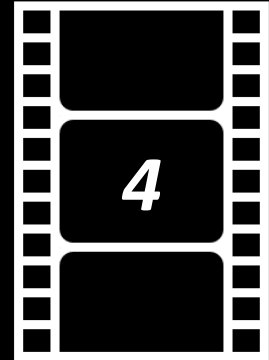
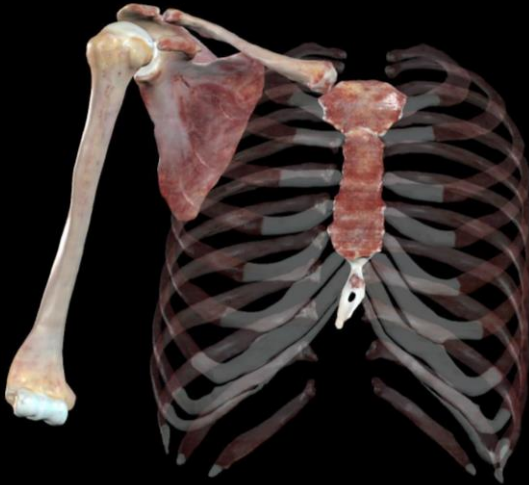


1

Gerber
Hawkins
Coiffe
Conflit
SLAP
Jobe
Clairon
Bourse
Neer
Yocum
Patte
Tendinopathie

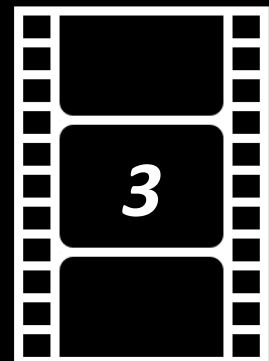
2

Combien d'os?



3

Combien d'articulations?

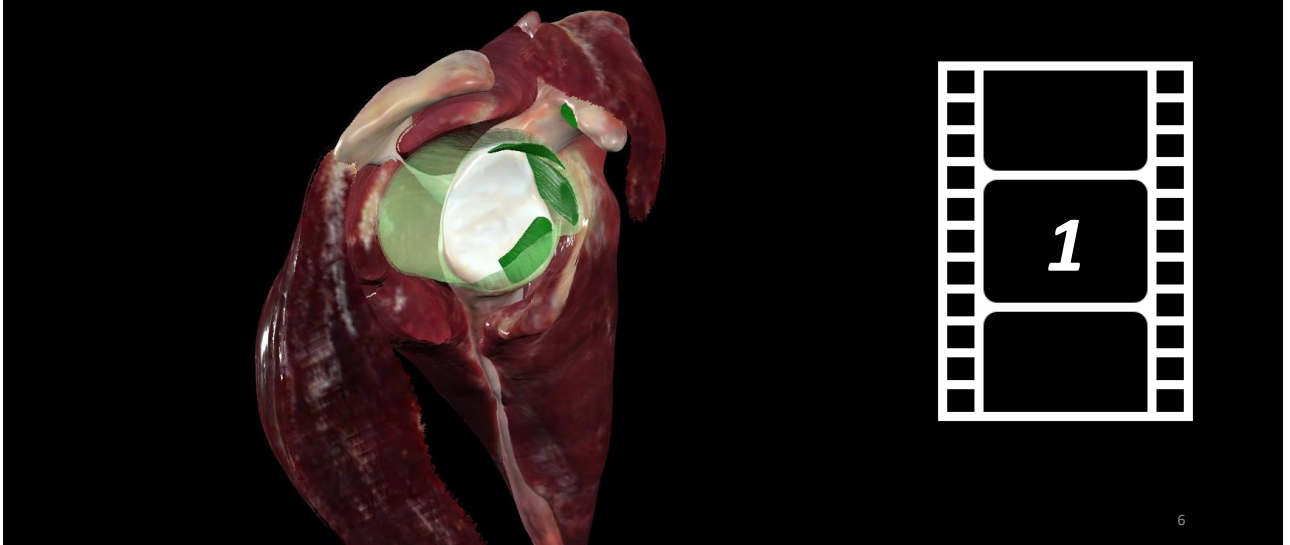


4

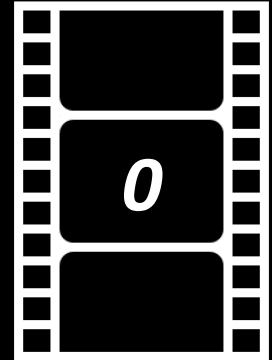
Combien de plans de glissement?



