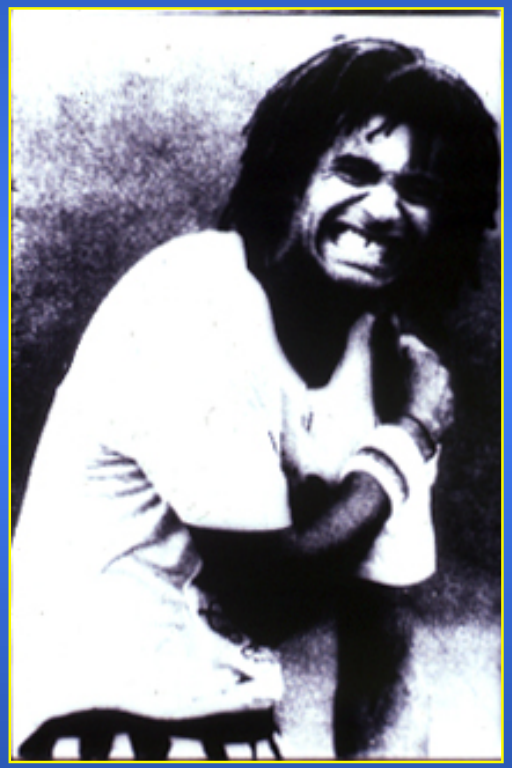
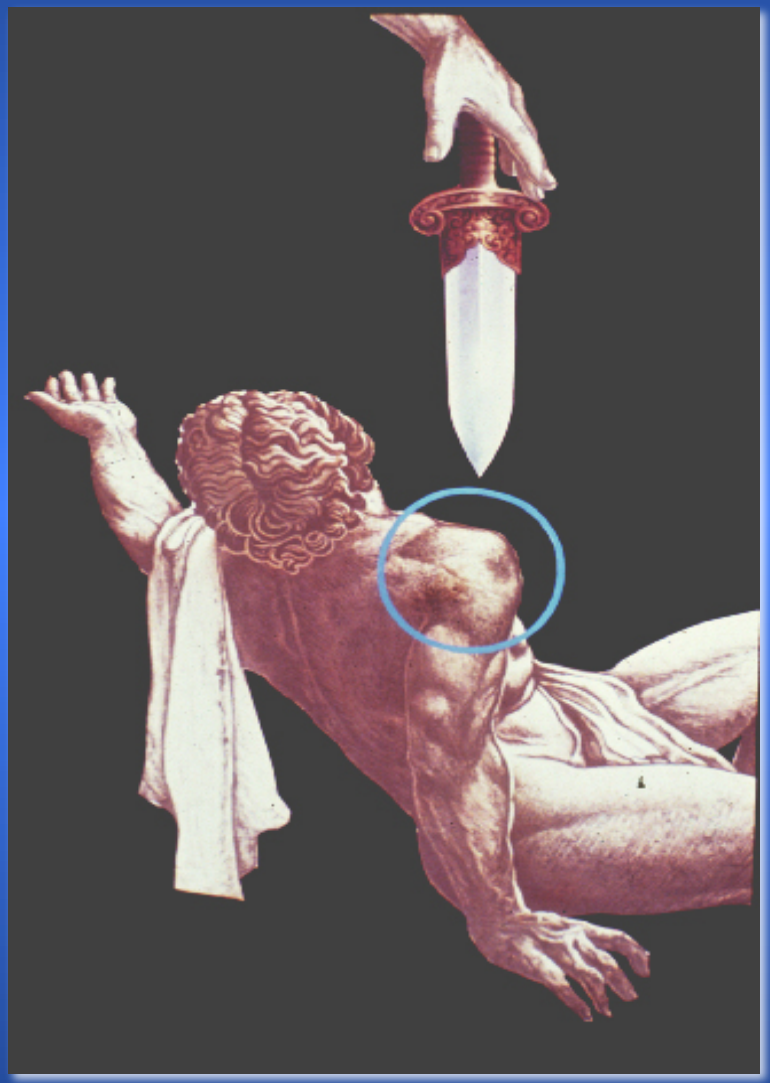
EXAMEN PROGRAMME DE L'EPAULE



Pascal Boileau

Nice - France



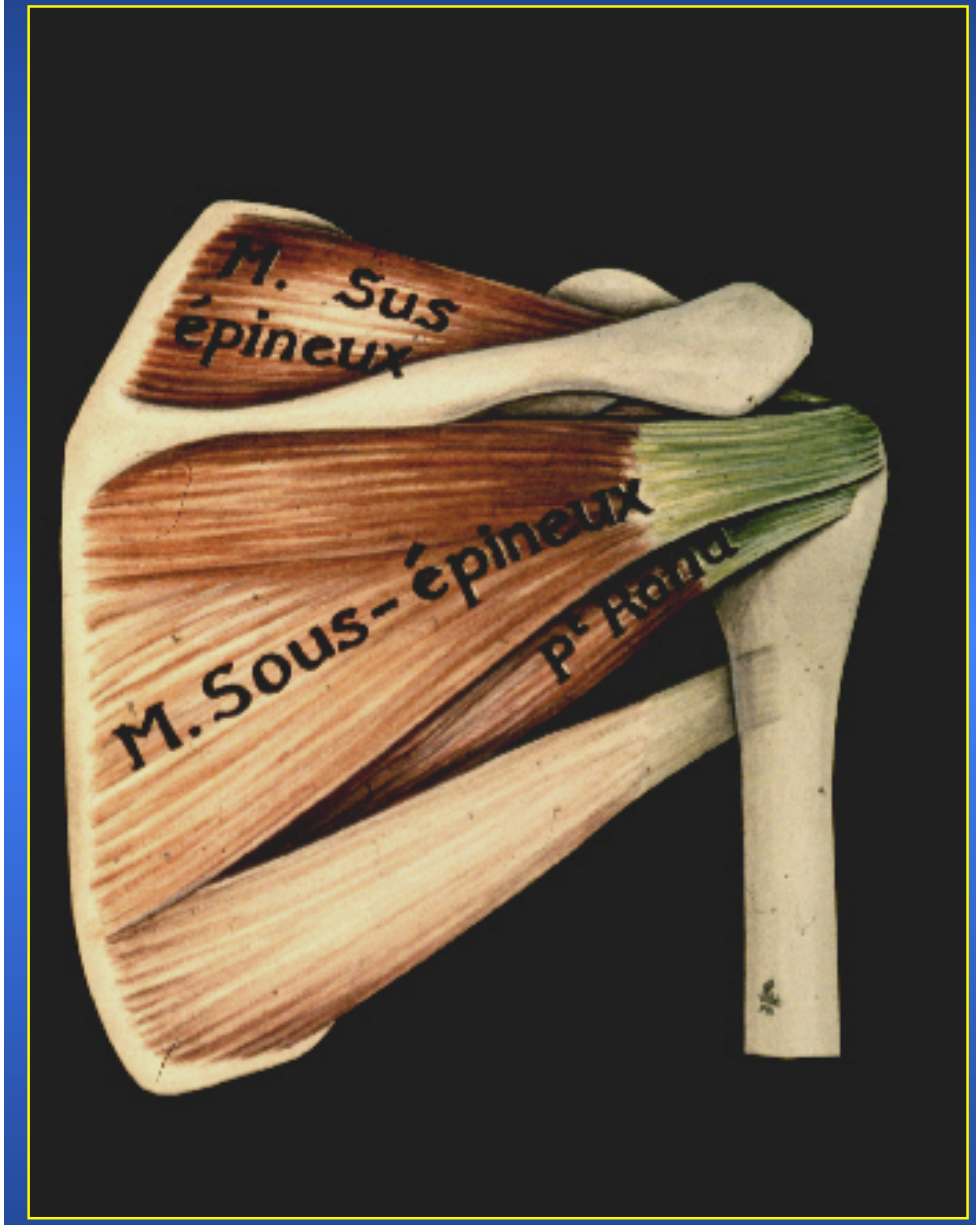
- Epaule Dégénérative Musculo-tendineuse
  (Pathologie Coiffe / LB)
- Epaule Raide
  (Algodystrophie / Capsulite)
- Epaule Instable

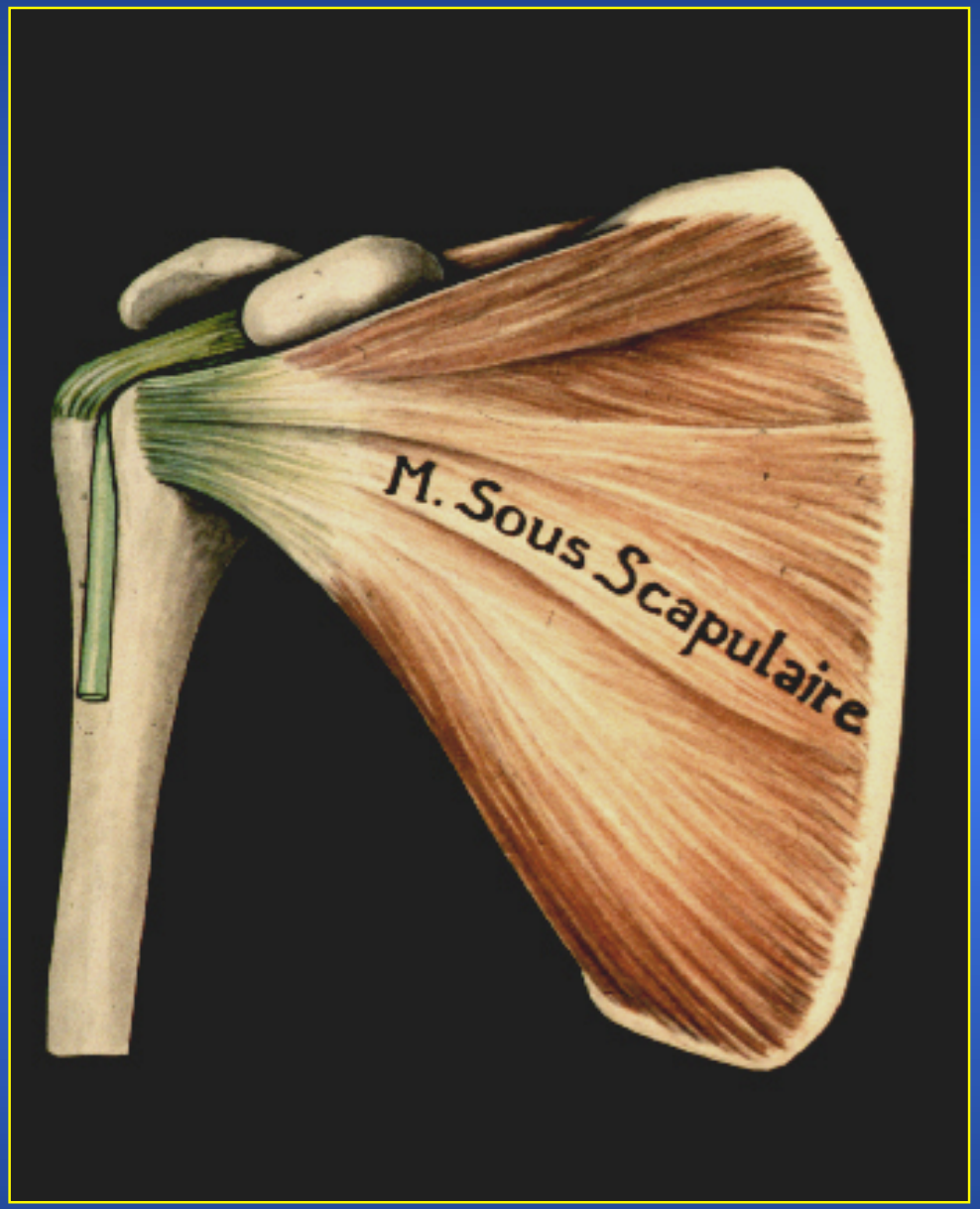
Introduction

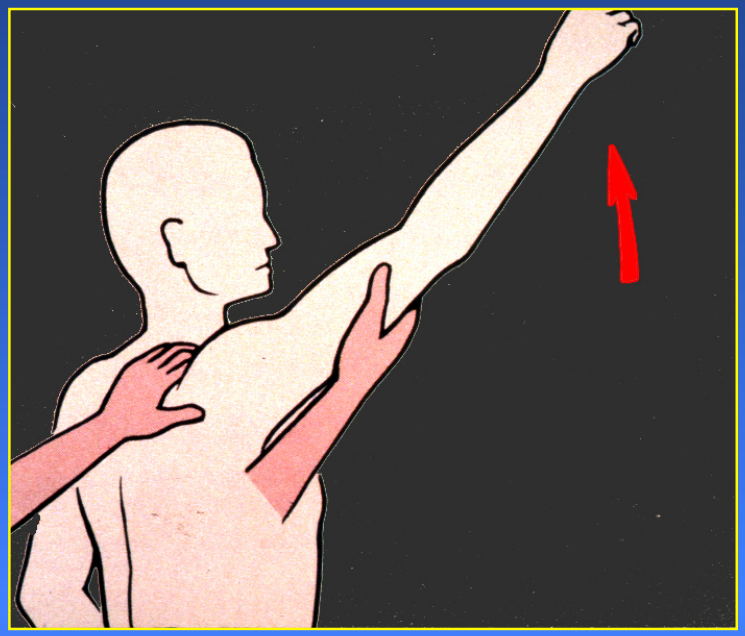
Ex. Clinique + RX simples

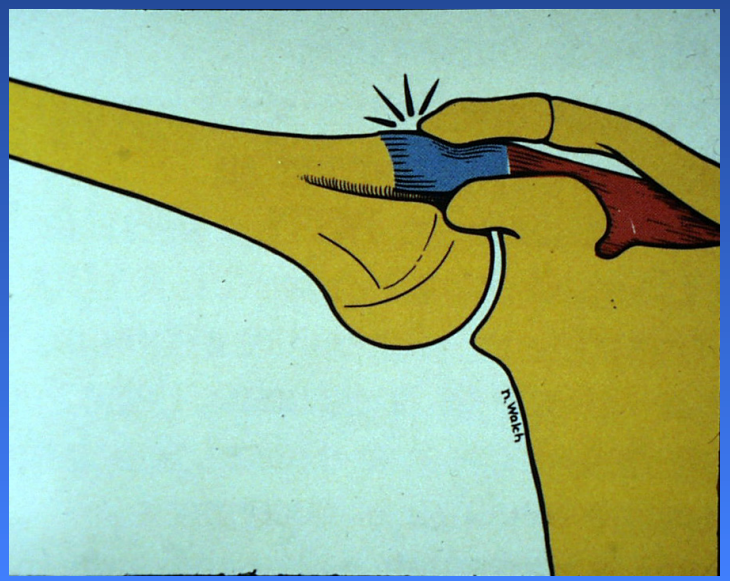
= Diagnostic assuré dans 80% des cas

Pathologie de la Coiffe de Rotateurs et du Long Biceps

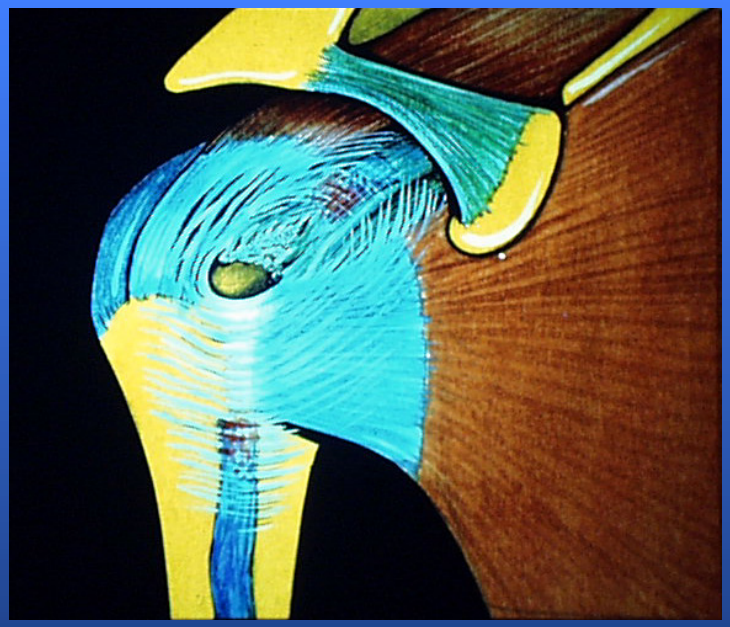

M. Sus épineux
M. Sous-épineux
Pt Rond


M. Sous Scapulaire





Usure de la coiffe des rotateurs…



Usure de la coiffe des rotateurs…

Après 70 ans

Fréquence des "ruptures" du sus-épineux

….30%

Vieillissement du tendon

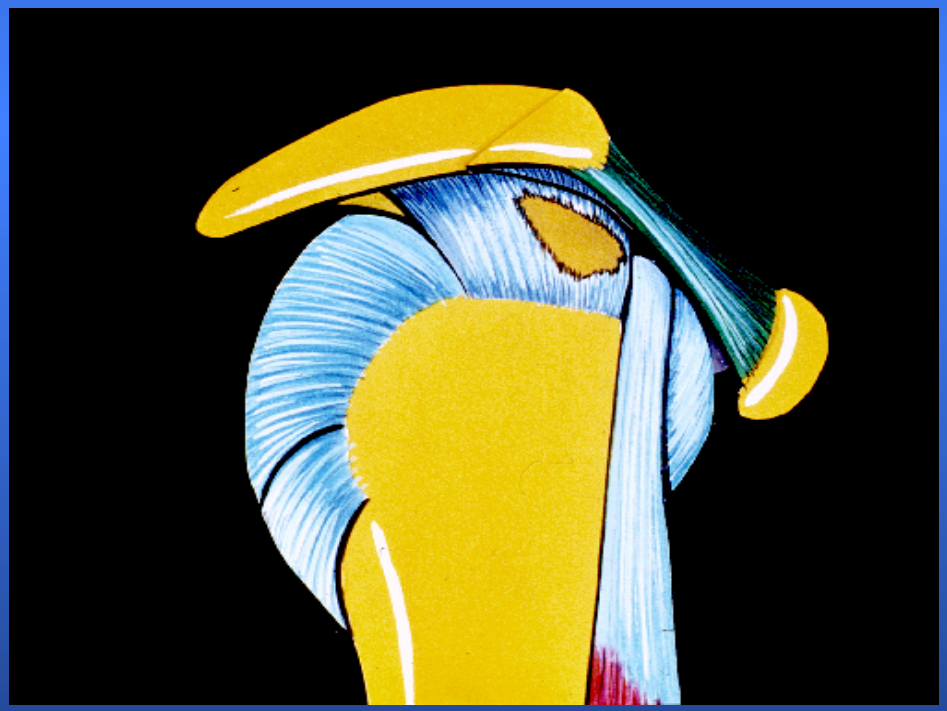
↘ Artérioles

↘ Ténocytes

↗ Chondrocytes

‘Ruptures’ de la Coiffe

= ‘Usures’ de la coiffe…



Démarche Diagnostique

I- Interrogatoire

II- Ex. Clinique

III- RX simples

IV- Ex. Complémentaires

Interrogatoire

4 Étapes

I- Motif(s) de Consultation

II- ATCD Médico-Chirurgicaux

III- ATCD Traumatiques

IV- Analyse de la Douleur

Motif(s) de Consultation

- Douleur
- Impotence Fonctionnelle
- Épaule Pseudo-paralytique
- Raideur
- Instabilité

Antécédents Médico-Chir.

- **Médicaments** (types, efficacité)
- **Rééducation** (Nb, efficacité)
- **Infiltrations** (Nb, efficacité)
- **Chirurgie** (types, efficacité)

Antécédents Traumatiques

Épaule

+

Rachis Cervical

- **Circonstances** (AT, Acdt trajet)
- **Mécanisme** (direct, indirect)
- **Intervalle libre**
- **État antérieur**

Analyse de la Douleur

- **Localisation : Ant/ Post/ Lat/ Sup**
- **Diurne / Nocturne**
- **Repos / Effort**
- **Quantifier+++** (EVA, échelle verbale)

Examen Clinique de l'Épaule

7 Étapes

I- Inspection

II- Palpation

III- Ex Rachis Cervical / Neuro-musculaire

IV- Mobilité Active et Passive

V- Signes de Conflit

VI- Testing de la Coiffe + LB

VII- Testing de la Stabilité

INSPECTION

Étape #1

- Relief articulaire
- Atrophie musculaire

Deltoide
Supraspinatus
Infraspinatus

INSPECTION

- Cicatrices

Chéloïde =
Hyperlaxité

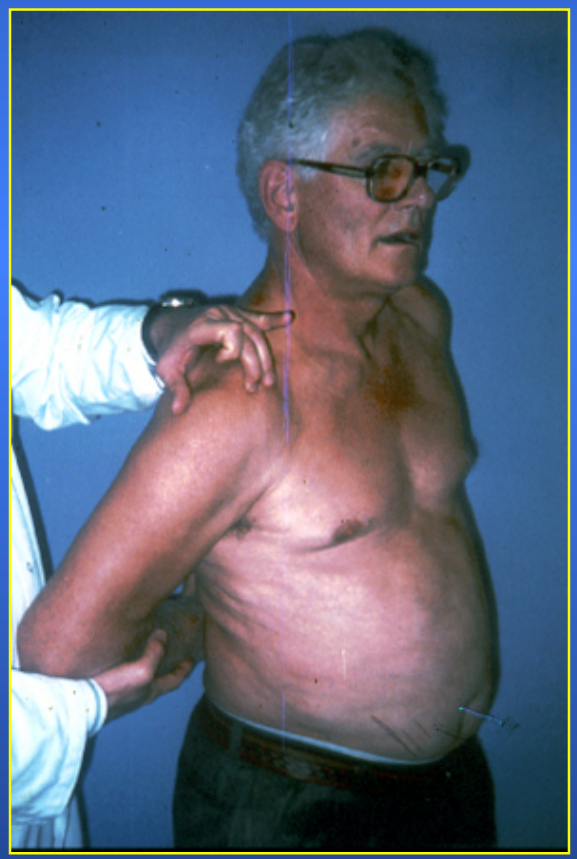
INSPECTION

- Asymétrie du rythme scapulo-huméral

PALPATION

Étape #2

- Trochiter



- Acromio-Claviculaire

PALPATION

Étape #2

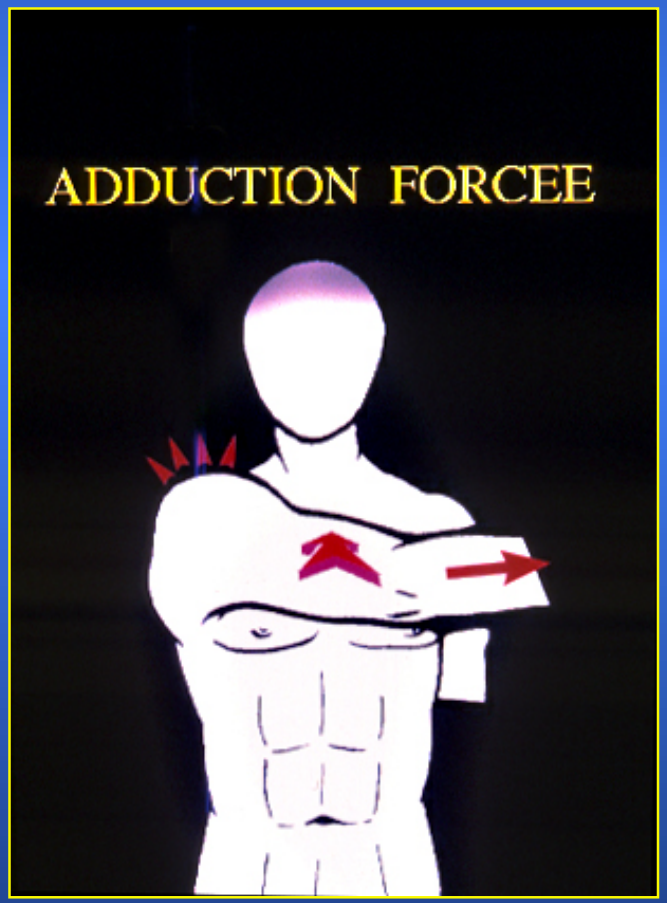
- **Long Biceps**
- **Trochiter** ***(Susépineux)***
- **Acromio-claviculaire**

