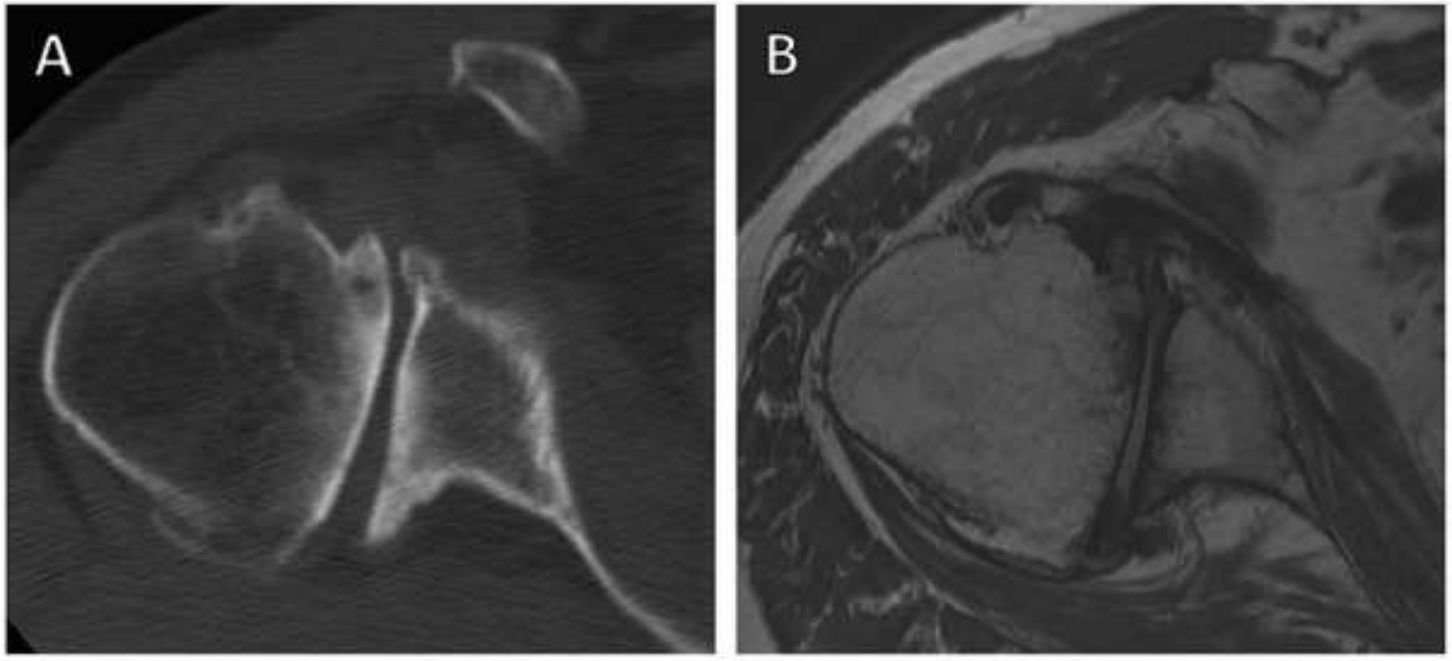


Que rechercher?

- Type de glène / Version

Magnetic resonance imaging is comparable to computed tomography for determination of glenoid version but does not accurately distinguish between Walch B2 and C classifications

Jeremiah T. Lowe, BA[a,b], Edward J. Testa, BA[c], Xinning Li, MD[d], Suzanne Miller, MD[a,b], Joseph P. DeAngelis, MD[e], Andrew Jawa, MD[a,b,c,*]

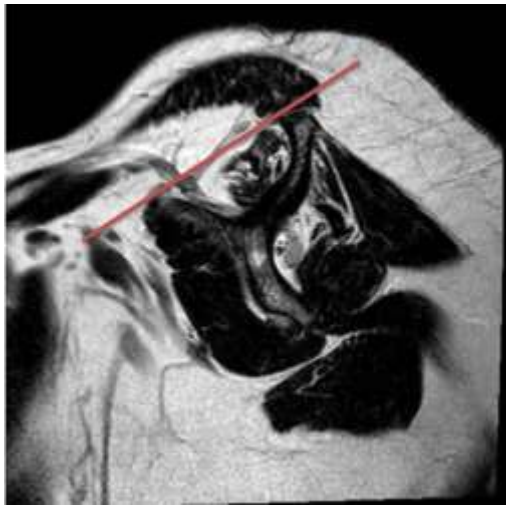


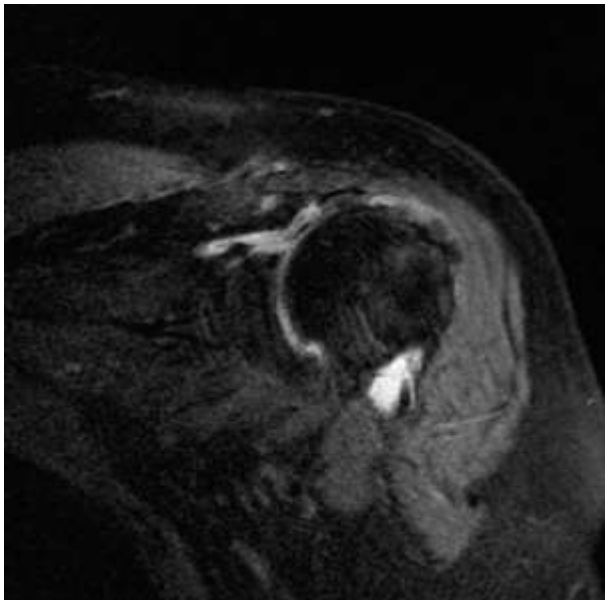
Que rechercher?

- Coupes Transversales/ Coronales

  – Etat musculaire de la coiffe
    - Infiltration graisseuse
    - Atrophie musculaire

  – Rupture de coiffe



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