Combien d'éléments de stabilité scapulo-humérale inférieure?



Combien de signes cliniques avec une sensibilité proche de 100%?



7

L'épaule

De l'Anatomie à la pathologie

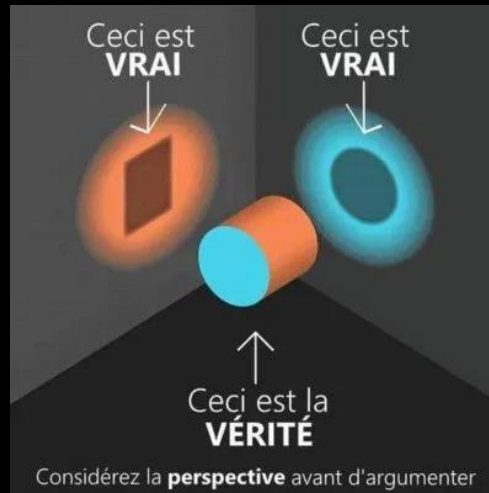
Grégoire PRUM

Anatomie

Médecine Physique et Réadaptation - Médecine du Sport

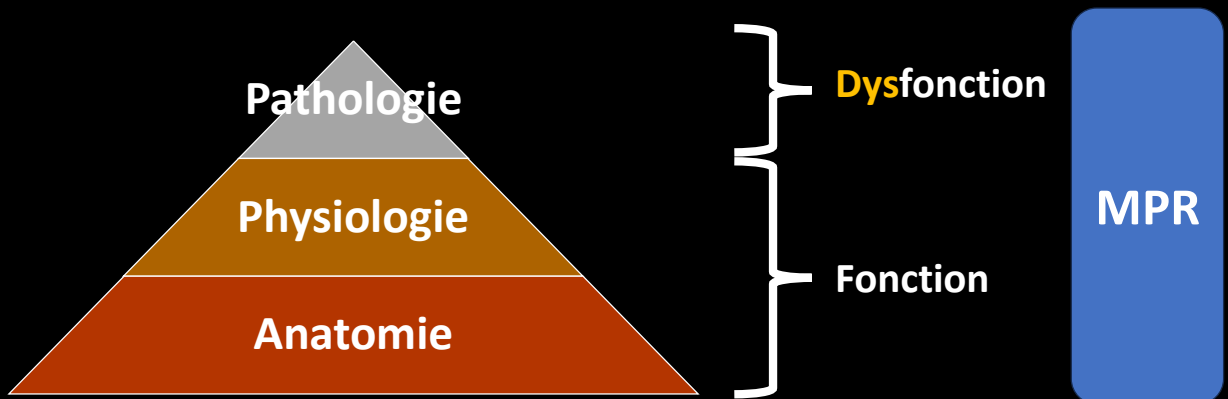