LB

PALPATION

Si AC douloureuse ⟶ Cross Arm Test

Douleur SUP



Cross Arm Test

RACHIS CERVICAL - NEURO

Étape #3

DOULEUR ÉPAULE

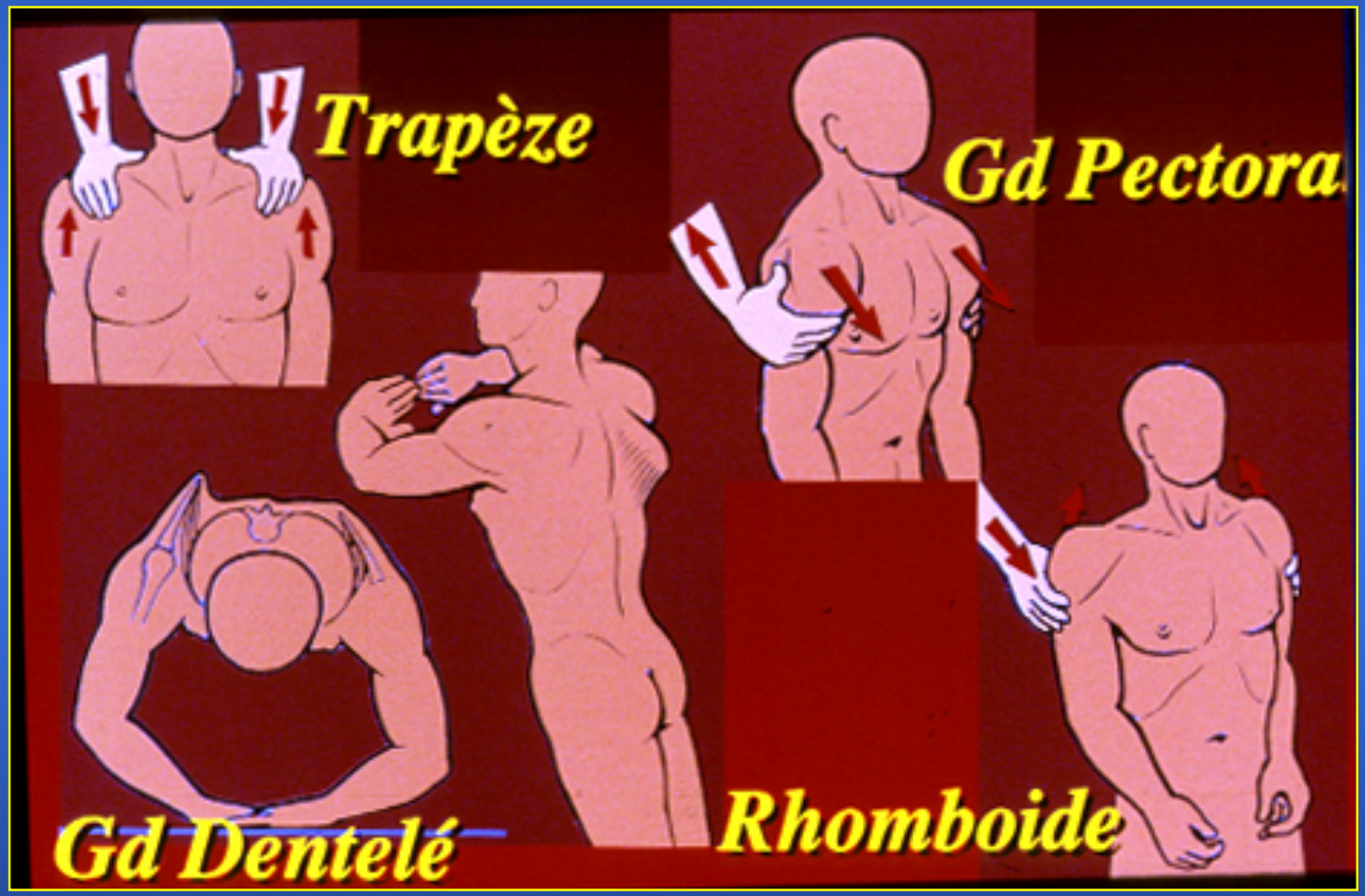
….Problème cervical

RACHIS CERVICAL - NEURO

DOULEUR ou IMPOTENCE FONCTIONNELLE

….Problème neuro

TESTING MUSCULAIRE



MOBILITE ACTIVE et PASSIVE

Étape #4

- Élevation anterieure
- Rotation externe
- Rotation interne

Bilatérale

+++

Mobilité active: Élevation anterieure

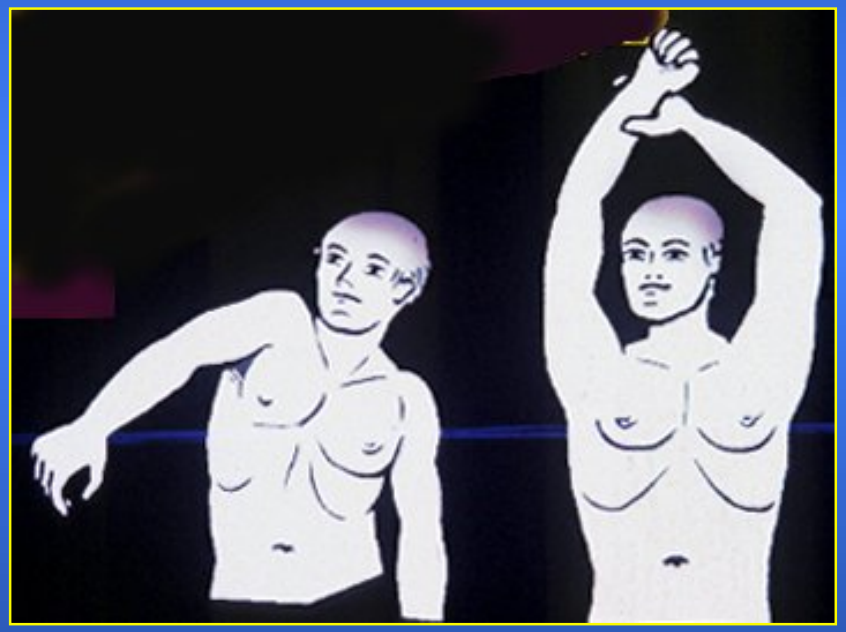
Mobilité active: Rotation externe

Mobilité active: Rotation interne

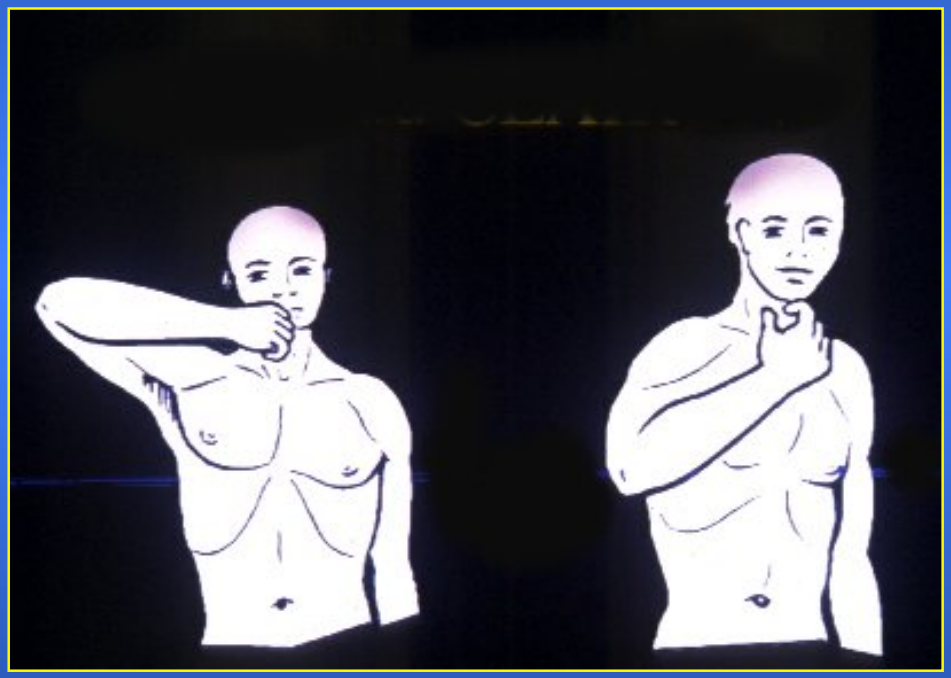
MOBILITE ACTIVE et PASSIVE

Arc douloureux

Epaule pseudo-paralytique



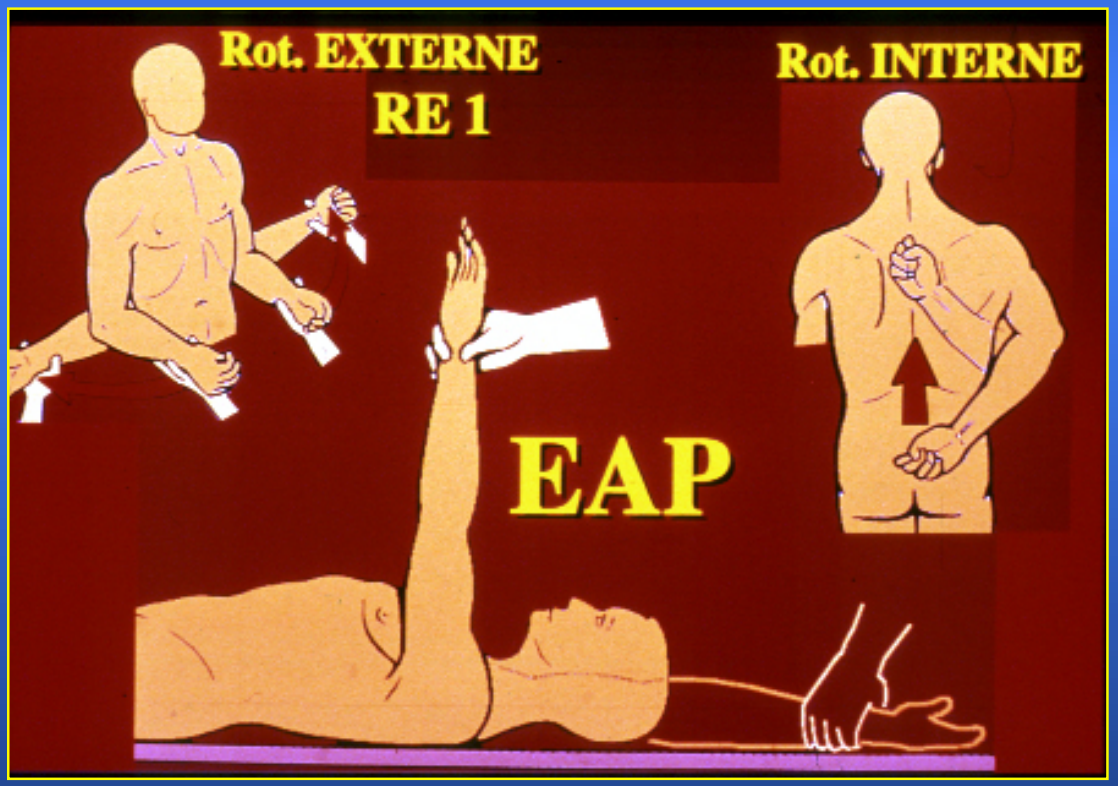
Signe du Clairon



= Perte Rot. Ext. active

MOBILITE PASSIVE

Étape fondamentale+++



Épaule Raide (‘Capsulite’)

= limitation des amplitudes passives

2 conséquences:

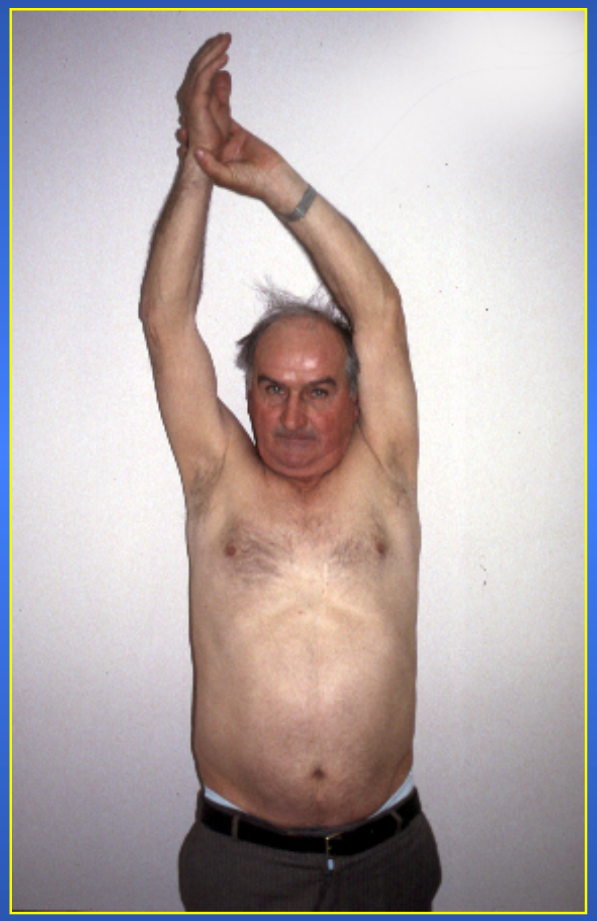
- Testing inutile et sans valeur (faux +)
- ~~Chirurgie~~

Epaule pseudo-paralytique

≠

Epaule Raide (Capsulite)

Epaule pseudo-paralytique

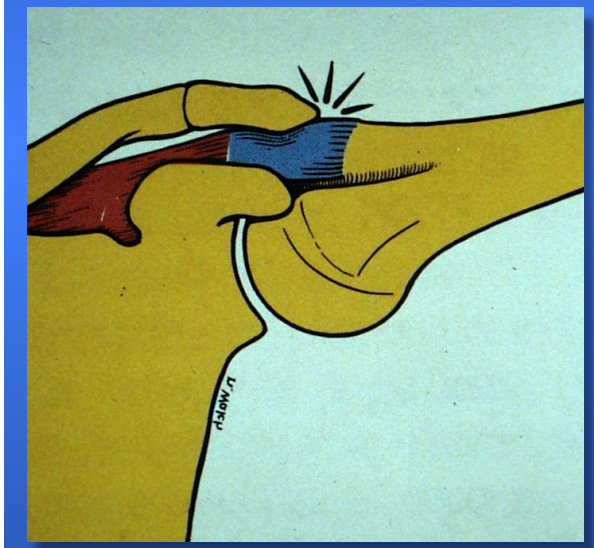


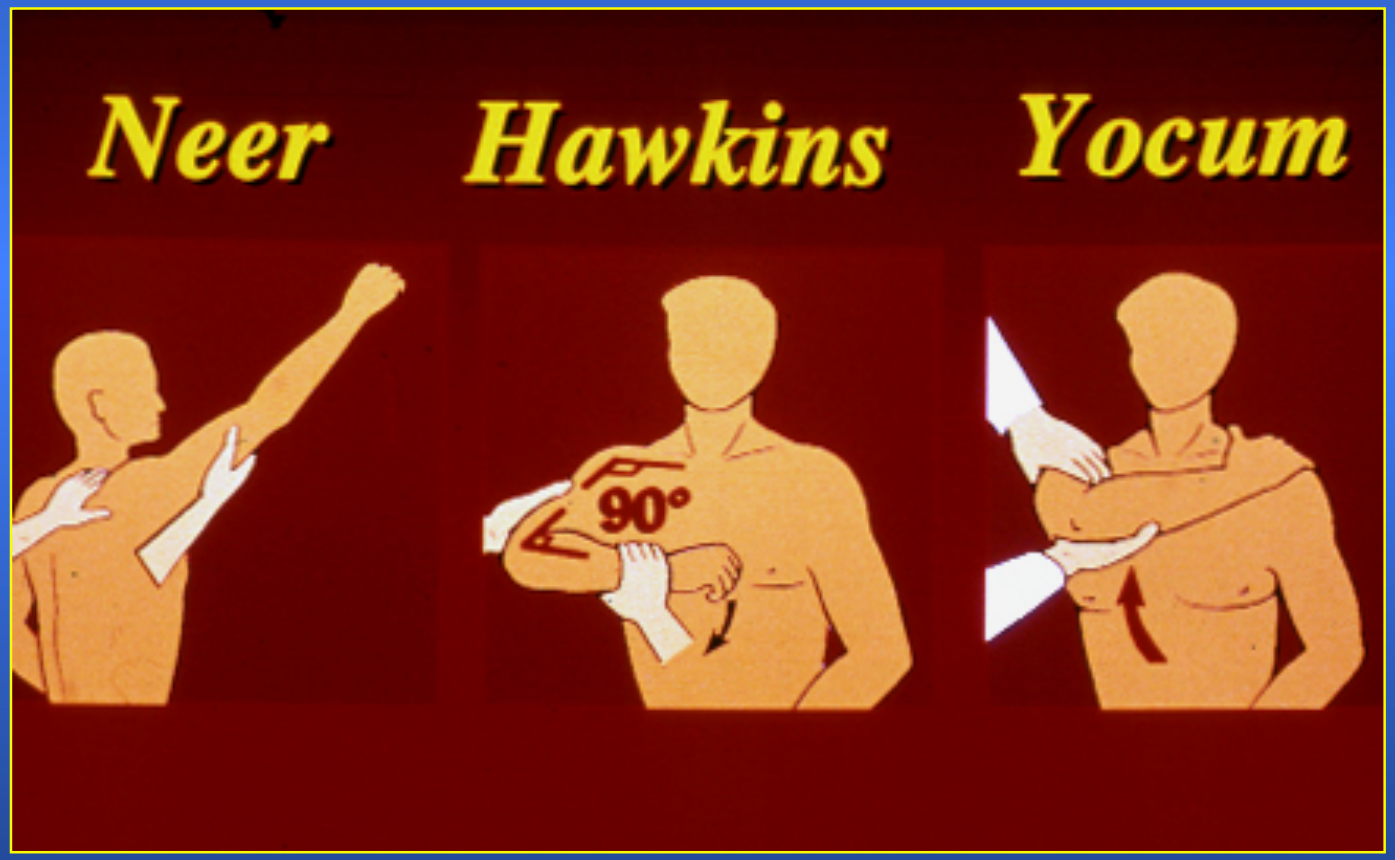
= Perte élévation active

Epaule Raide (‘Capsulite’)

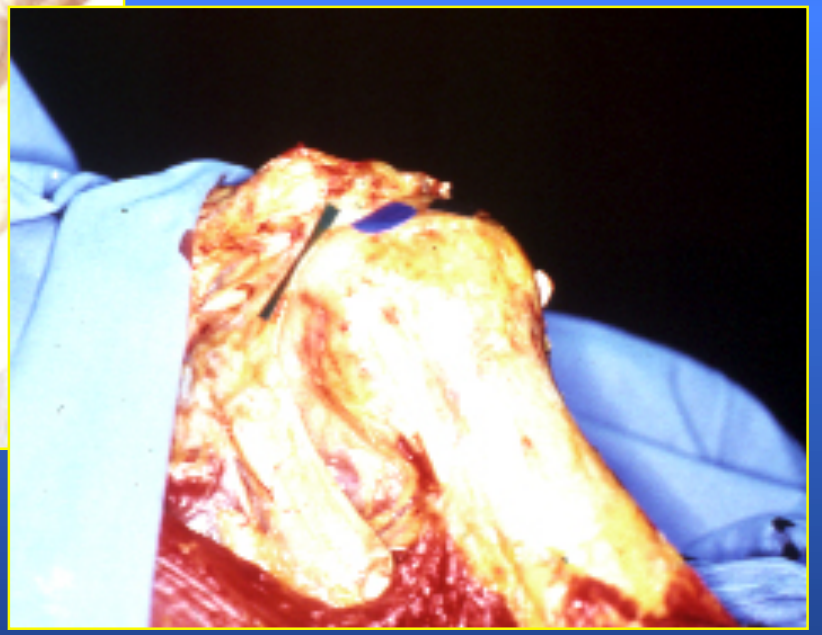
= Perte élévation active et passive

SIGNES DE CONFLIT ANT-SUP



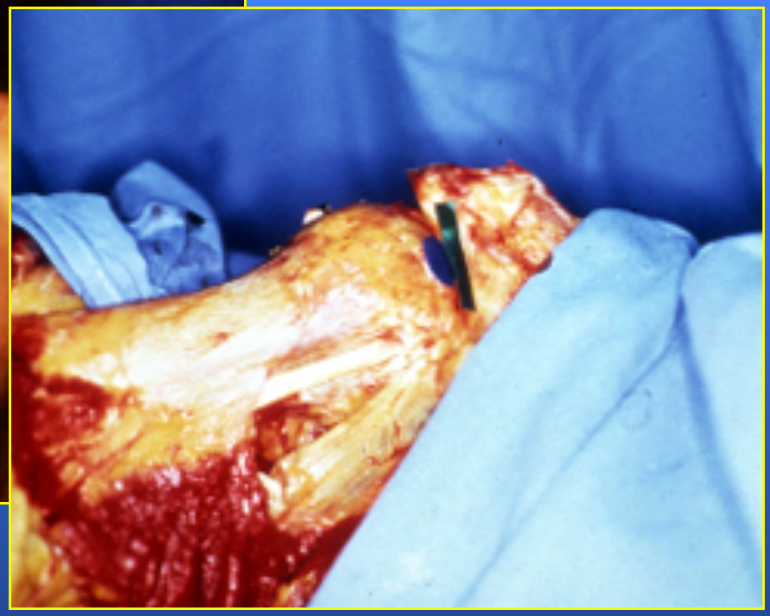


Test de Neer = Conflit acromion



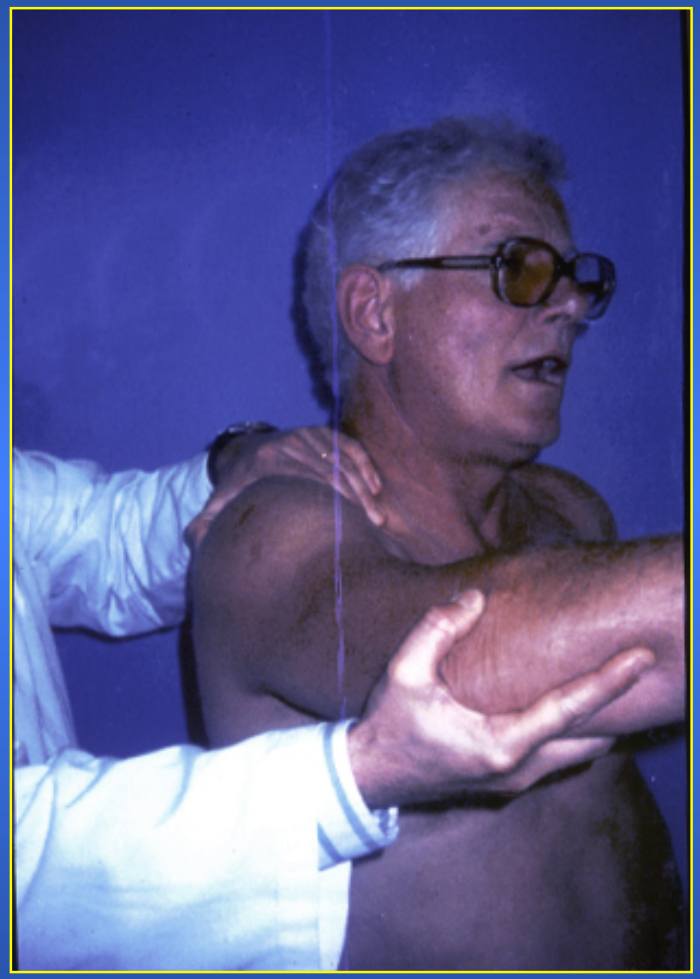
= Souffrance Susépineux / LB

Test de Hawkins = Conflit Ligt AC

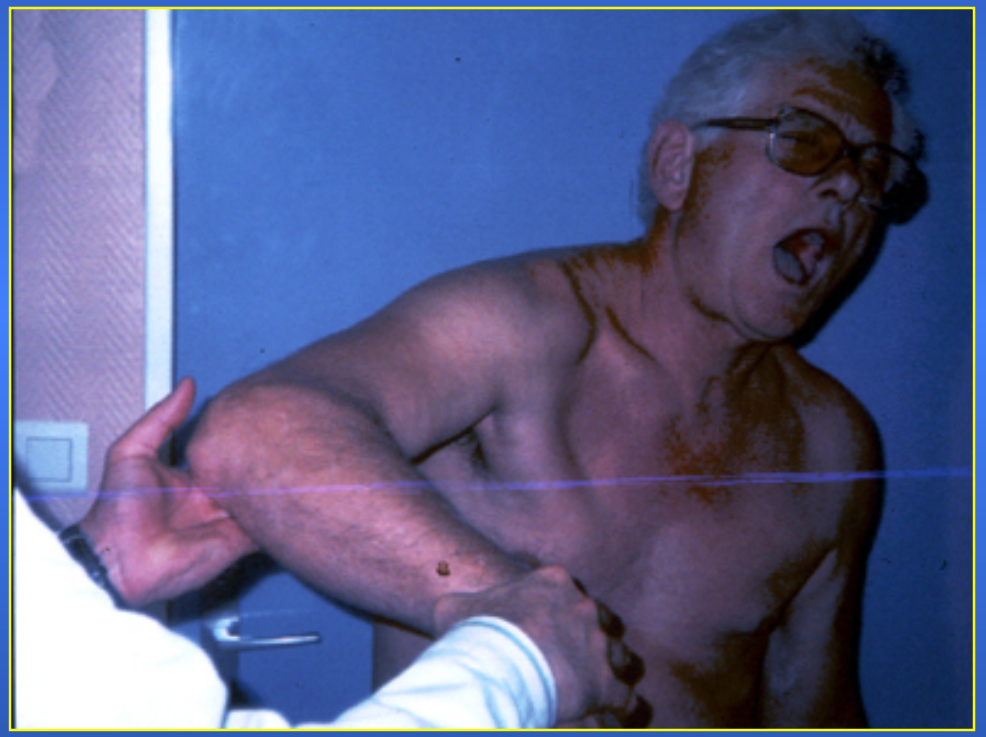


= Souffrance Susépineux / LB

Test de Neer



Test de Hawkins



...très (trop) sensibles, non spécifiques !