UFR Médecine Rouen

Généralités

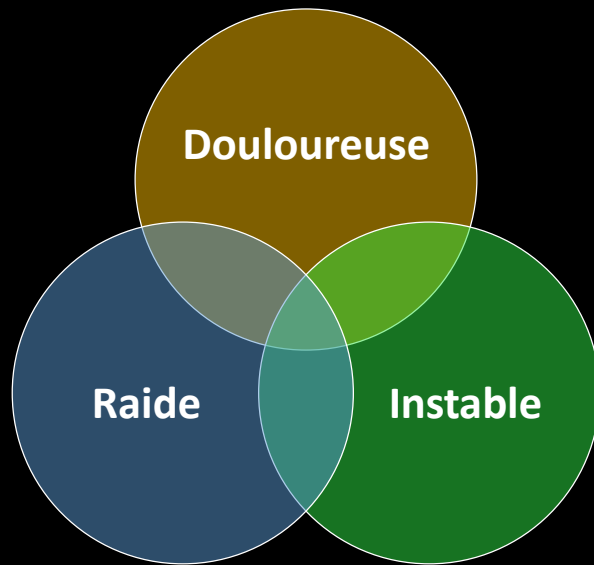


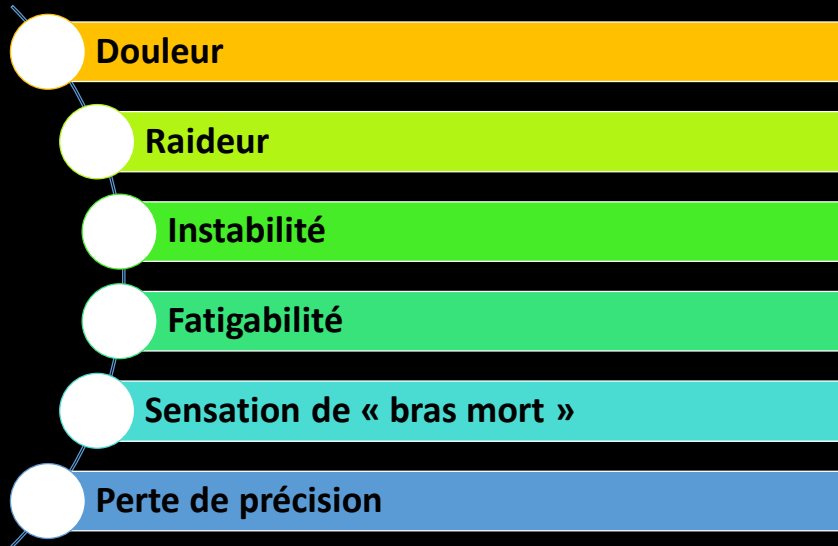
9

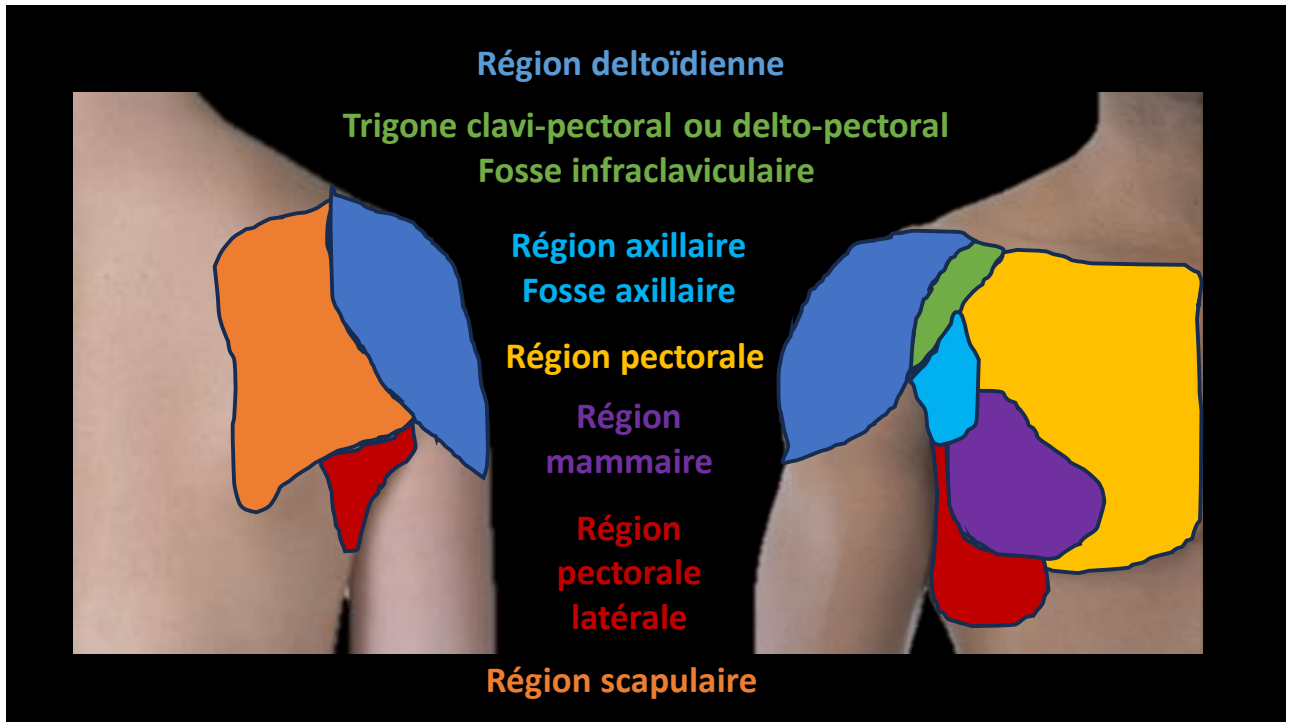
Généralités



10



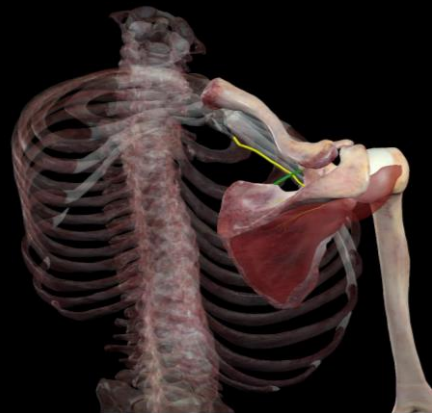




Amyotrophie



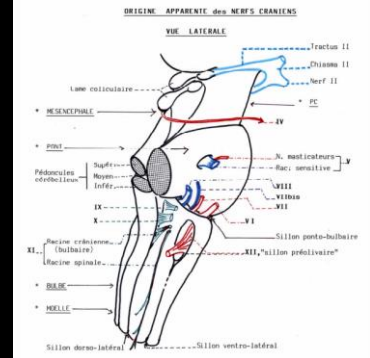
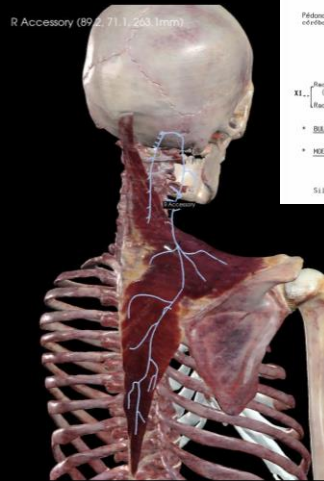
Nerf supra-scapulaire C5-C6