TESTING DE LA COIFFE DES ROTATEURS

Étape #6

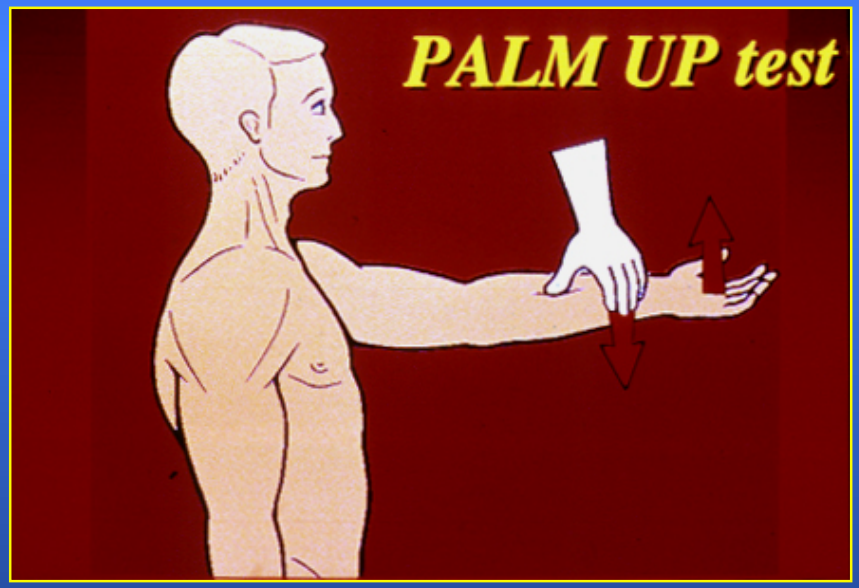
- Longue portion du Biceps
- Sous-Scapulaire
- Sous-Epineux / Petit Rond
- Sus-Epineux

LONG BICEPS

- Tendinite
- Rupture
- Lux / Subluxation
- Hypertrophie
  (Sablier)

LONG BICEPS

- Tendinite

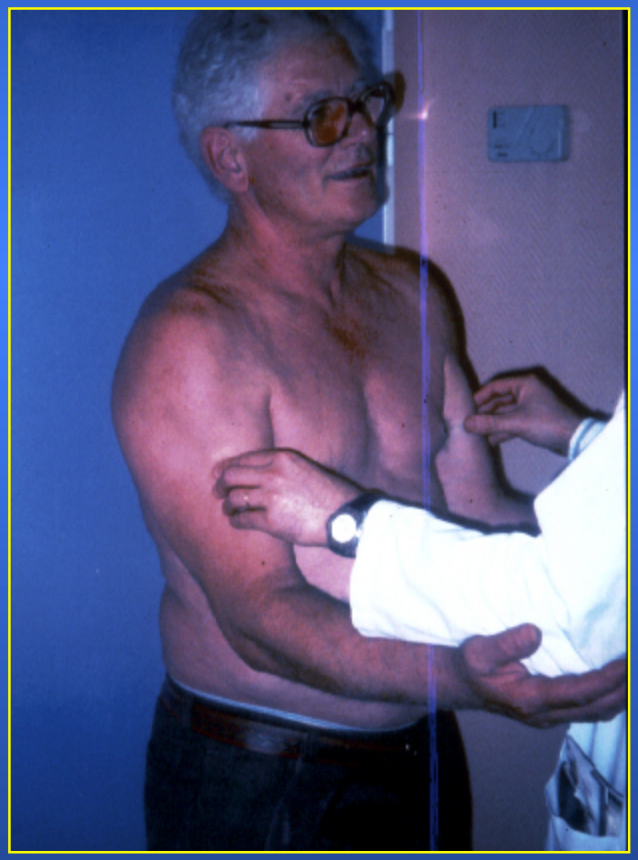


LONG BICEPS

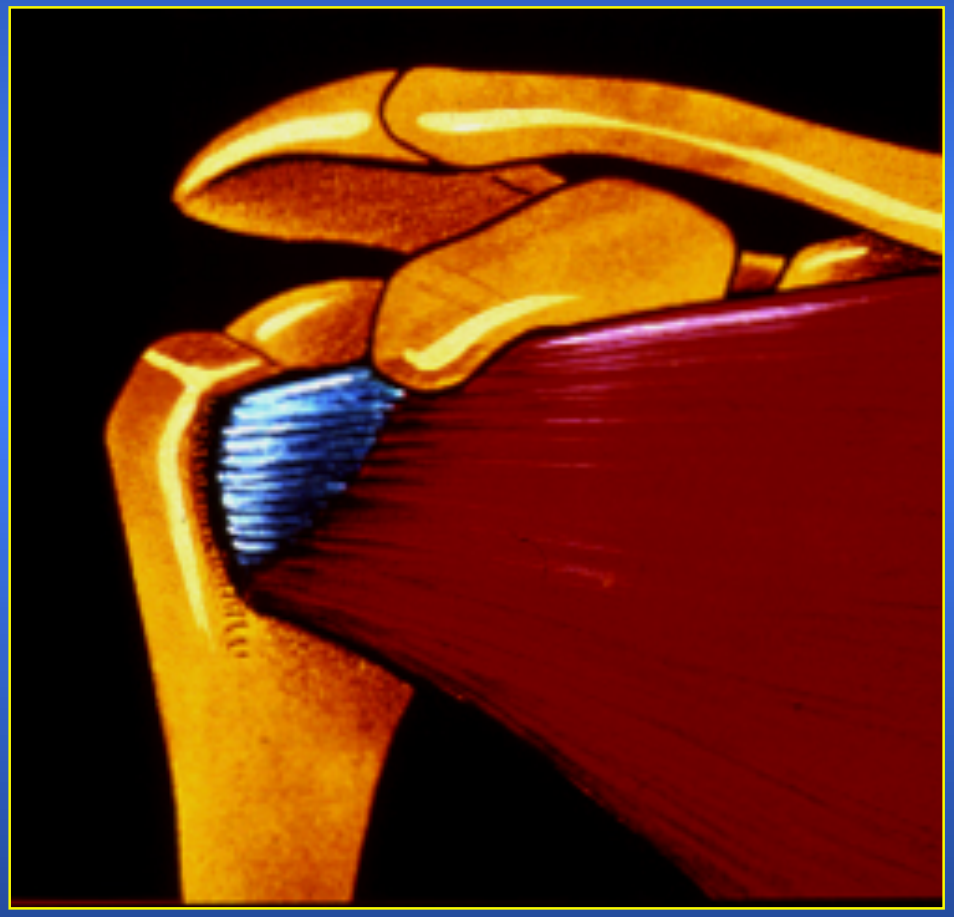
- **Rupture (évidente)**

LONG BICEPS

- **Rupture (discrète)**



SOUS SCAPULAIRE (Subscapularis)

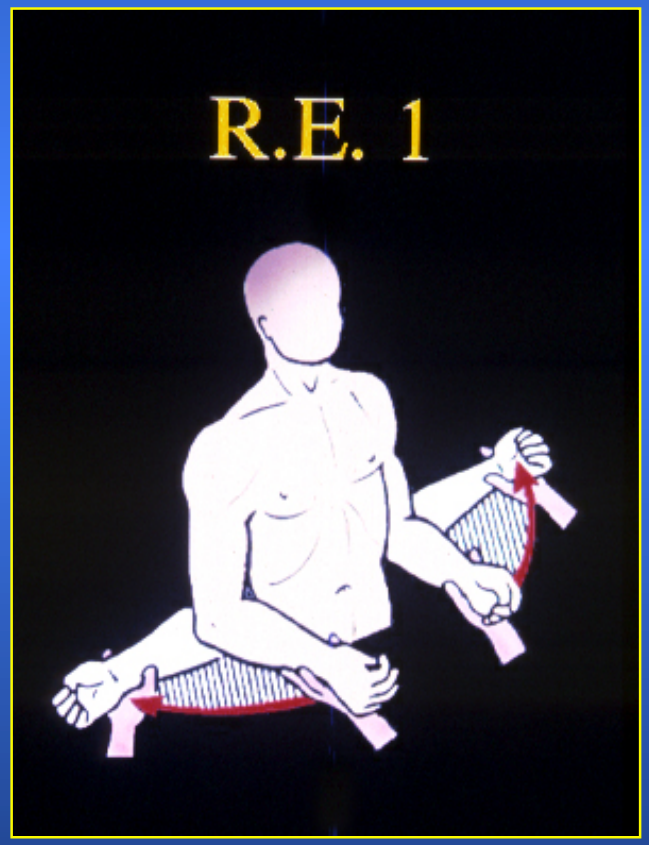


RE passive

Force en RI

SOUS SCAPULAIRE

Augmentation de la RE passive

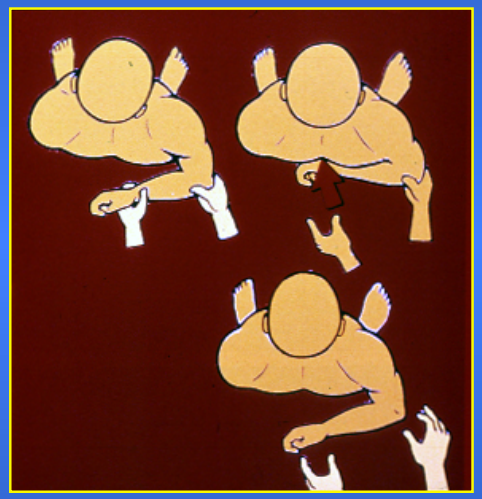


SOUS SCAPULAIRE

Diminution de la Force en RI

SOUS SCAPULAIRE

Diminution de la Force en RI

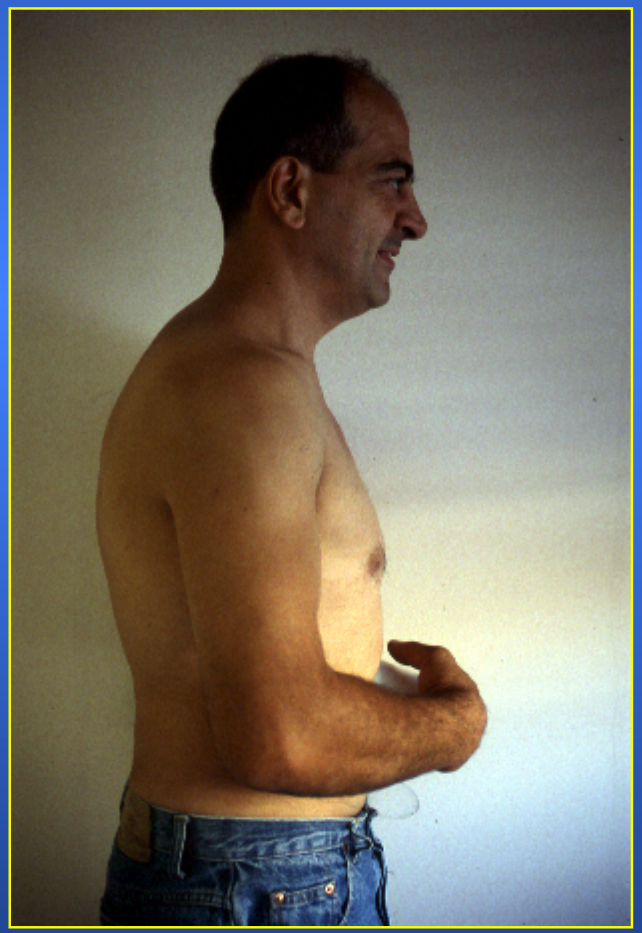


Lift-off test
(Gerber)

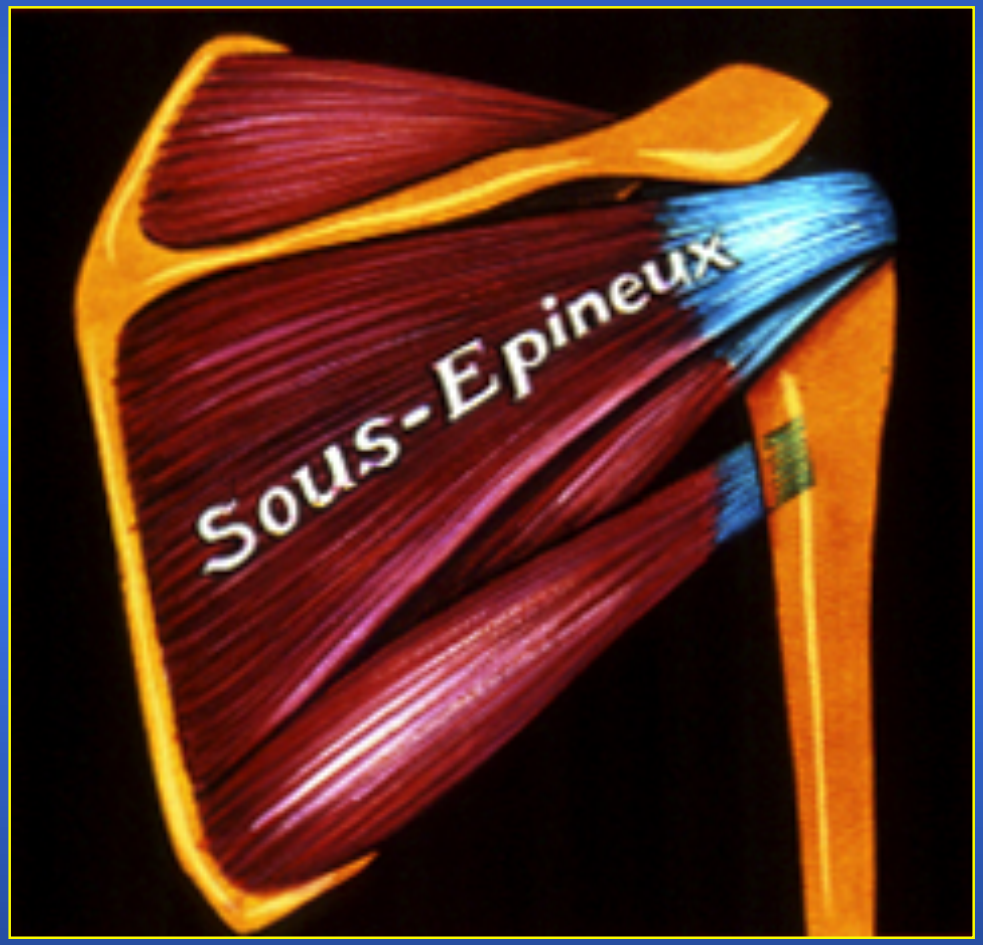
SOUS SCAPULAIRE

Diminution de la Force en RI

Press Belly Test
(Gerber)



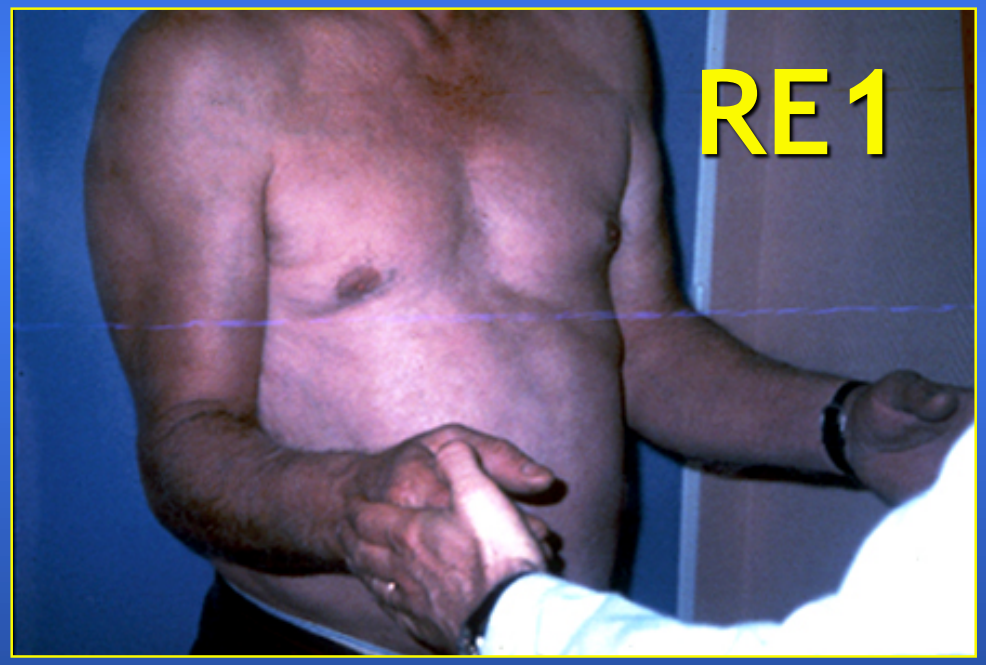
SOUS-EPINEUX (Infraspinatus)

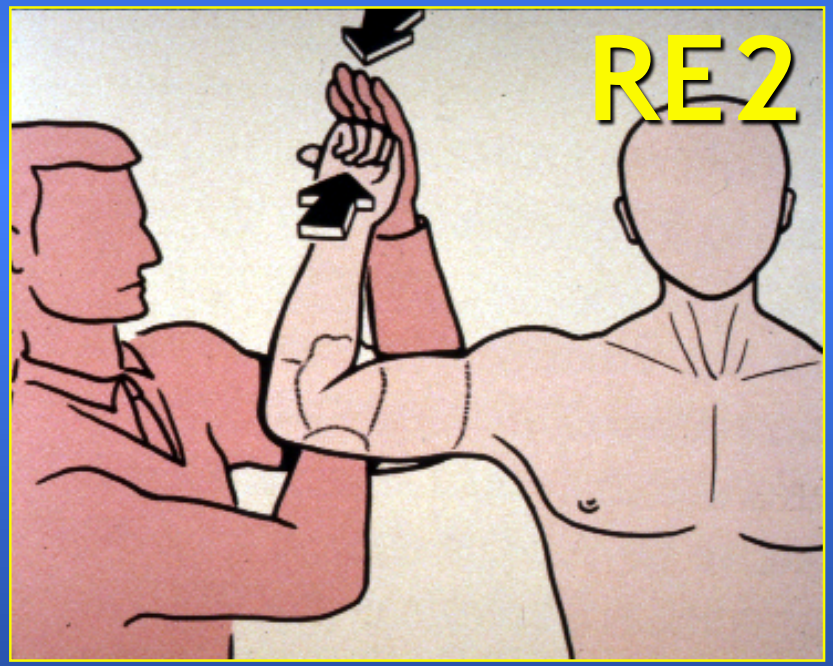


↘ Force en RE

SOUS-EPINEUX (Infraspinatus)

↘ Force en RE





Manœuvre de Patte

SOUS-EPINEUX (Infraspinatus)

↘ Force en RE

Test de Patte +

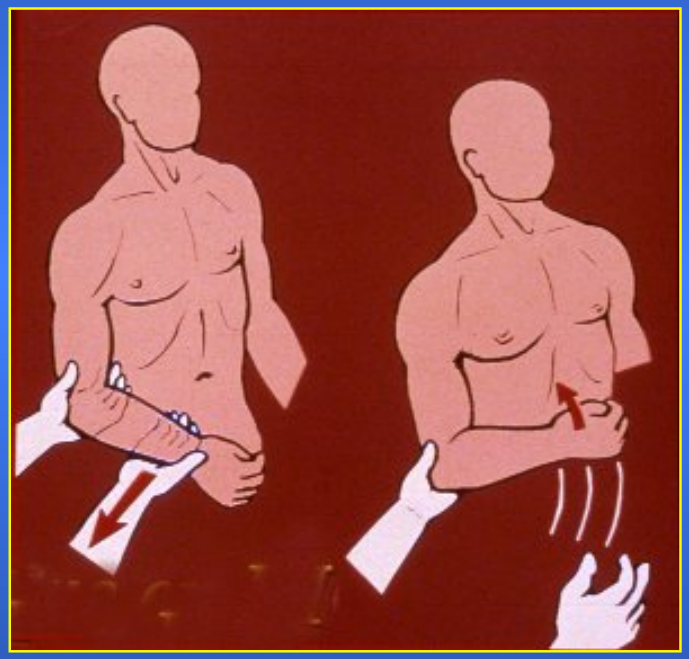
Rupture Infraspinatus + Petit Rond

Petit Rond (Teres Minor)

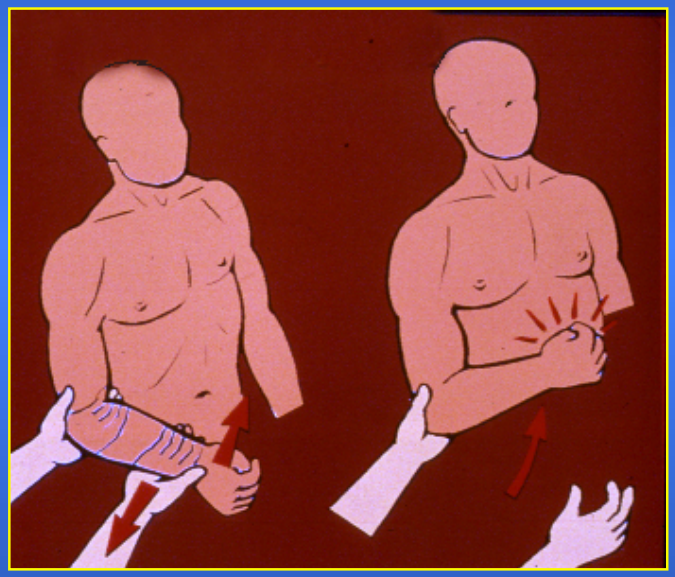
↘ Force en RE

Signe du Clairon = plus de Petit Rond!