Amyotrophie



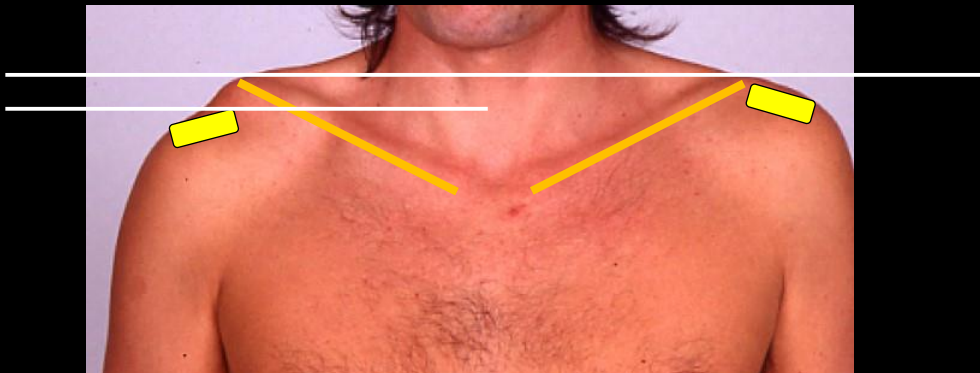
Nerf accessoire XI



<https://www.kineakine.com/post/le-syndrome-de-parsonage-et-turner-ou-n%C3%A9vralgie-amyotrophiante-p-seror>

17

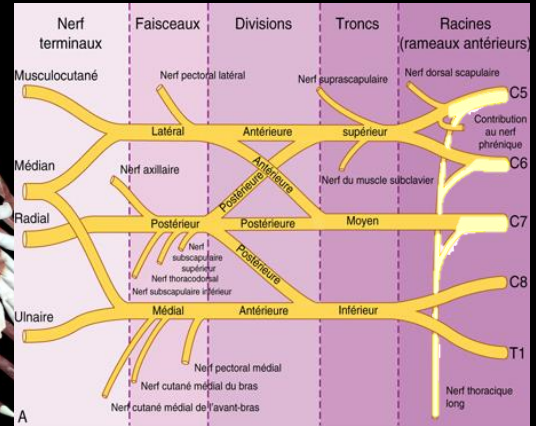
Déformation



<https://www.groupe-epaule-nantes-atlantique.fr/pathologies/luxation-acromio-claviculaire/>

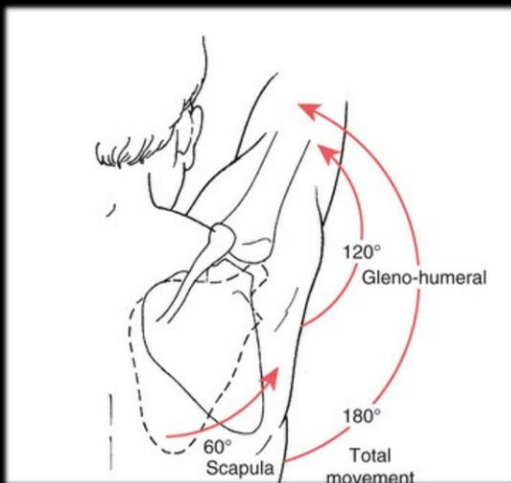
18

Ecchymose – Hématome – Tuméfaction – Déformation

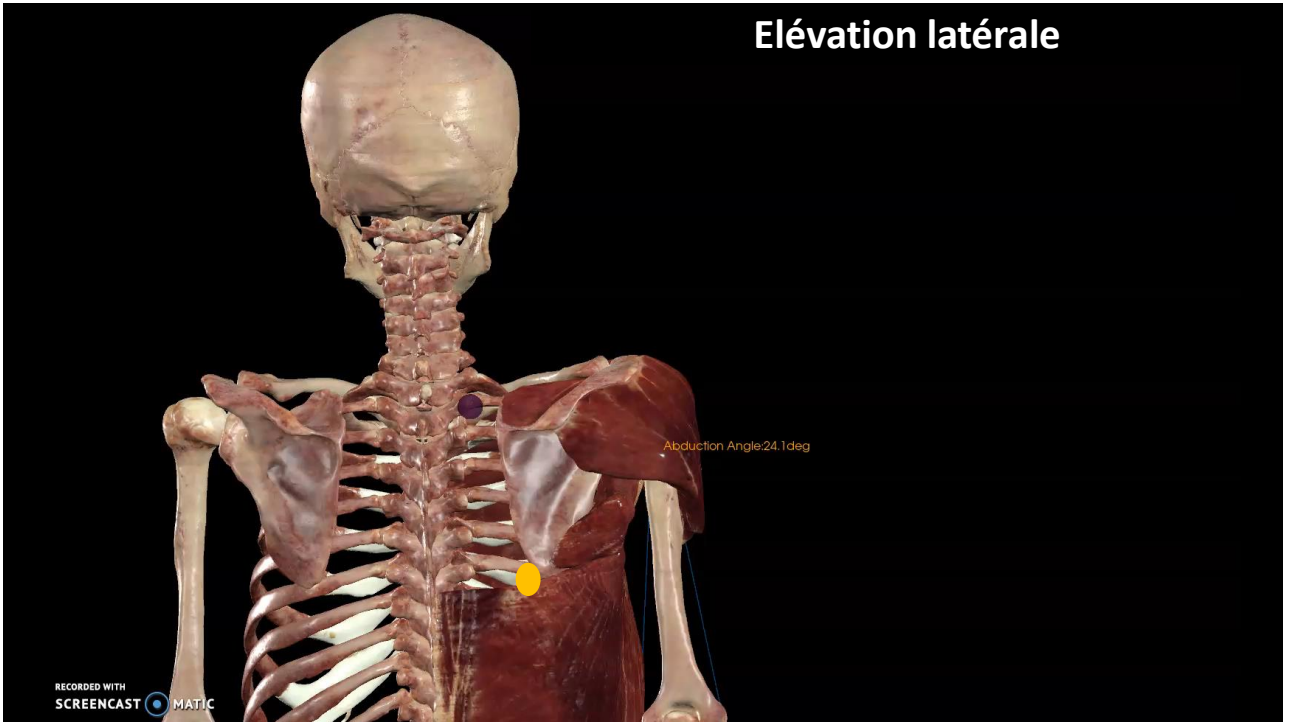


Nguyen, Christelle, et al. « Scapula alata dynamique d'origine neuromusculaire : diagnostic clinique, électromyographique et à l'imagerie par résonance magnétique ». *La Presse Médicale*, vol. 44, n° 12, décembre 2015, p. 1256-65. DOI.org (Crossref), <https://doi.org/10.1016/j.lpm.2015.08.006>.