Absence de M. Rotateurs Externes



Rappel automatique en RI



Signe du Portillon

SOUS-EPINEUX / PETIT ROND = ABSENTS

Signe du Portillon ('ER Lag Sign')

SUS-EPINEUX

↘ Force en ABD

SUS-EPINEUX (Supraspinatus)

↘ Force en ABD

Test de JOBE +

= rupture su Supraspinatus

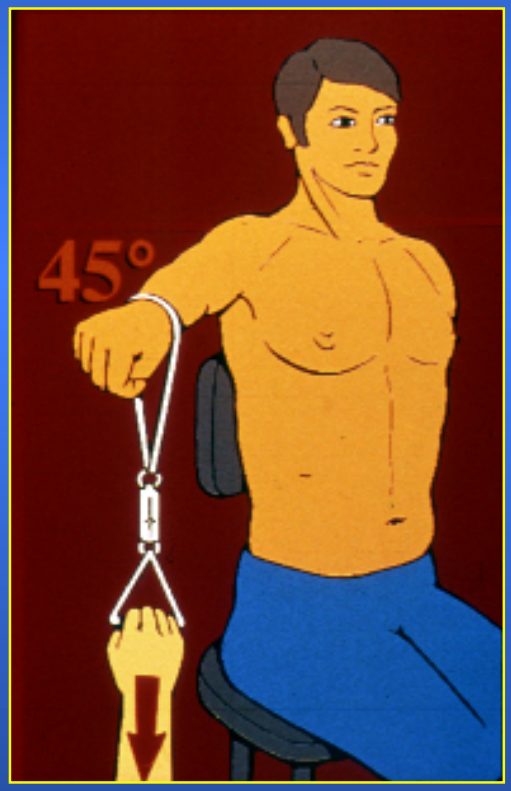
TESTING DE LA COIFFE DES ROTATEURS

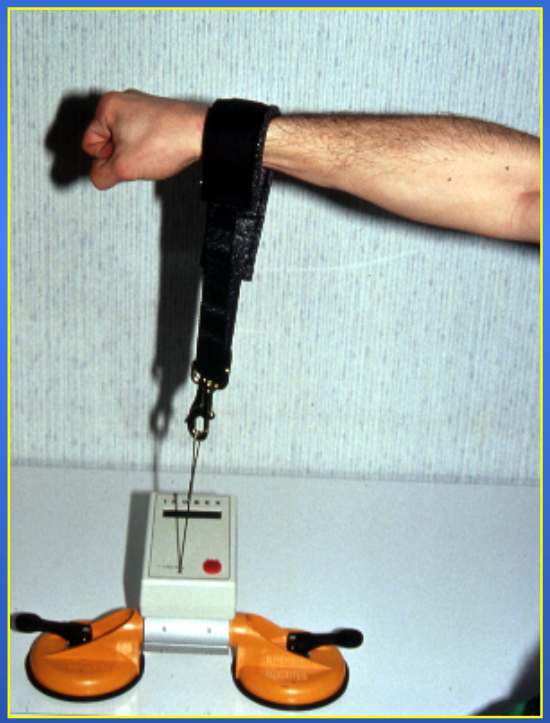
Score de CONSTANT

100 POINTS

35 % subjectif

65 % objectif



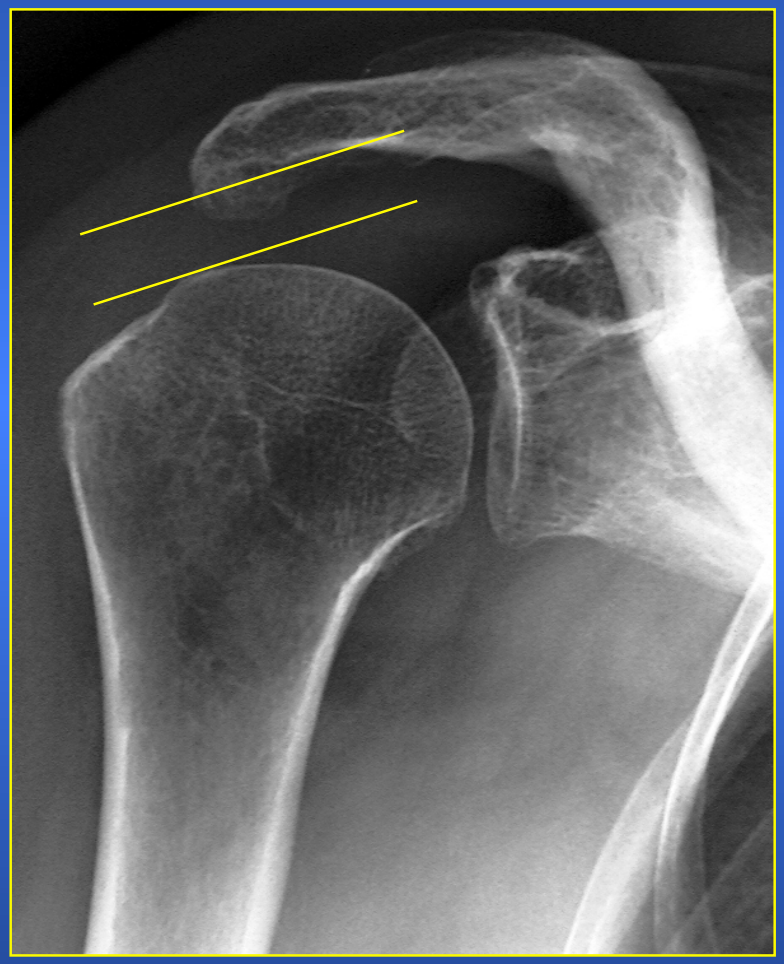


CONSTANT PONDERE

(Age/Sexe)

Exemple: une femme entre 60 et 70 ans doit obtenir 70 points pour être à 100%

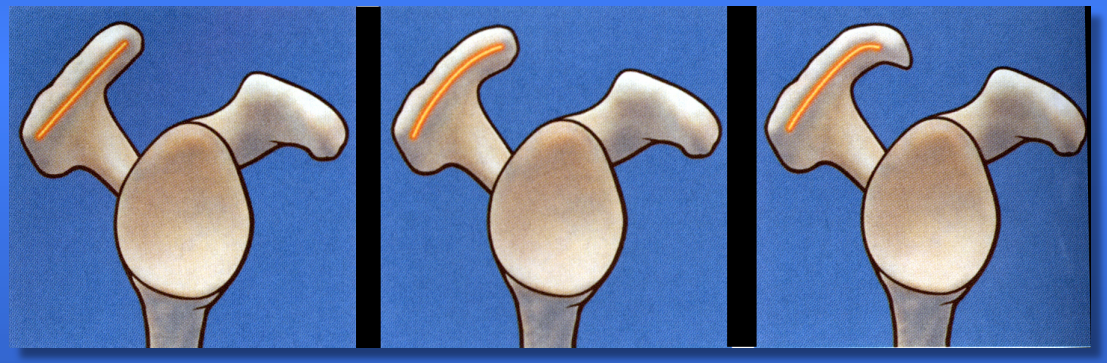
RX de Face en RN



Distance Acromio-Humérale = 10mm

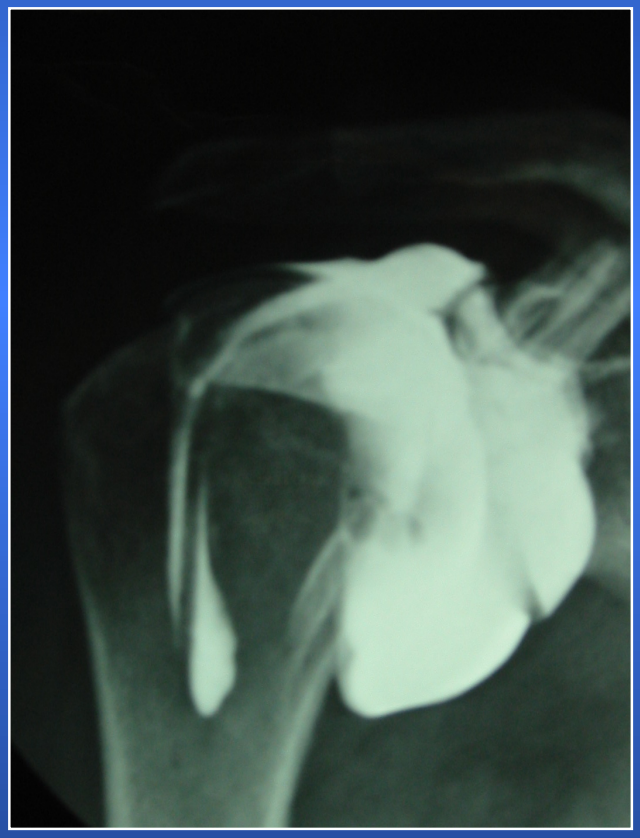
RX de Profil (Lamy)

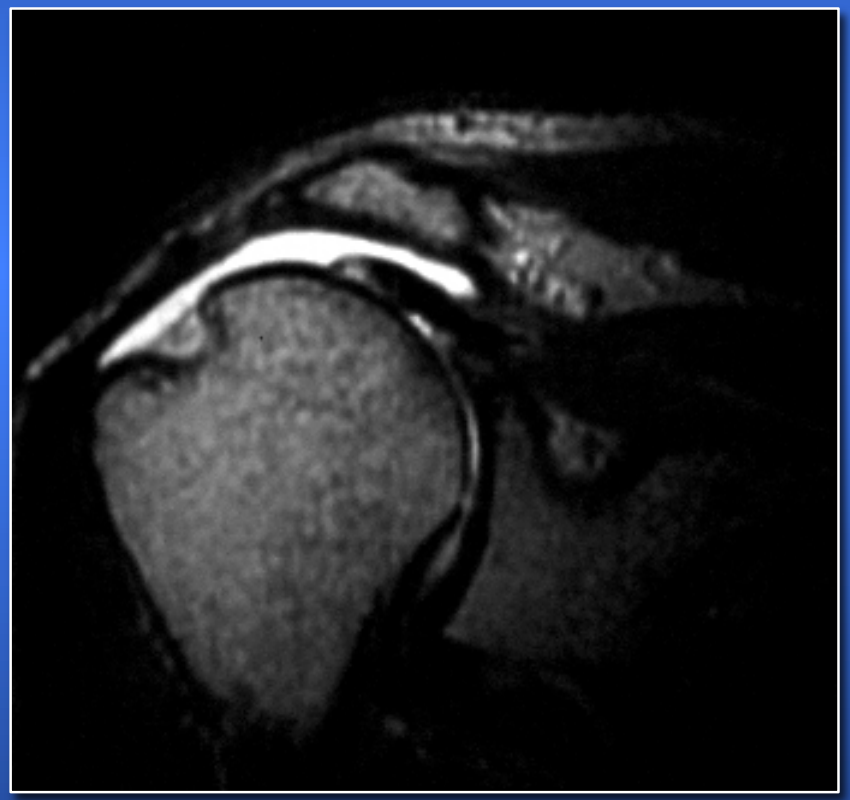
Acromion



Plat Courbe Crochu

Arthro-scanner ou Arthro-IRM





Infiltration graisseuse

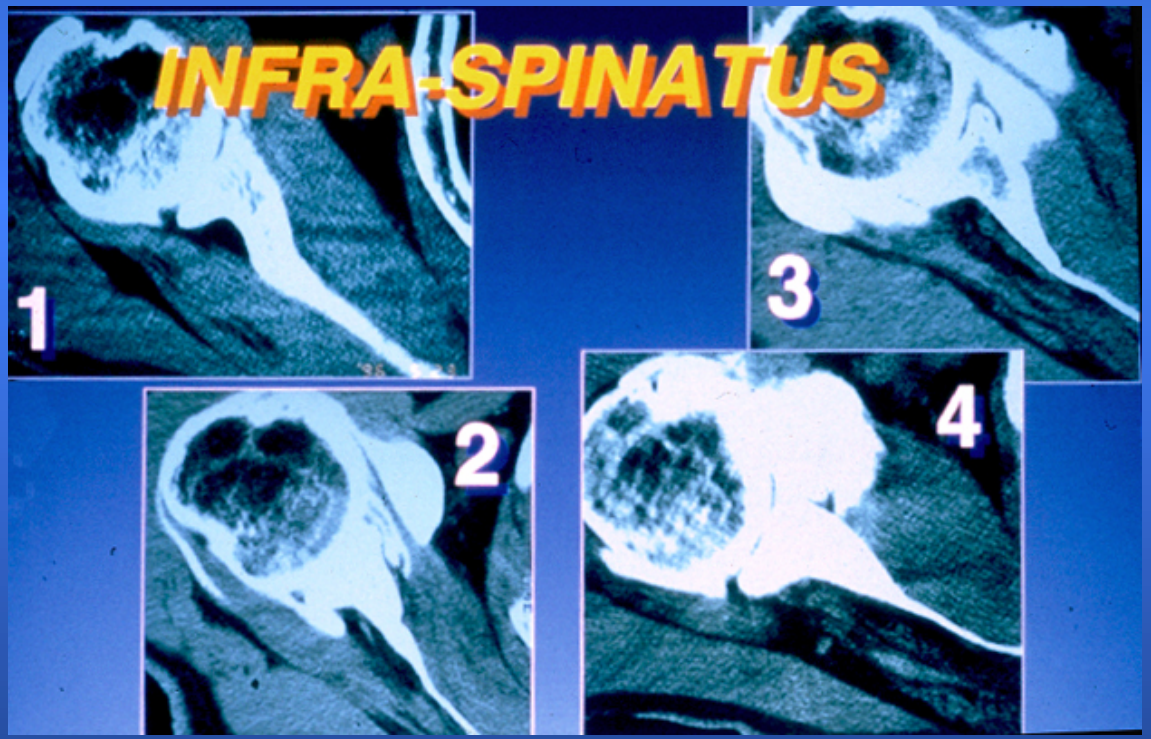
(Goutallier & Bernargeau)

1-Traces graisseuses

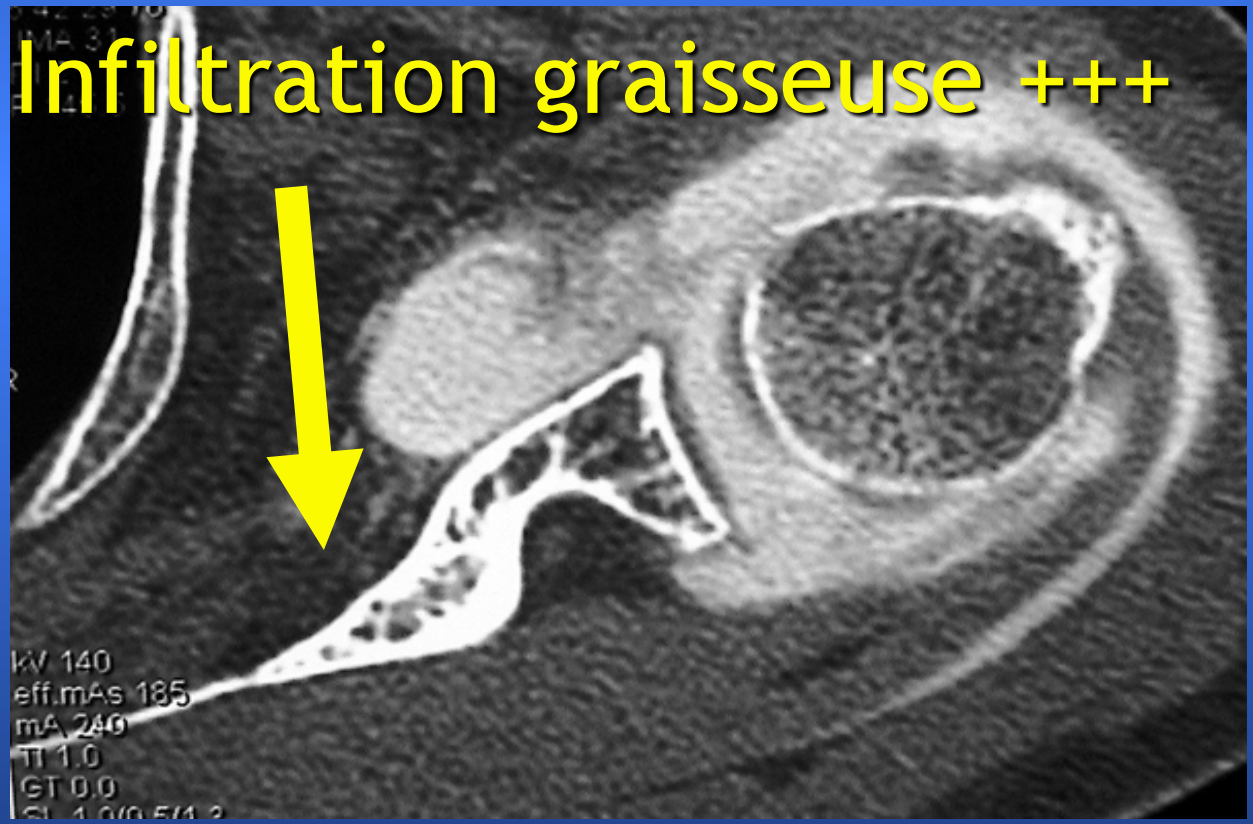
2 - Graisse < muscle

3 - Graisse = muscle

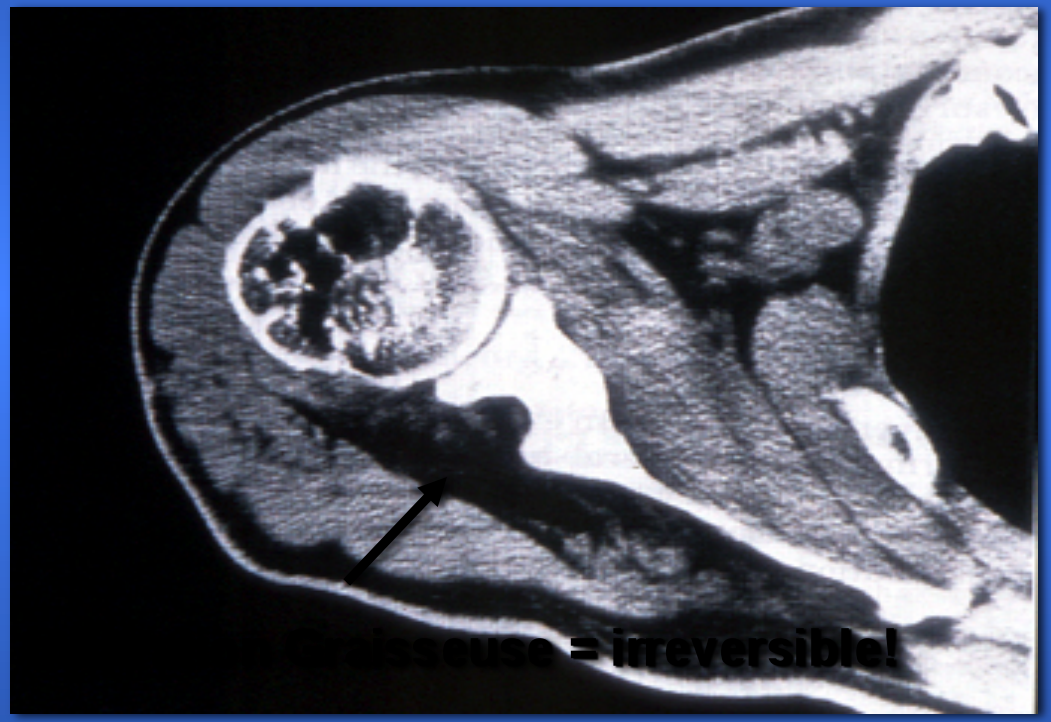
4 - Graisse > muscle



Rupture Subscapularis (ancienne)



‘Rupture’ Infraspinatus
(ancienne)



Stade 4

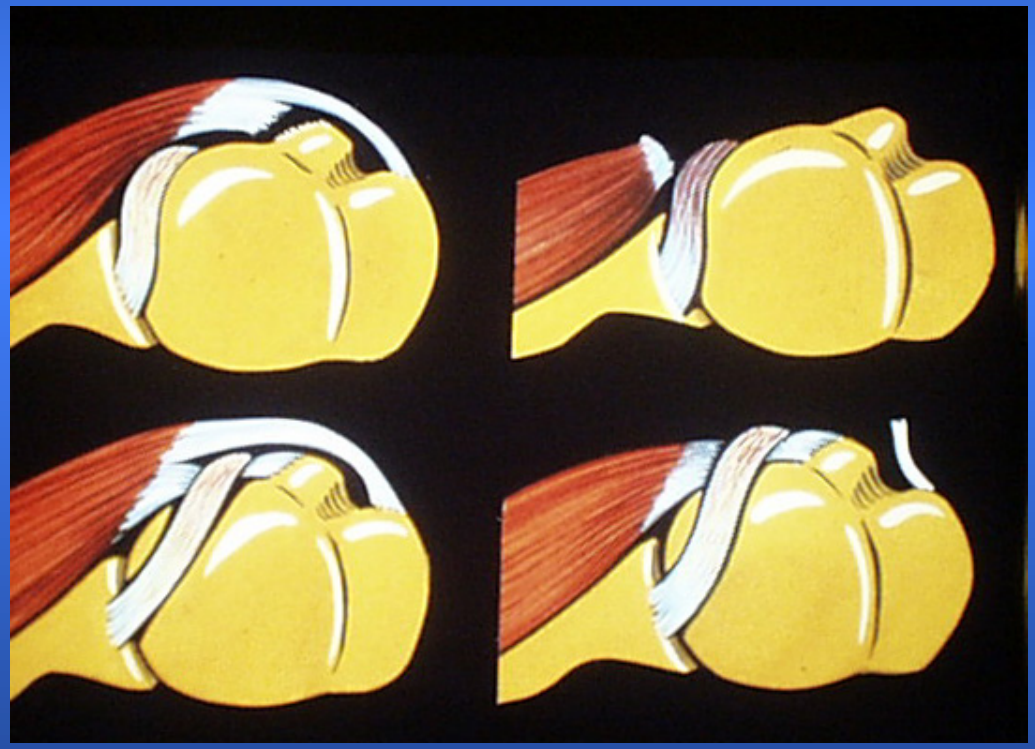
‘Rupture’ de Coiffe

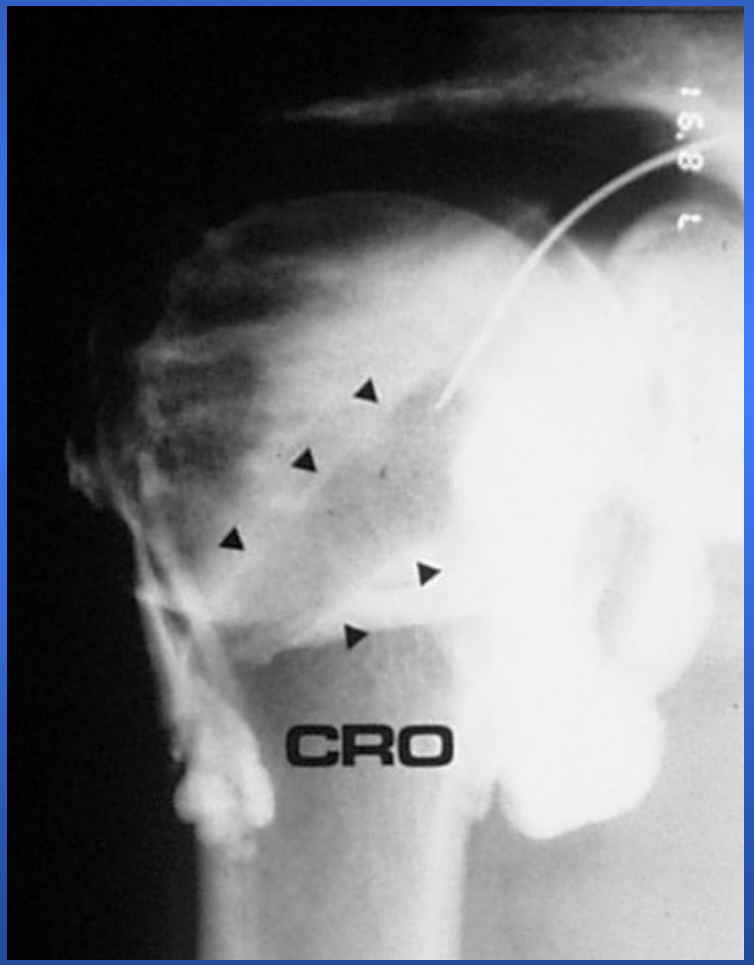
≠

‘Usure’ de Coiffe

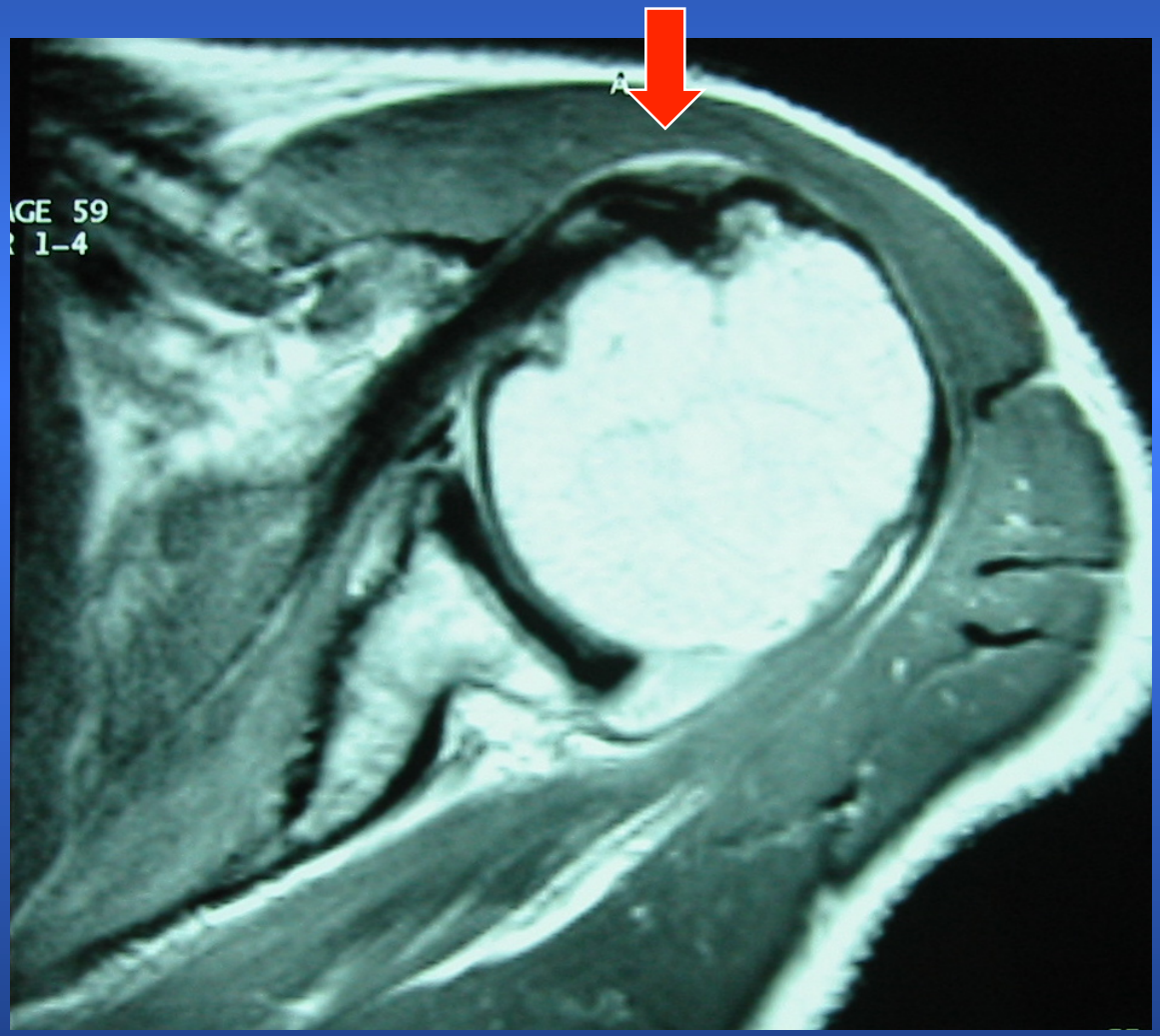
Toutes les ‘usures’ de la coiffe ne doivent pas être opérées!..

Subluxation du LB ++++

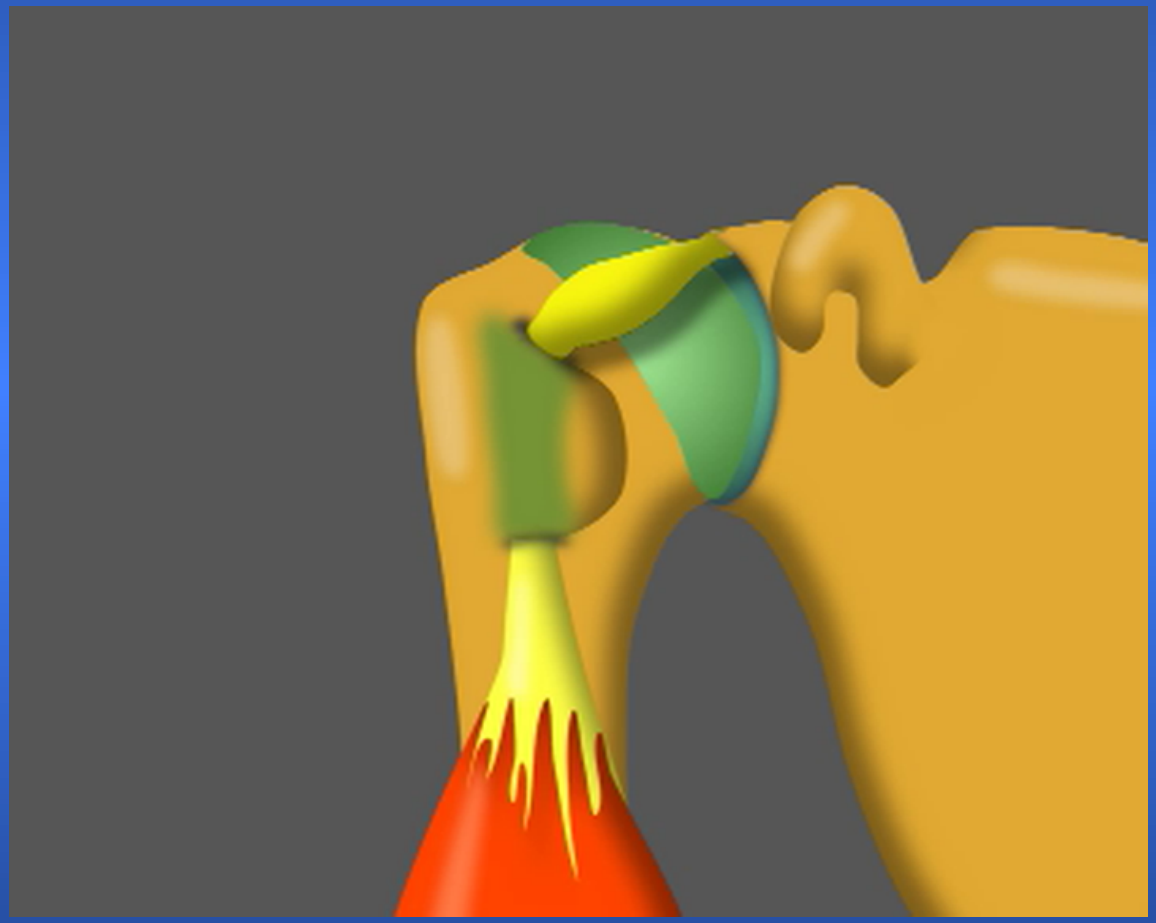




Subluxation du LB ++++



Long Biceps en ‘Sablier’



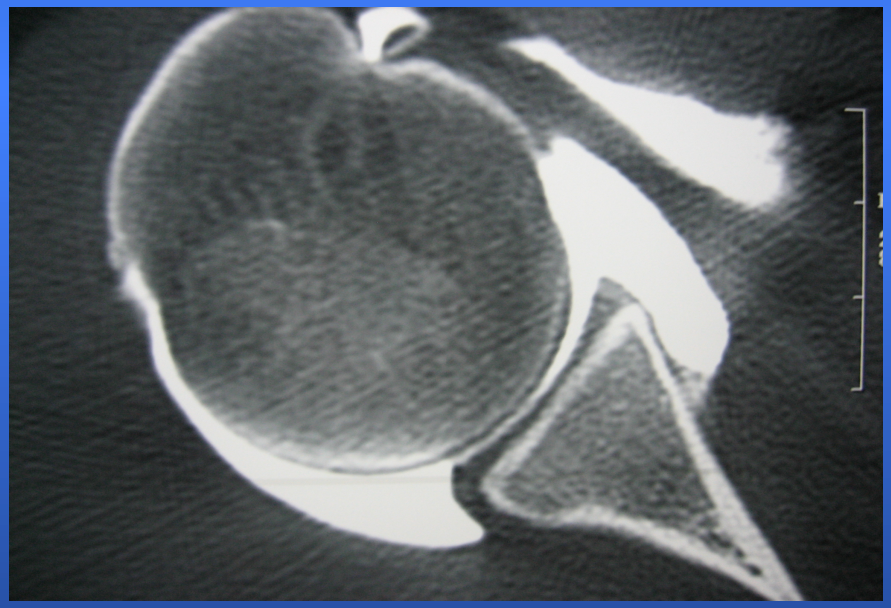
Boileau et Coll. RCO 2004

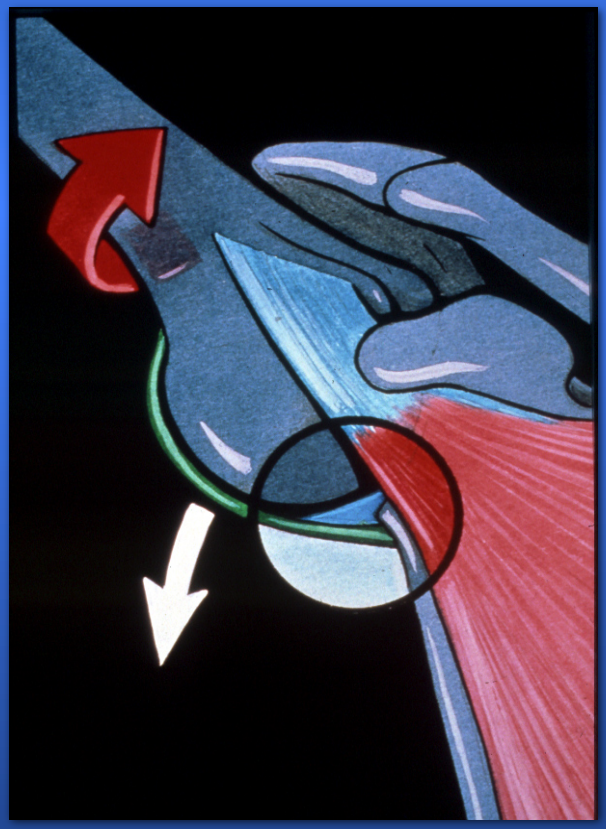
Pause!...

Instabilité de L'Epaule

Stabilité de l'Epaule

= capsulo-ligamentaire

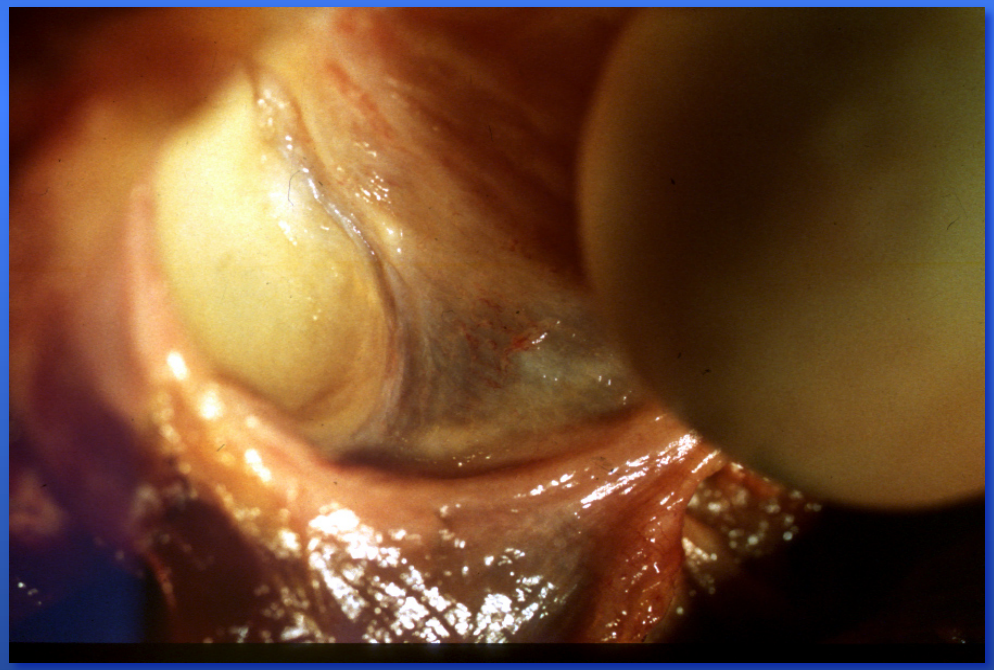


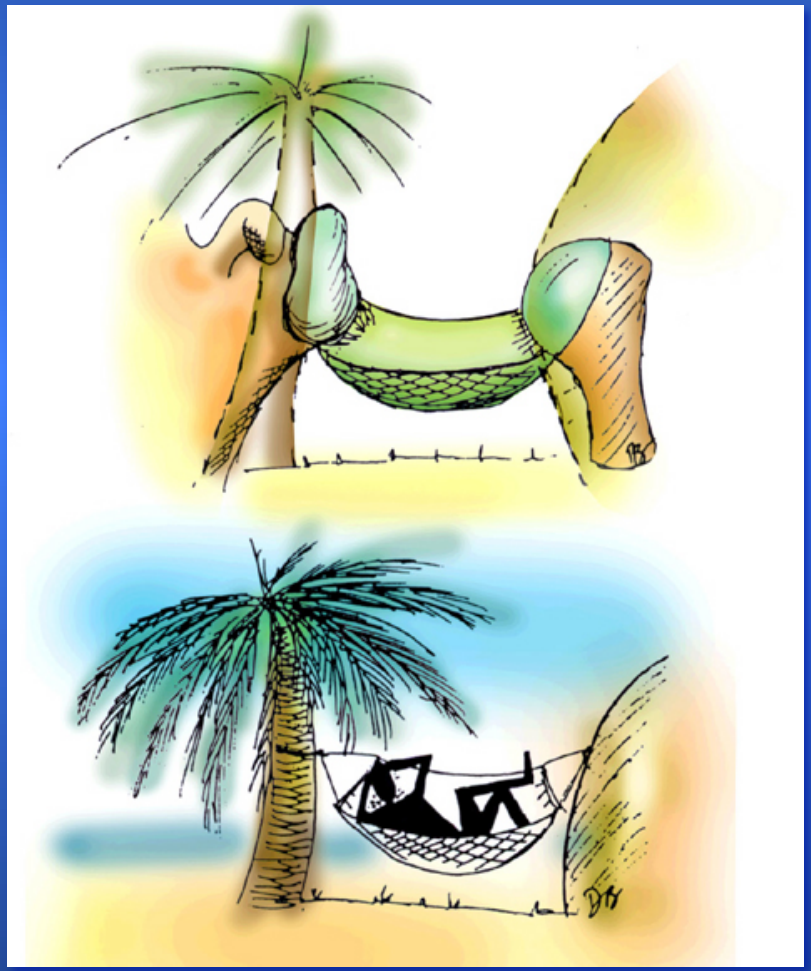


Capsule / LGHI = Hammac

Attaché sur la Glène (l'arbre)

& sur l'humerus (le rocher)



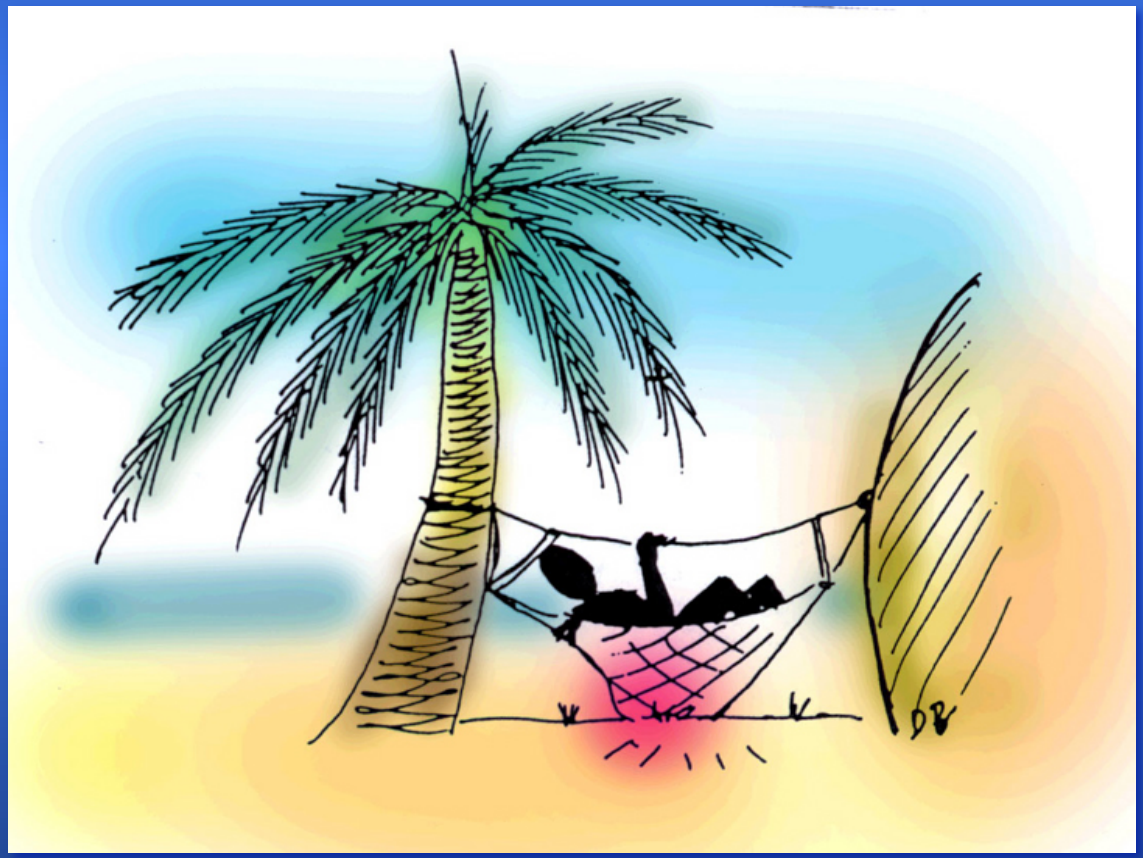


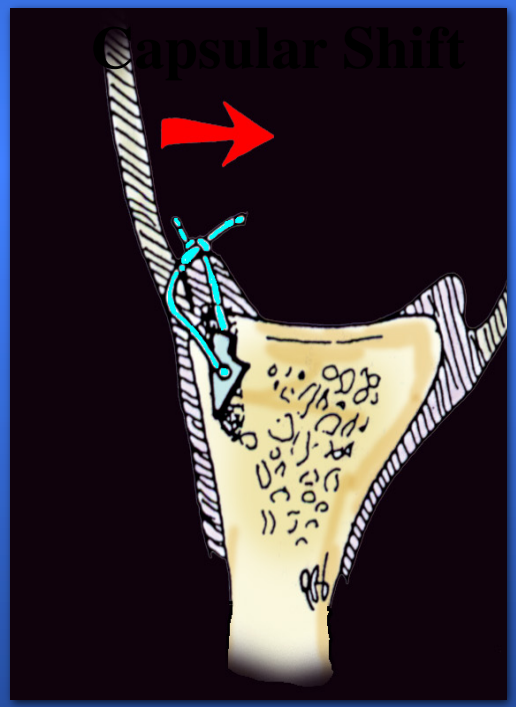
Lésion de Bankart

= Detachement du hammac de la glène (de l'arbre)

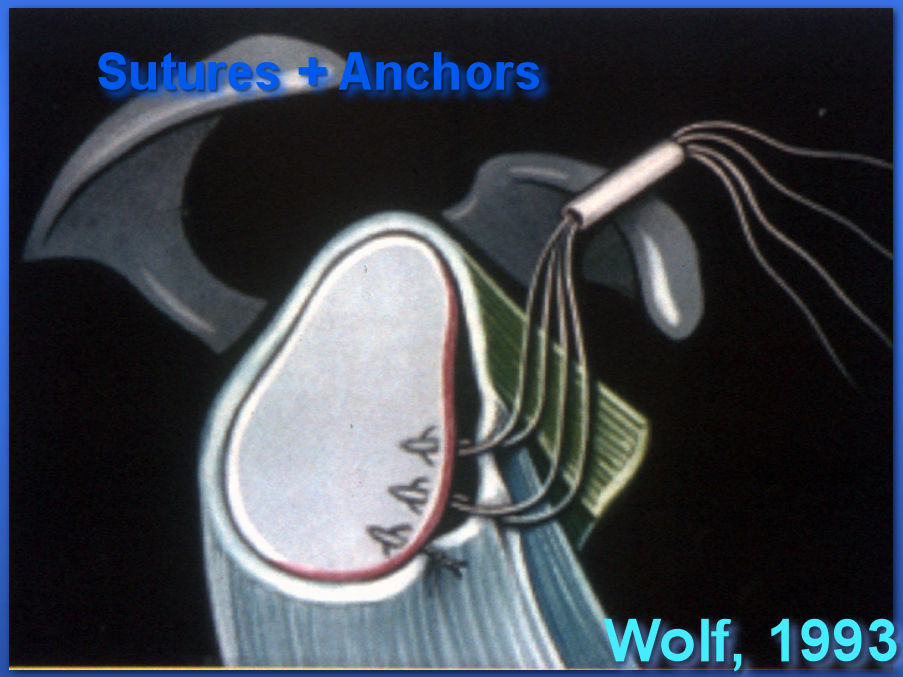
Distension Capsulaire

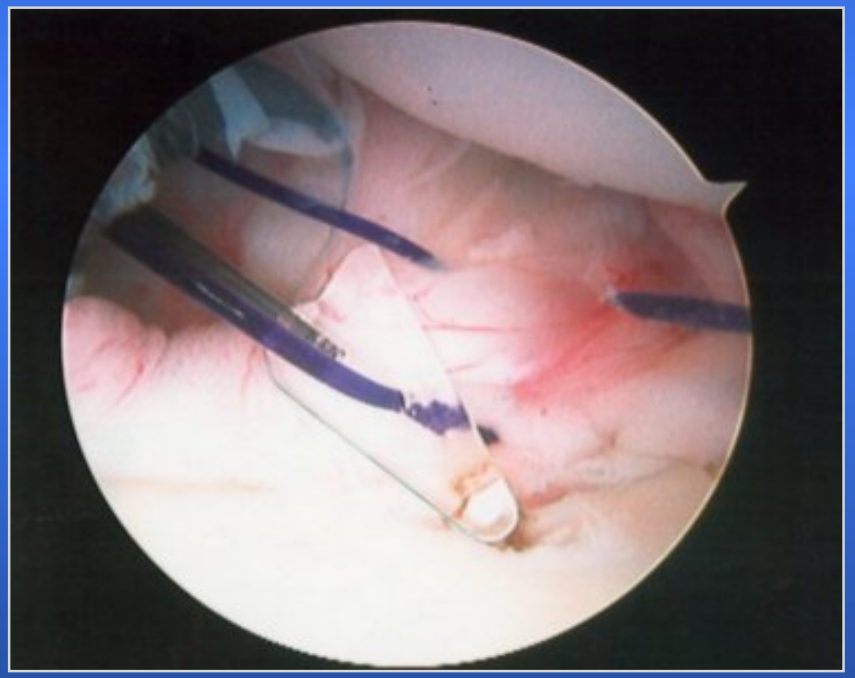
Toujours présente…





Bankart ‘Arthroscopique’

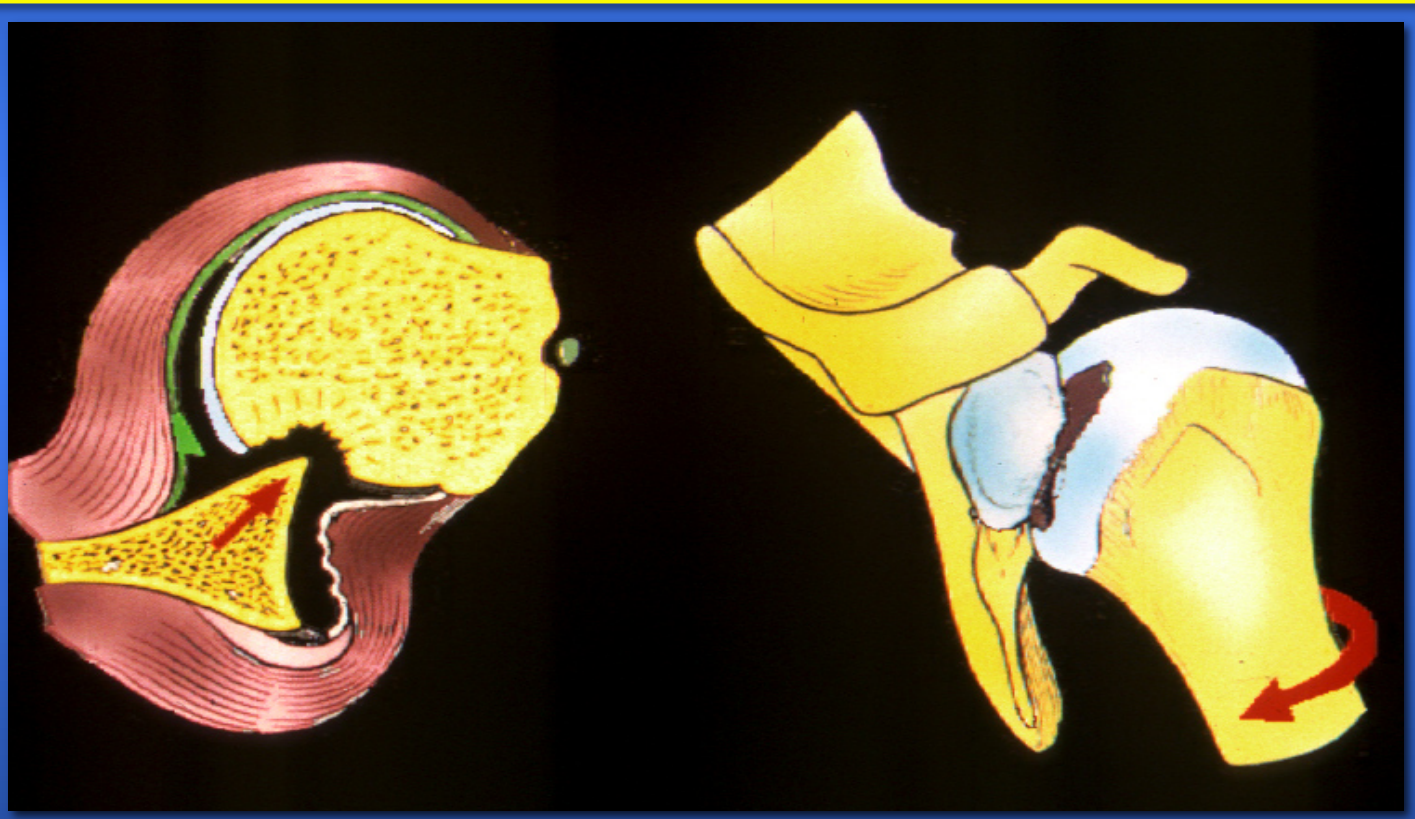




Fracture / Erosion de la Glène

Rattacher le hammac à l'arbre cassé est inutile !

Fracture de Malgaigne ou Lésion de Hill-Sachs



= Fracture-impaction post. de la tête humérale

Lésions associées

Lésions de la coiffe des rotateurs

‘Toute épaule douleureuse et/ou impotente > 4 semaines après luxation = Lésions de la coiffe ?...

‘Toute luxation après 40 ans est un rupture de la coiffe des rotateurs jusqu’à preuve du contraire!....’