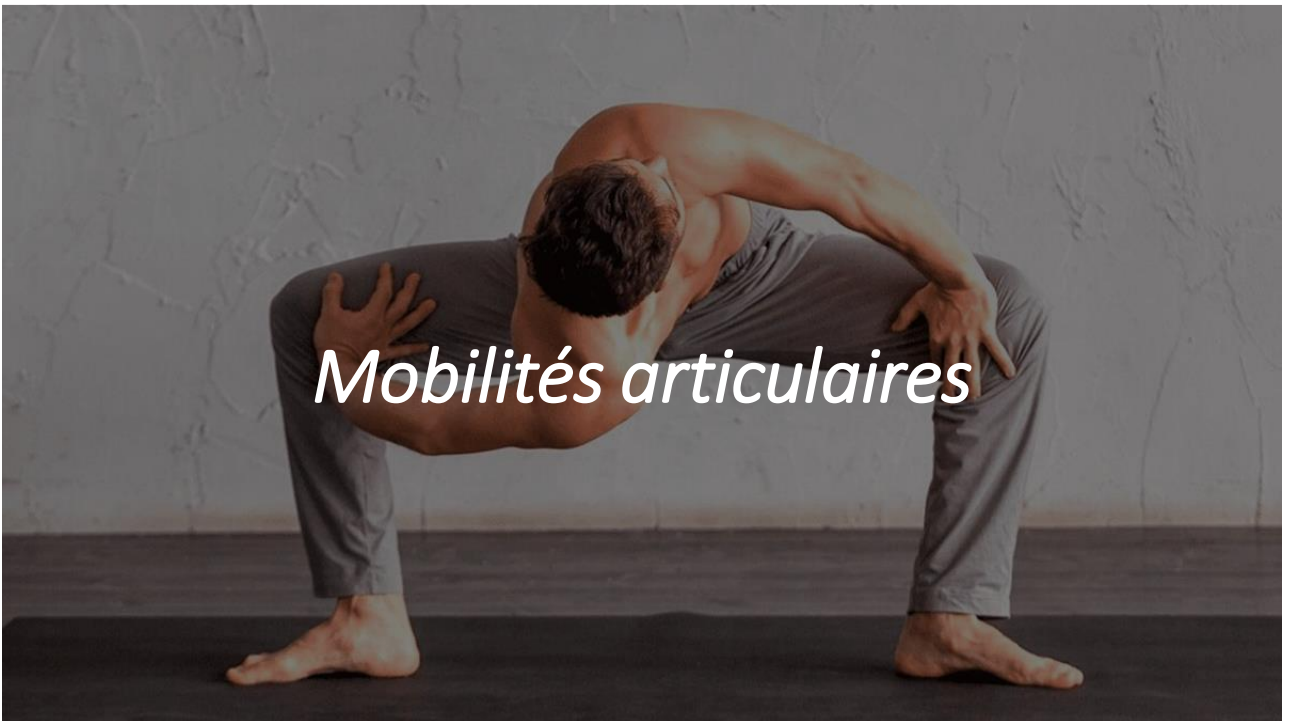
Rythme scapulaire



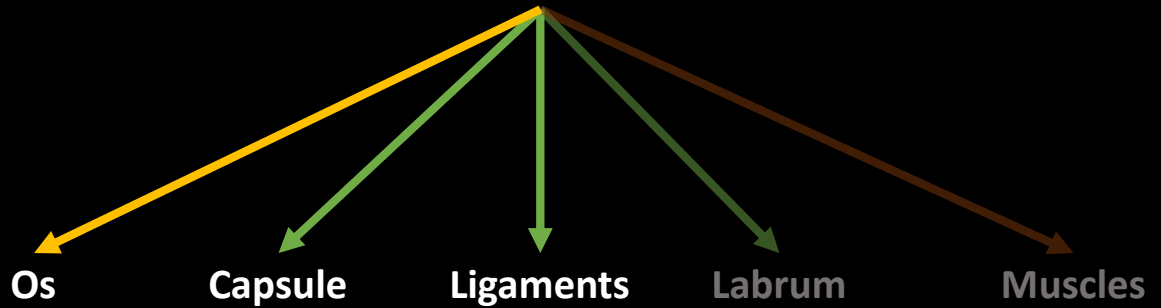
Elévation latérale



Mobilités articulaires



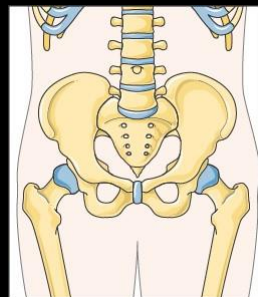
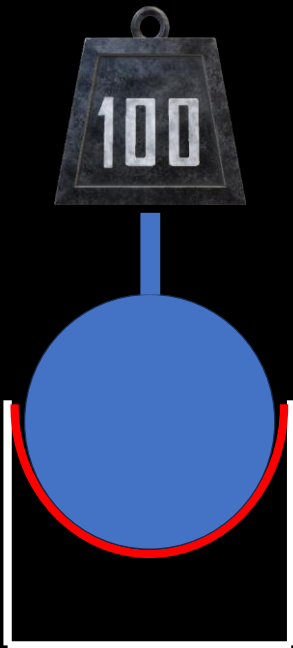
Examen des éléments de **stabilité passive**

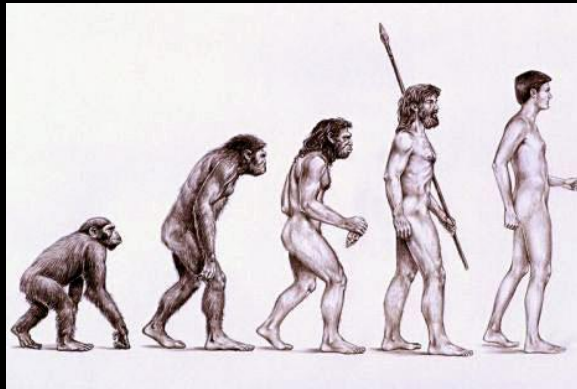