TESTING de la STABILITÉ

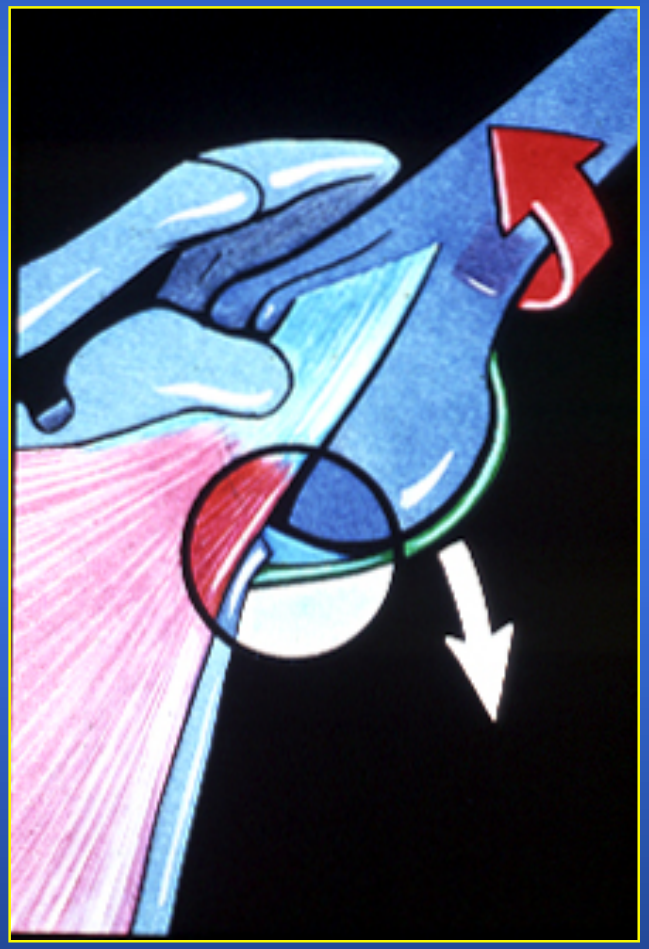
Étape #7

Épaule =

la + mobile

la + instable

des articulations



LE MODE D ’INSTABILITE

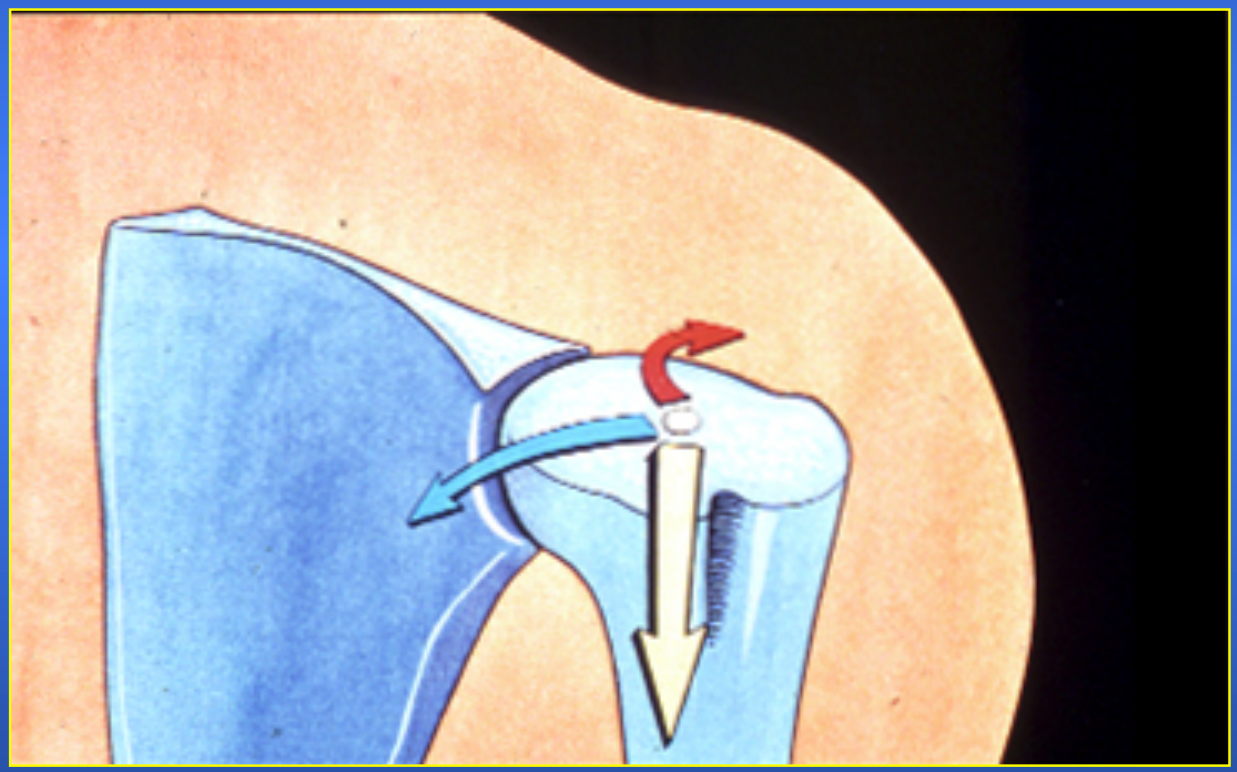
- La Luxation
- La Subluxation
- L ’épaule douloureuse

(Epaule Douloureuse et Instable= ‘EDI’)

DIRECTION INSTABILITÉ

uni ou bidirectionnelle

- ANT
- INF
- POST



… ‘Multidirectionnelle’ = rare!

Signes d'hyperlaxité antérieure

Rotation externe ≥ 85° ++

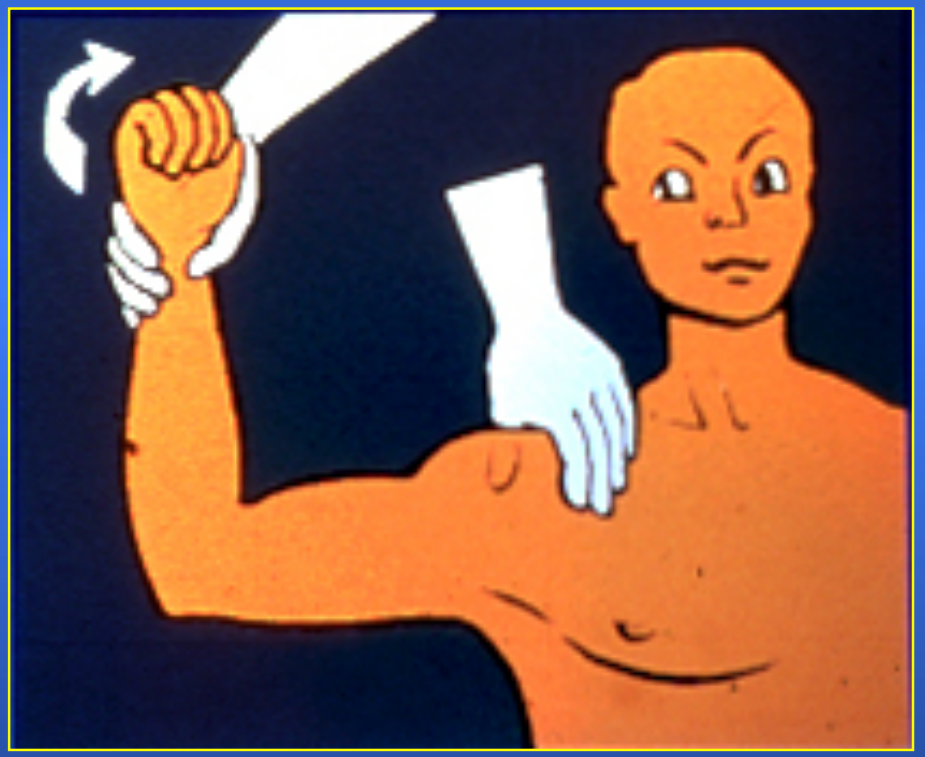
RE1 asymétrique

Hyperlaxité antérieure

Rotation externe ≥ 85° ++

INSTABILITÉ ANTÉRIEURE

Test d'appréhension ANT



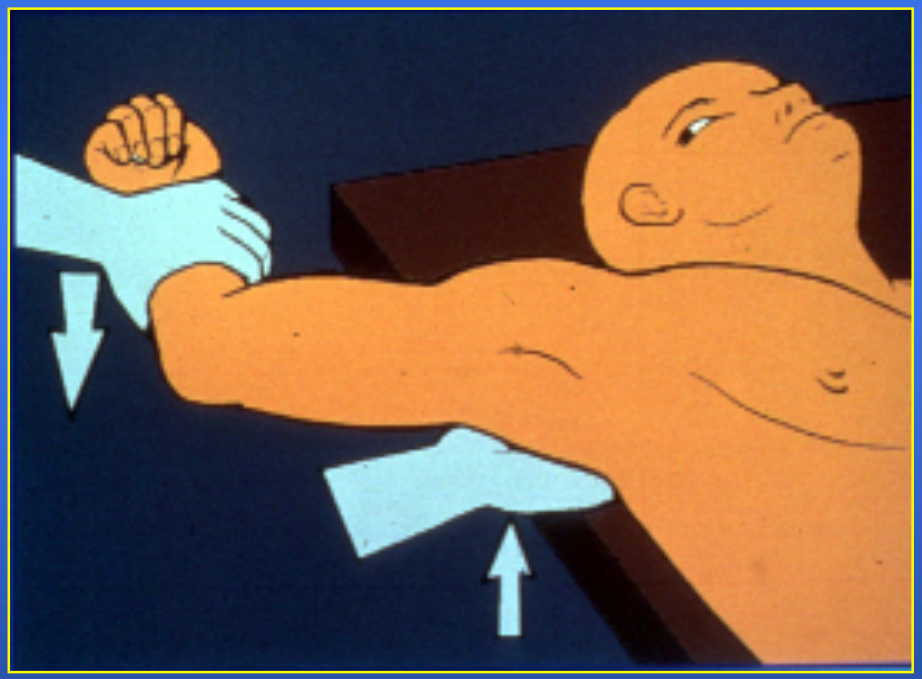
Peur ≠ Douleur

Test d'Appréhension ANT

Peur ≠ Douleur

INSTABILITÉ ANTÉRIEURE

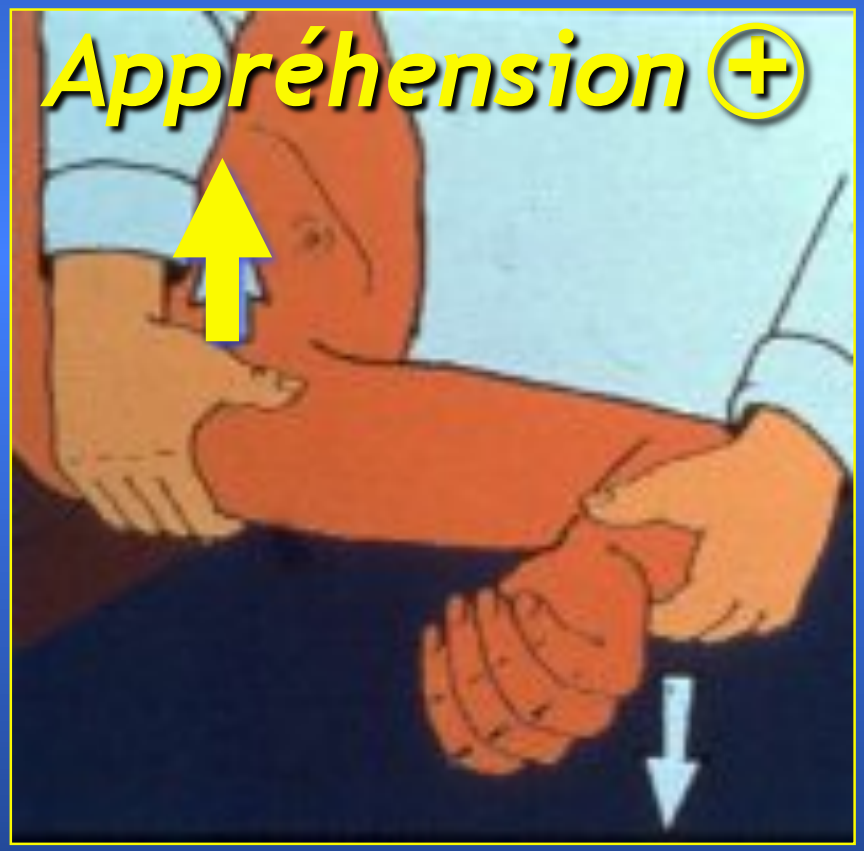
Fulcrum Test



= appréhension +

Test de recentrage

‘RELOCATION TEST’ de JOBE



Test de Recentrage

Appréhension = Signe d'instabilité antérieure

Push-Pull test

Recherche d'un tiroir Ant ou Post excessif / douleurs

Confirme la nature intra-articulaire des douleurs

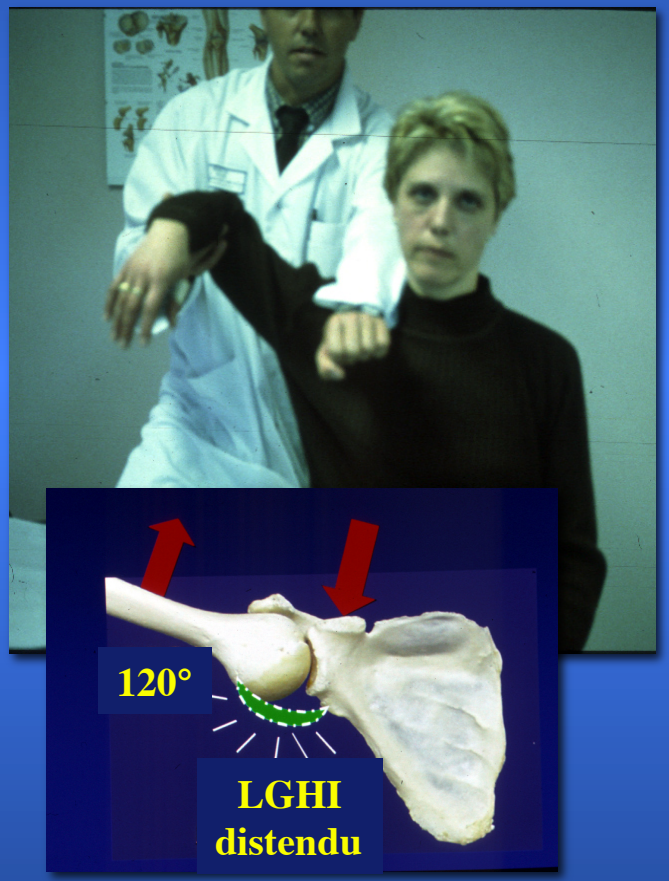
INSTABILITÉ POSTÉRIEURE

Appréhension Post

INSTABILITÉ INFÉRIEURE

Test d' Hyperabduction (Gagey)

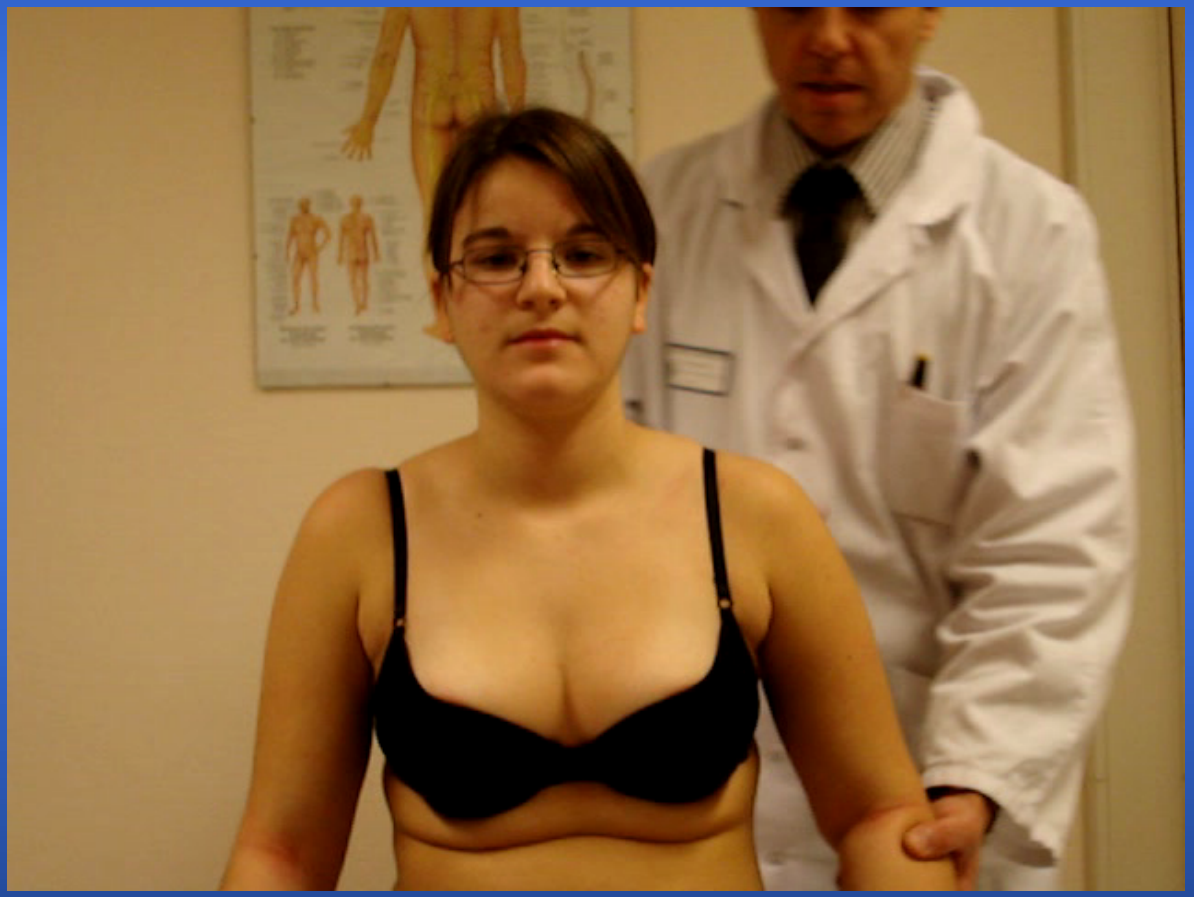
Test d'Hyperabduction (Gagey)

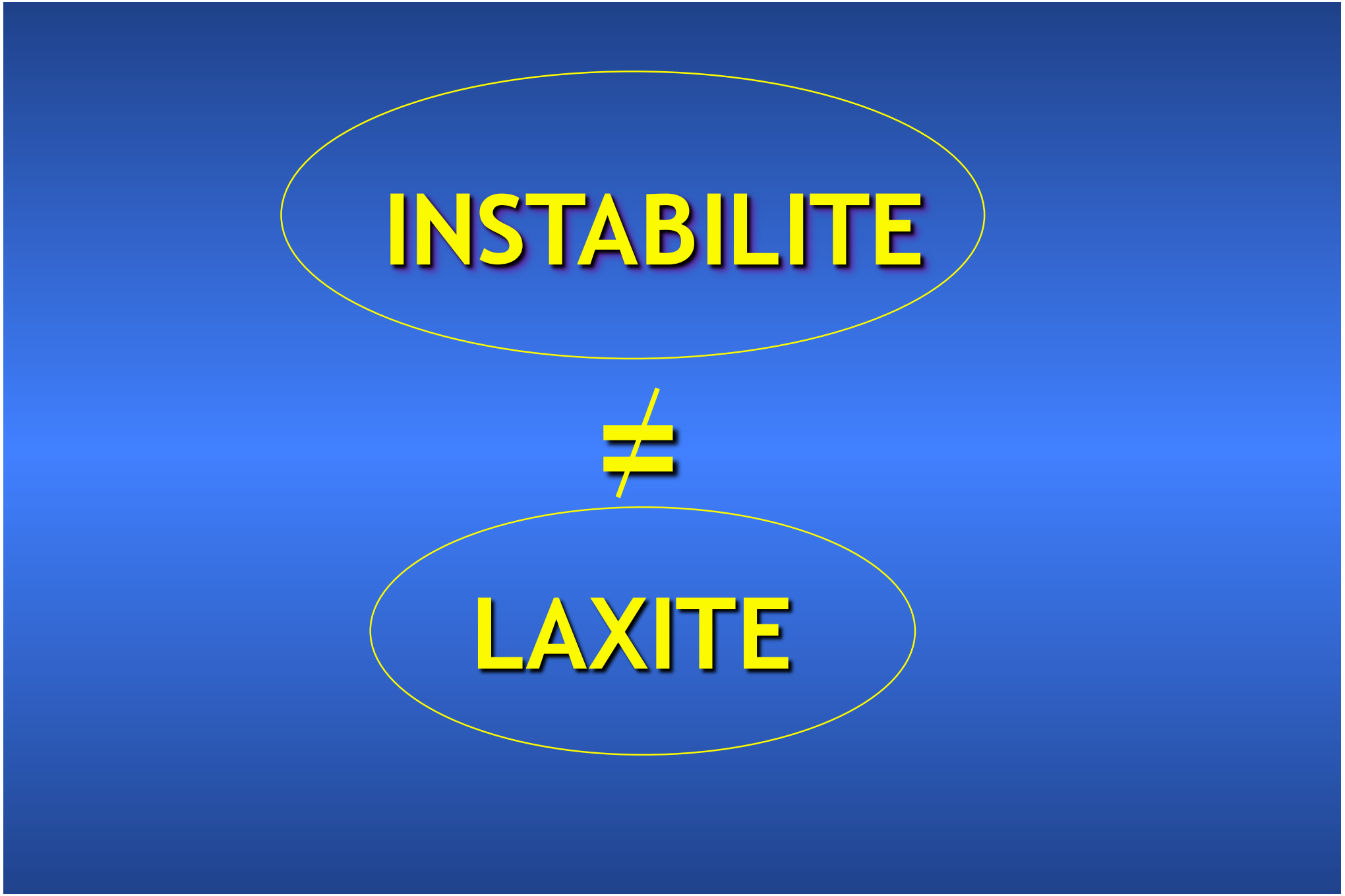


Différentiel > 20° ou Appréhension
= Distension capsulaire INF.+++

Boileau, SOFCOT 1999

Test d'HyperAbduction



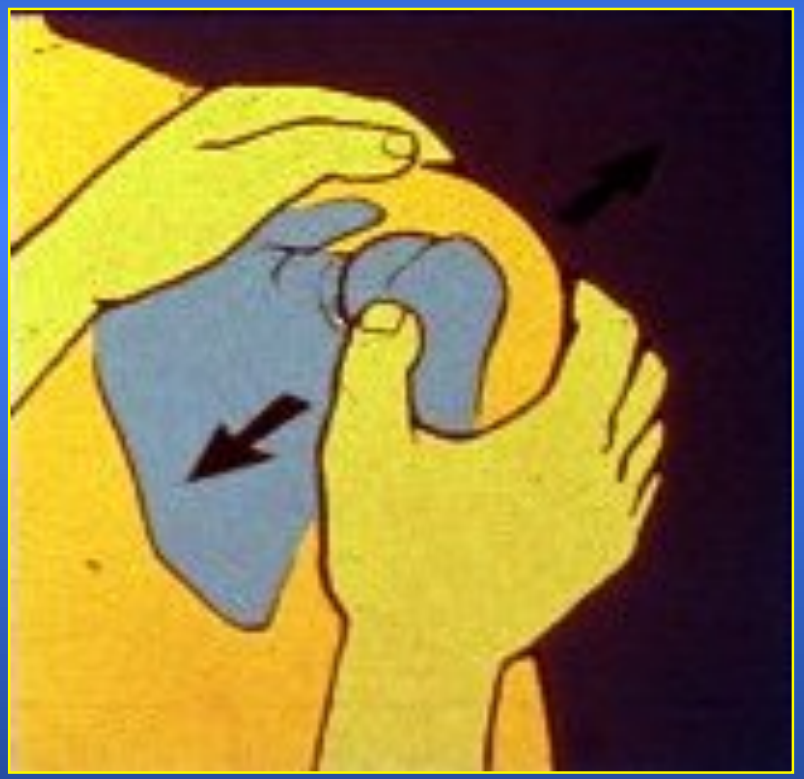

INSTABILITE
≠
LAXITE

HYPERLAXITÉ

Augmentation RE > 90°

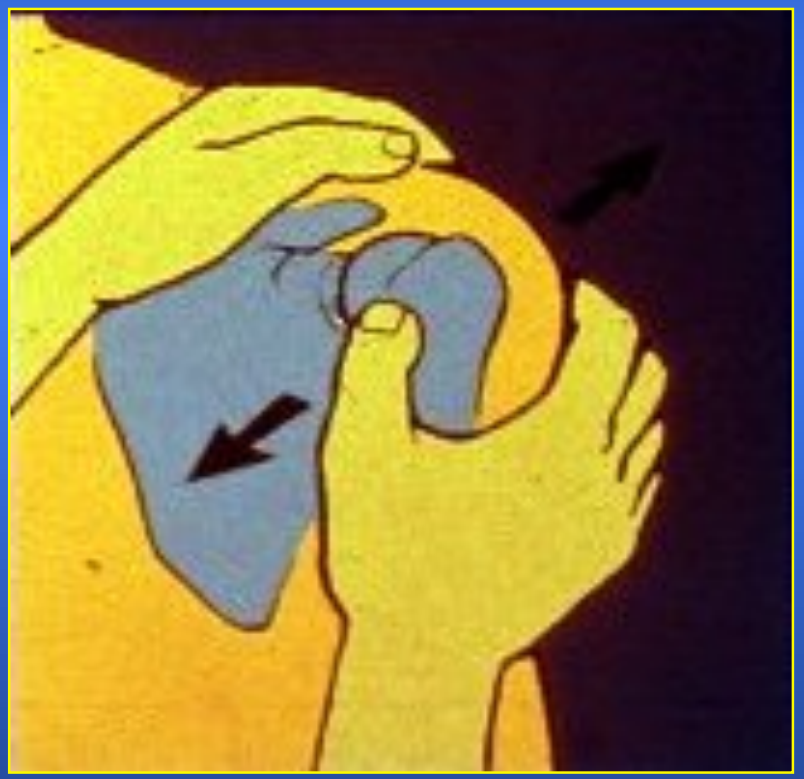
Laxité antéro-postérieure

Tiroirs ANT et POST



Laxité antéro-postérieure

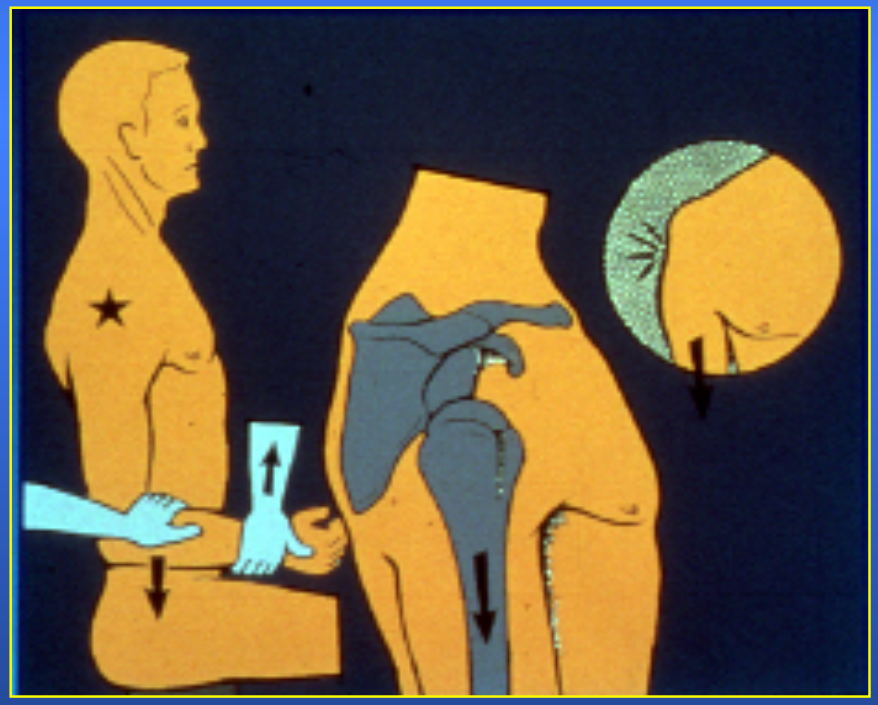
Tiroirs ANT et POST

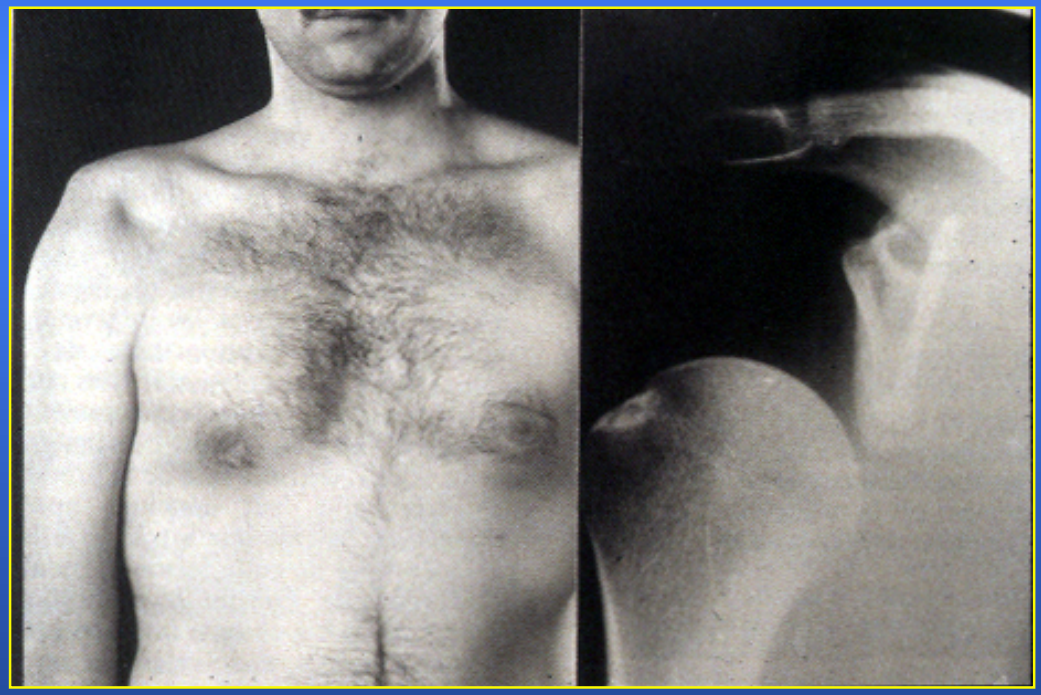


Tiroirs ANT et POST en position couchée

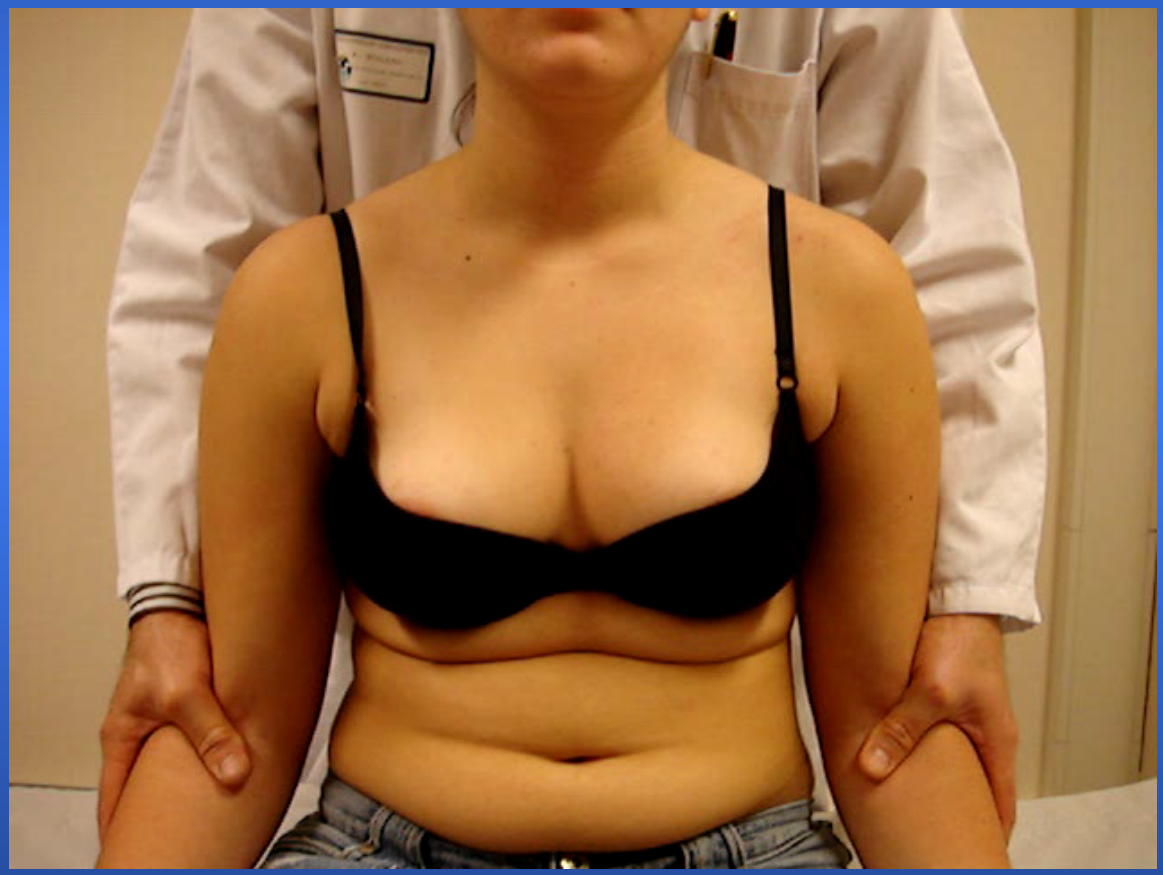
Laxité inférieure

Tiroir INF **('SULCUS TEST')**

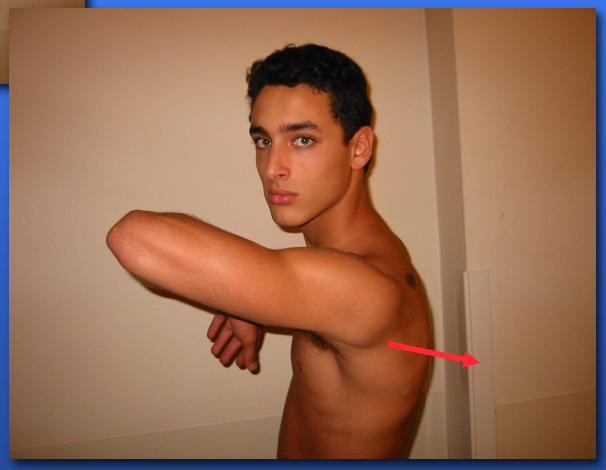




Tiroir INF ('SULCUS TEST')



INSTABILITÉ VOLONTAIRE



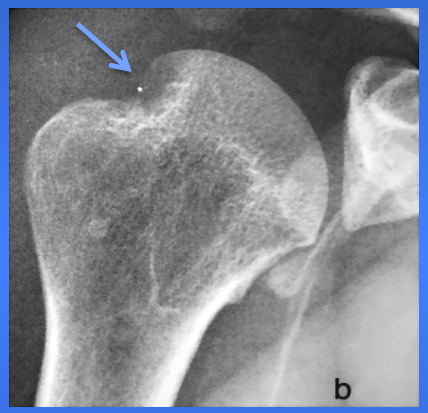
Subluxation Ant. Volontaire

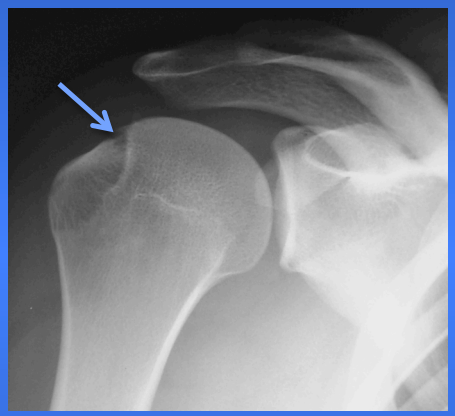
Subluxation Post. Volontaire

INSTABILITÉ ANTERIEURE

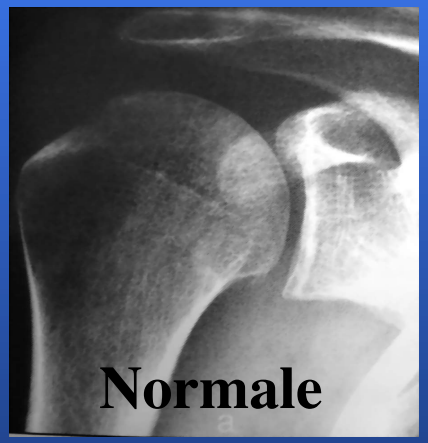
Recherche des lésions osseuses

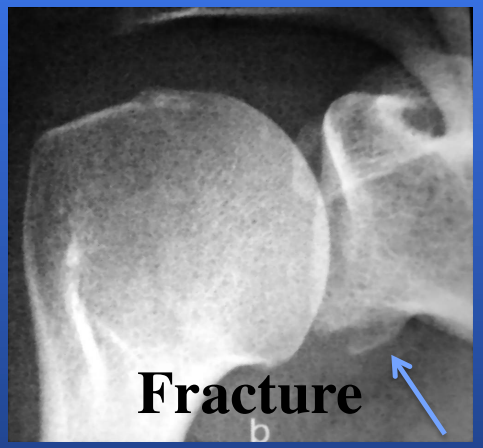
Lésion humérale (Hill-Sachs ou Malgaigne)

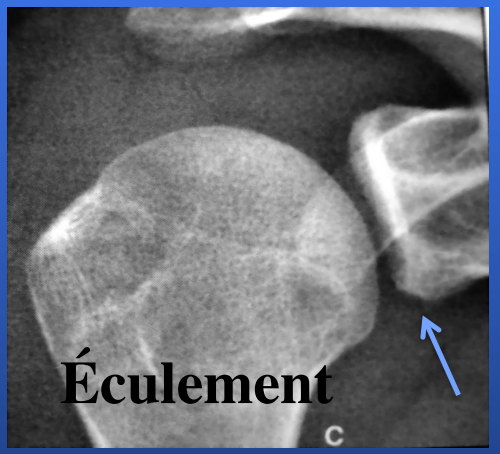




Lésion de la glène







Radiographies Instabilité

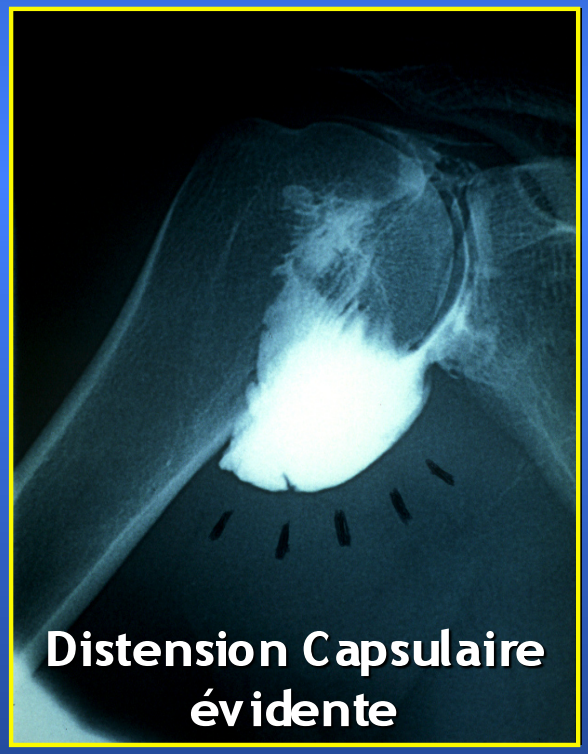
Face en RI

Encoche de Hill-Sachs

Bernageau / Garth

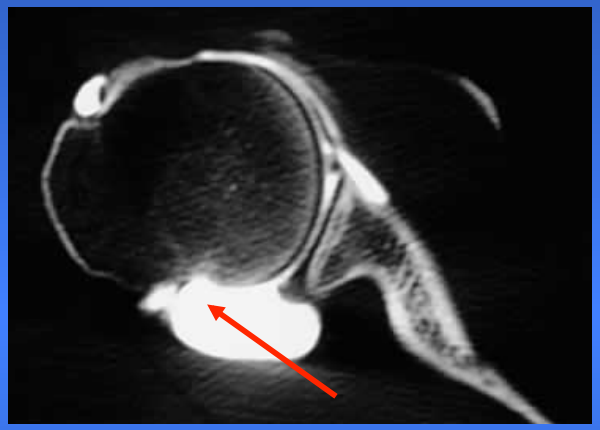
Fracture de Glène
ou Éculement

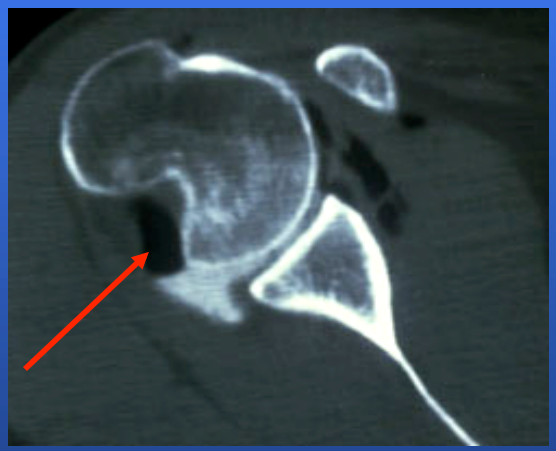
Arthro-Scanner (Instabilité)



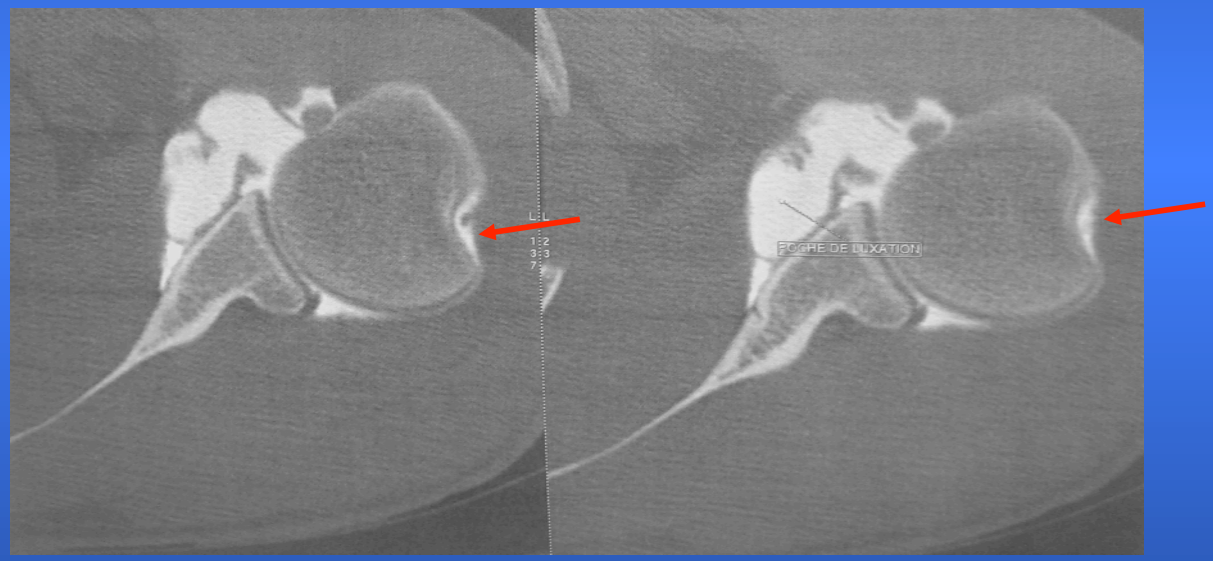
Distension Capsulaire évidente

Arthro-Scanner (Instabilité)





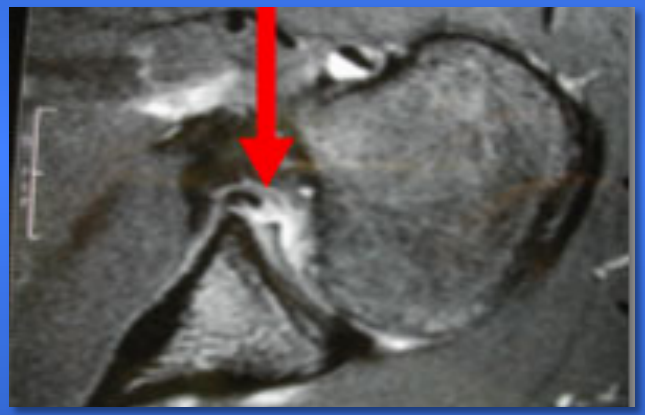
Lésion de Hill-Sachs

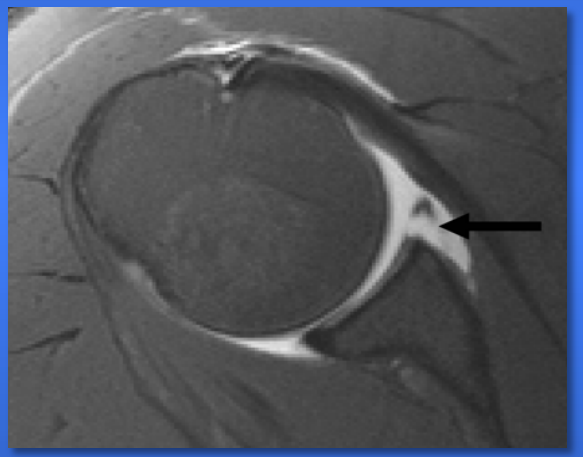


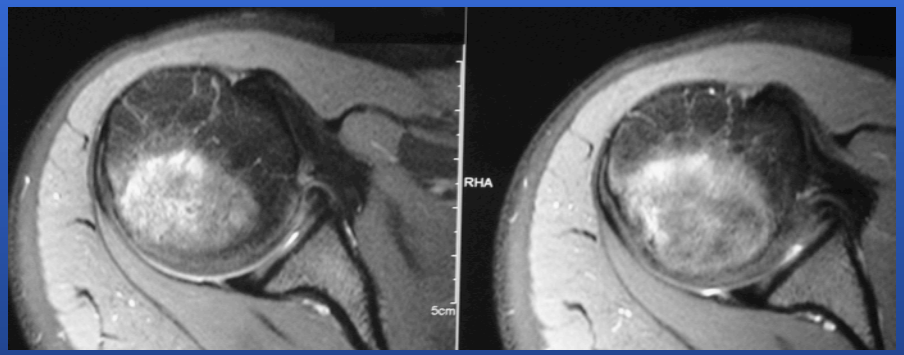
IRM ou Arthro-IRM (Instabilité)

Moins bon pour les lésions osseuses

Lésions de Bankart ++





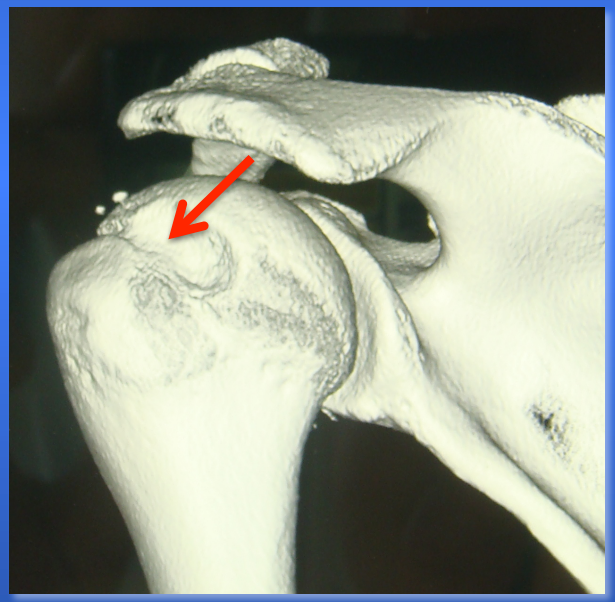


‘Bone bruise’ = œdème

= équivalent d’une lésion de passage

Scanner ‘3D’ (Instabilité)

Bilan des lésions osseuses:

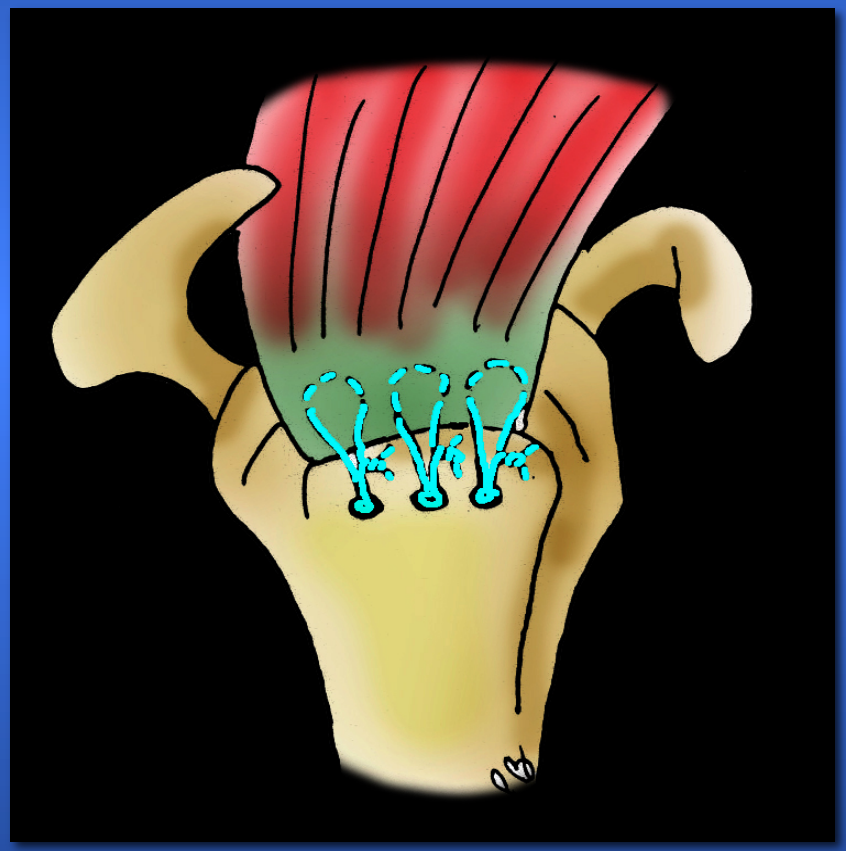


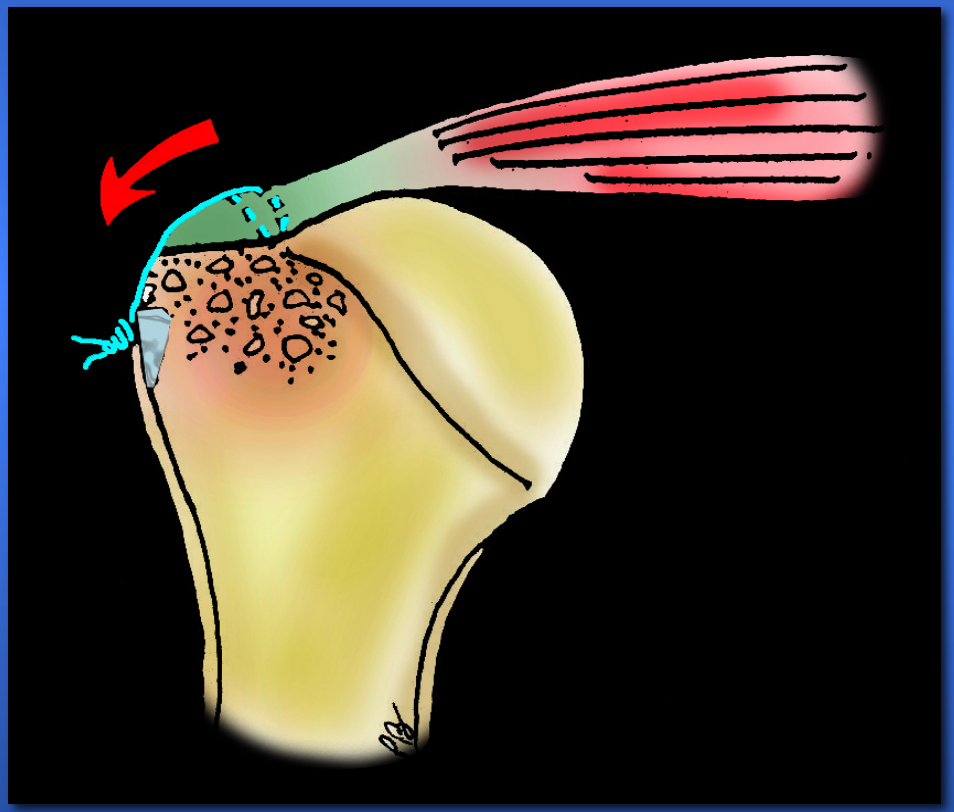
Lésion de Hill-Sachs

Fracture / éculement de la glène

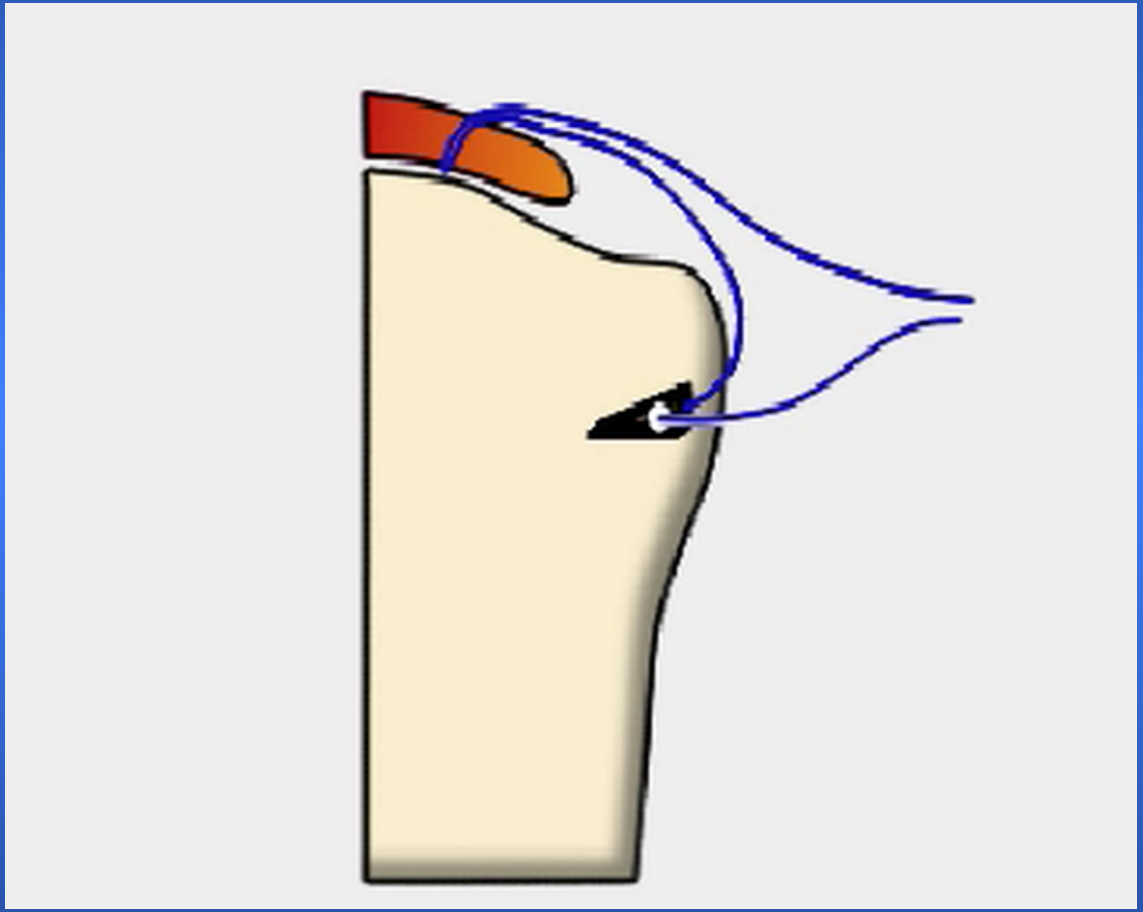
Quelques Interventions Chirurgicales…

Haubannage de la Coiffe

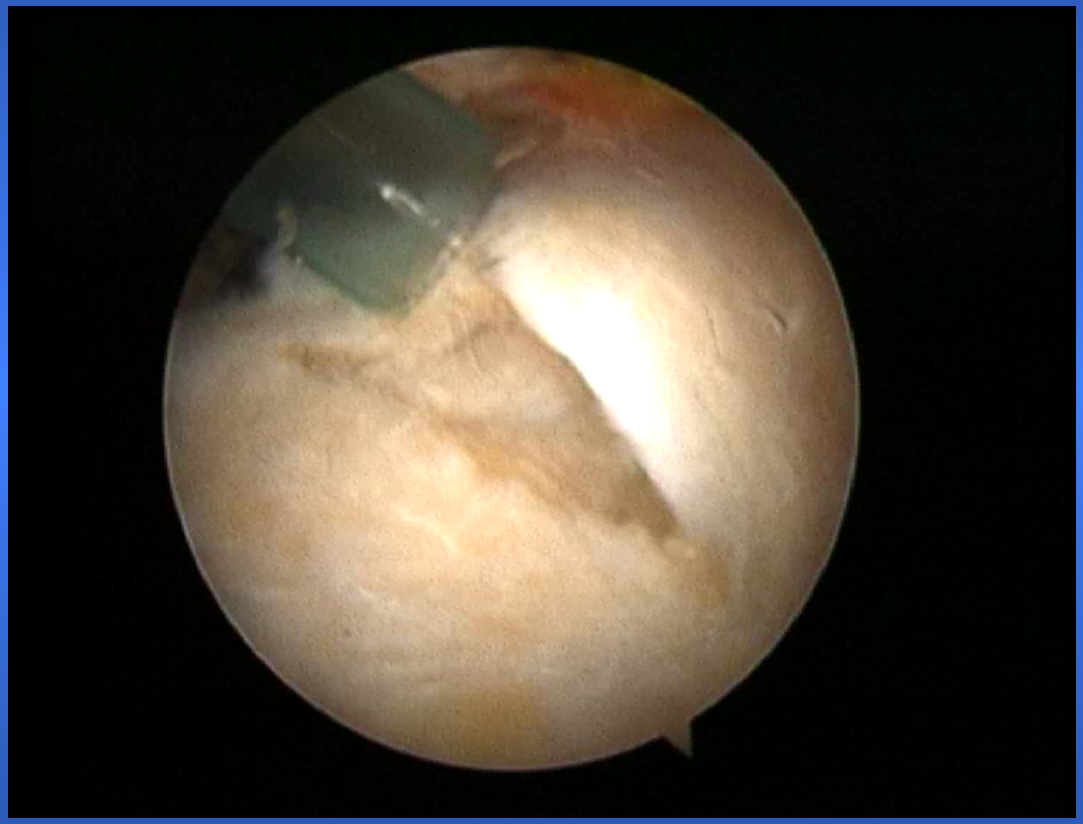




Réparation de la Coiffe des Rotateurs

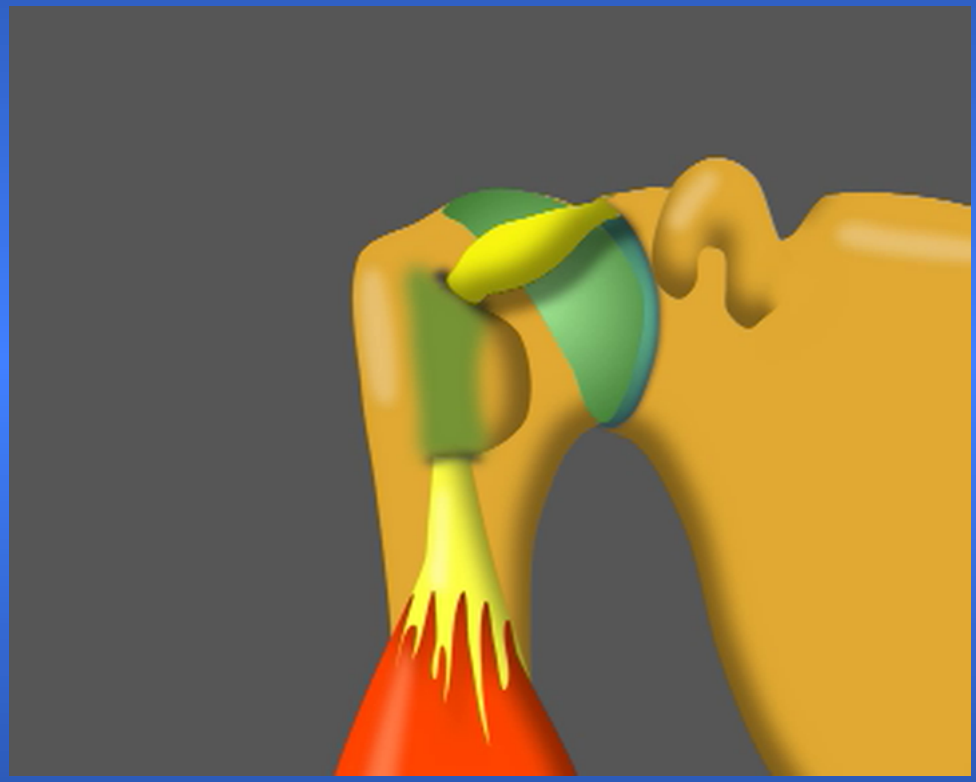


Réparation Arthroscopique de la Coiffe des Rotateurs



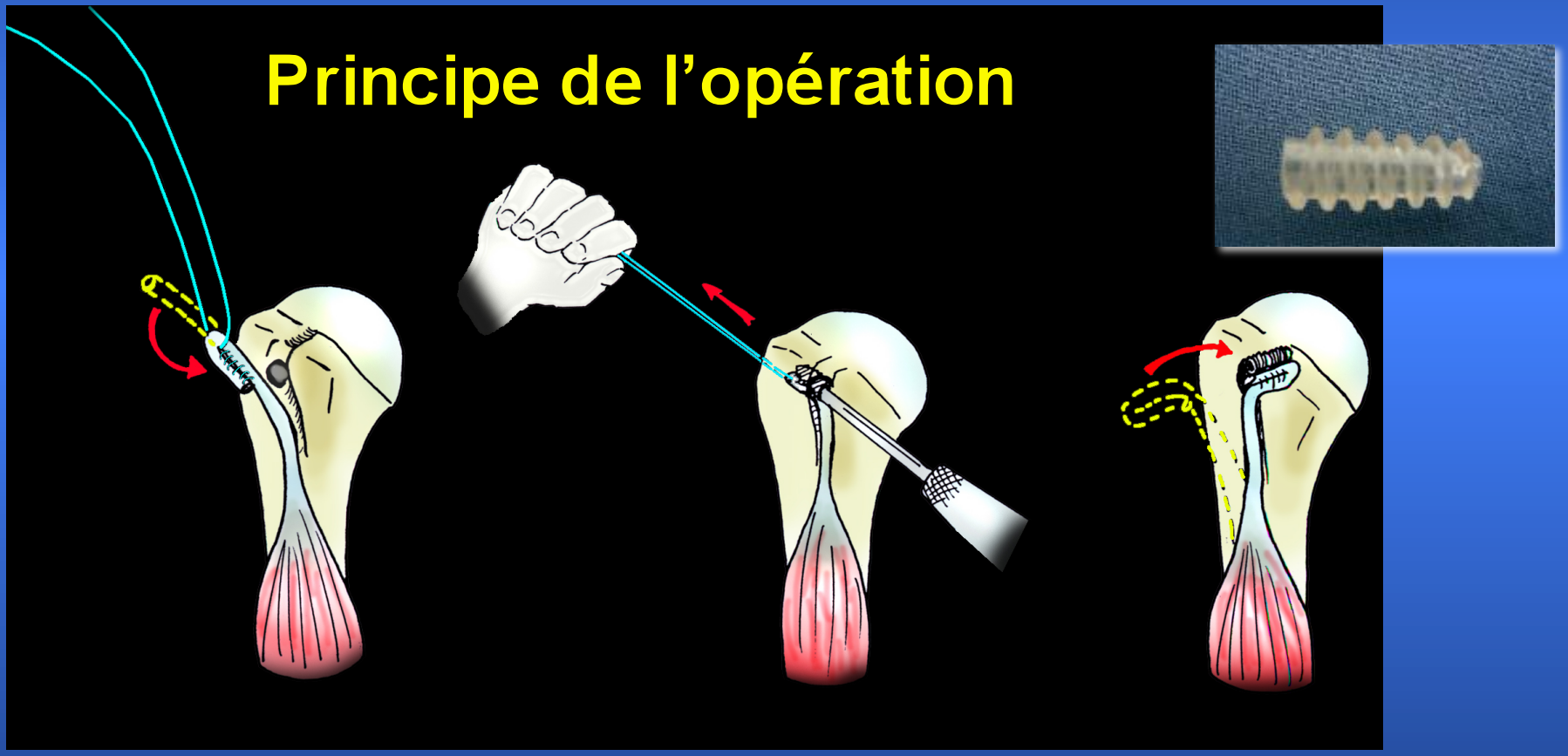
Réinsertion tendineuse trans-osseuse
+/- sutures latéro-latérales

Long Biceps en ‘Sablier’

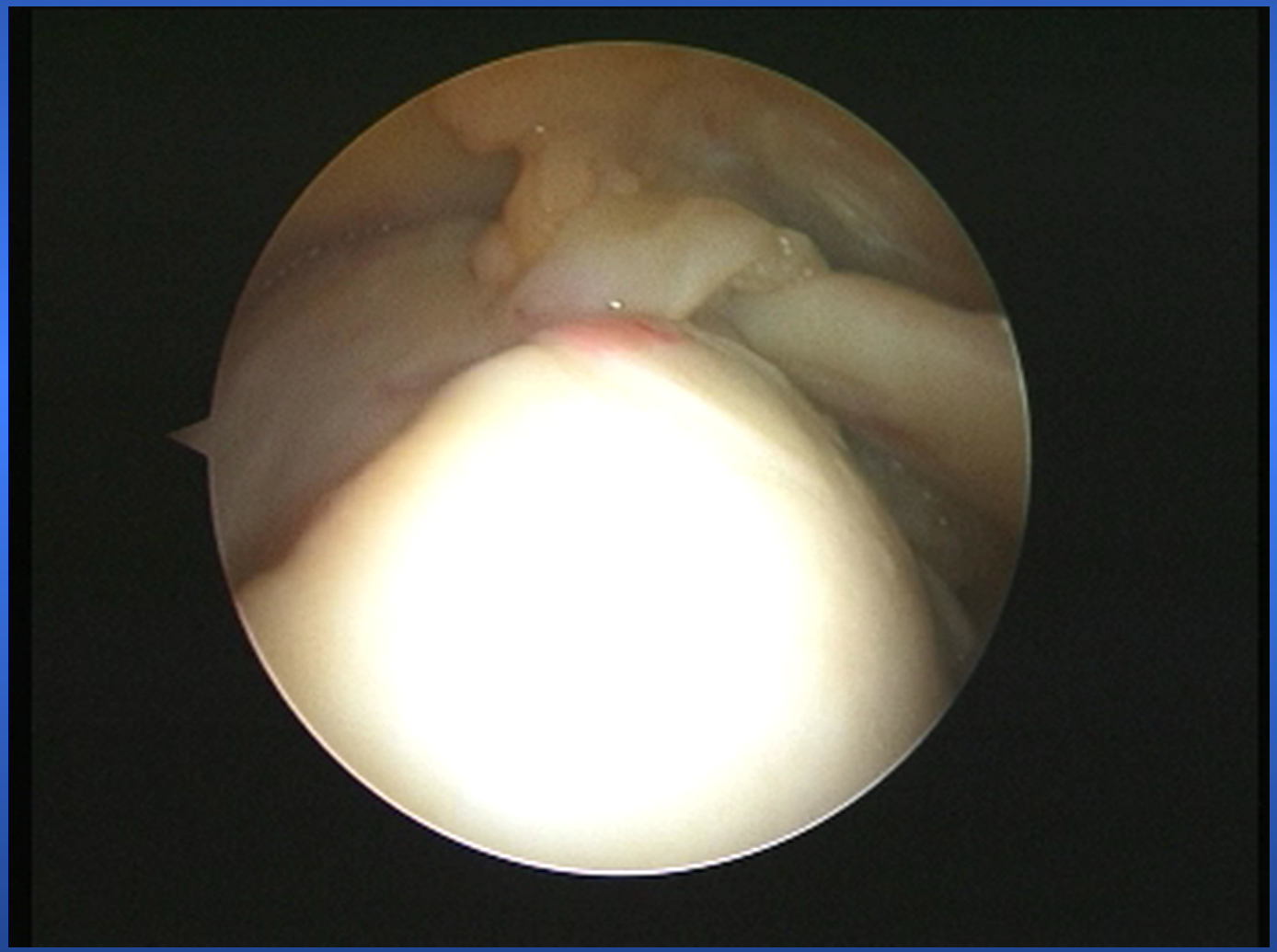


Boileau et Coll. RCO 2004

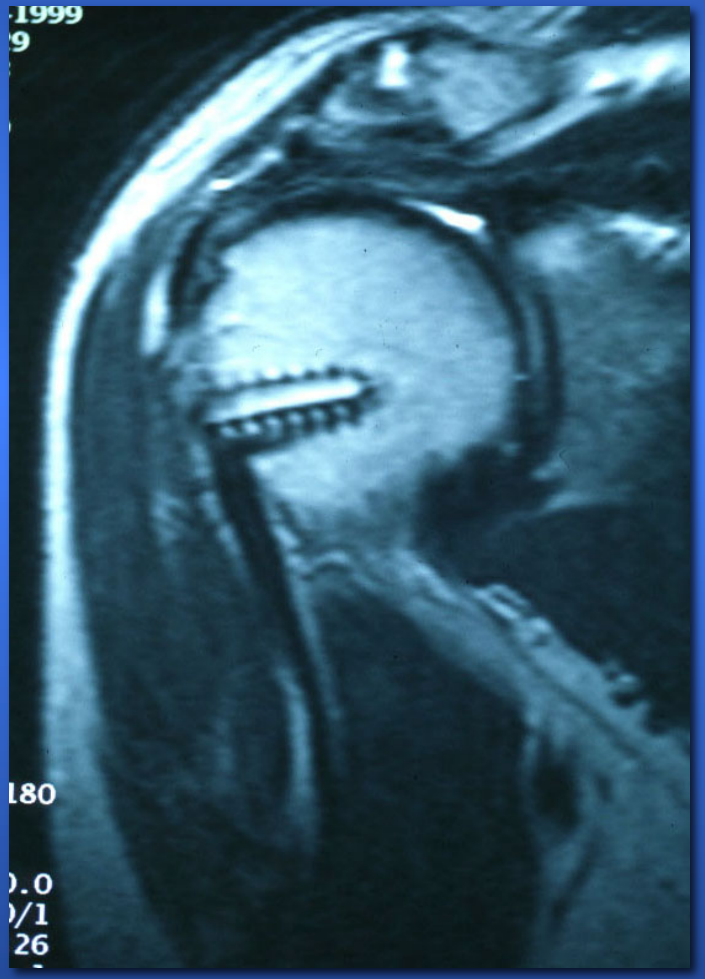
Ténodèse @ du Long Biceps



Ténodèse Arthroscopique du LB



Ténodèse Arthroscopique du LB



Stabilisation Arthroscopique de l'épaule

Butée + Bankart s/ @

SYNTHESE

- Epaule Douloureuse
- Impotence Fonctionnelle
- Épaule Pseudo-paralytique

- Instabilité

- Raideur

Examen Clinique de l'Épaule

7 Étapes

I- Inspection

II- Palpation

III- Ex Rachis Cervical / Neuro-musculaire

IV- Mobilité Active et Passive

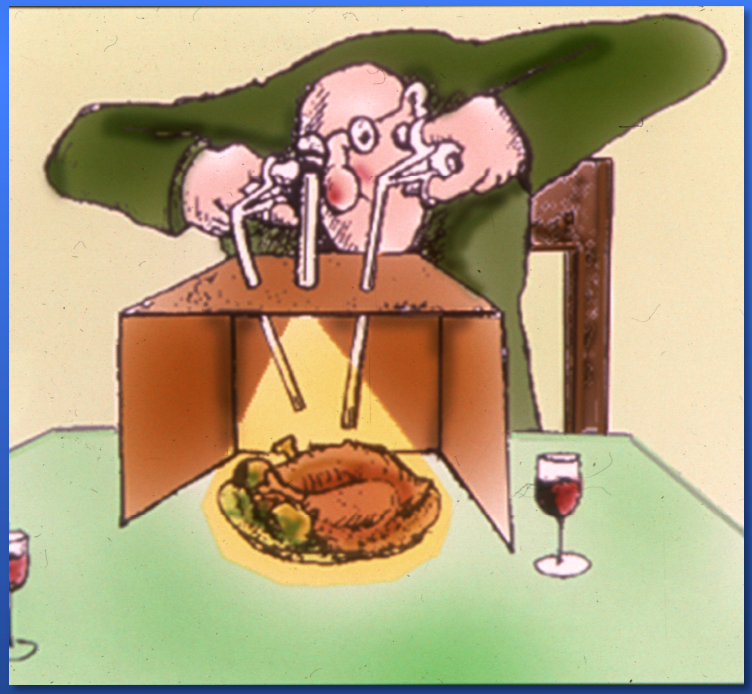
V- Signes de Conflit

VI- Testing de la Coiffe + LB

VII- Testing de la Stabilité

La Chirurgie Arthroscopique

… a transformé
le diagnostic & le traitement
des pathologies de l'épaule

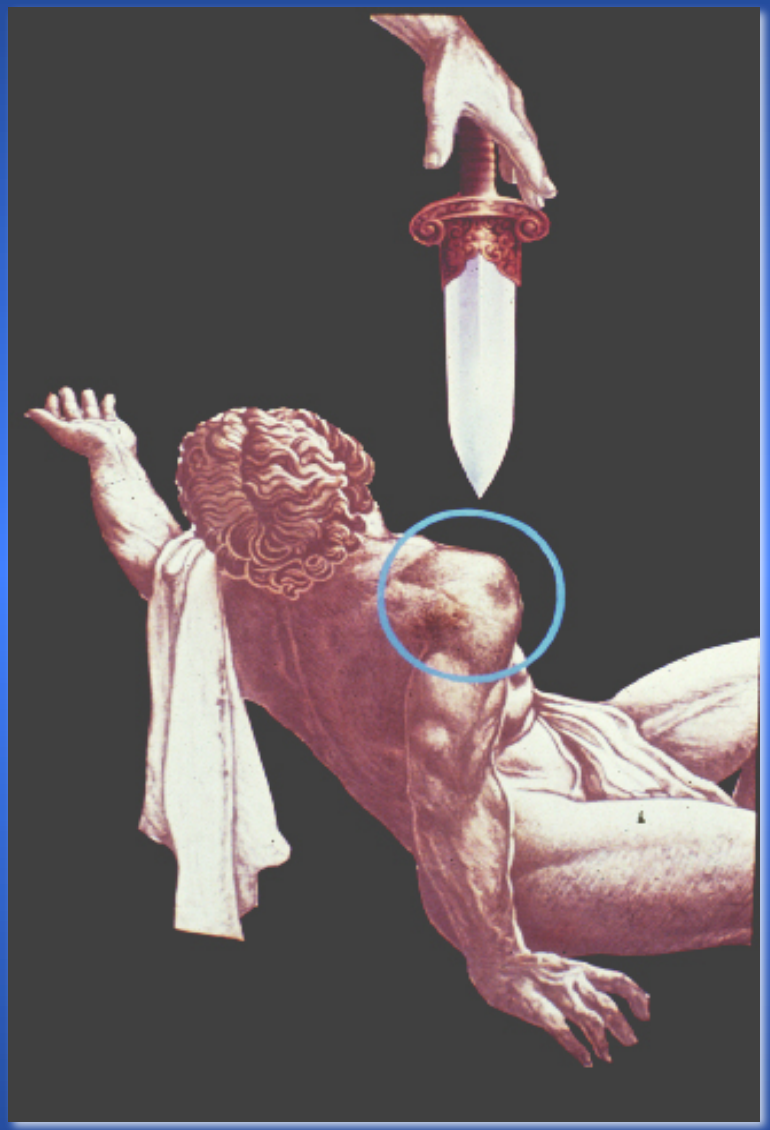


Merci de votre attention!…

Orthopaedic Dpt, Archet Hospital

Medical University of Nice, France

boileau.p@chu-nice.fr



Merci
de votre attention !...


Ford