Bilatéral et comparatif

Stabilité

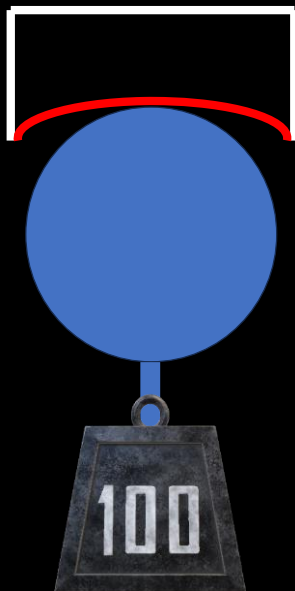
Articulation coxo-fémorale



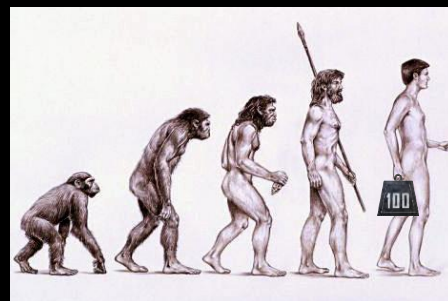


Membre antérieur → Membre supérieur
Préhension

25



Articulation **instable**

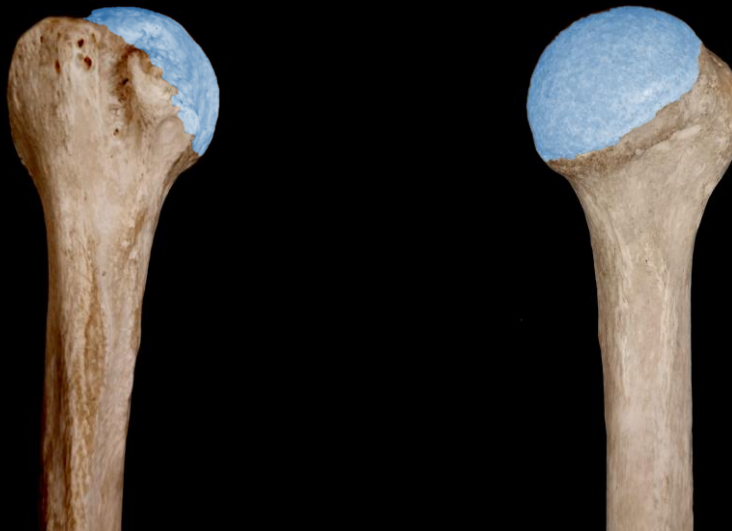


26

Articulation scapulo-humérale

27

Surfaces articulaires

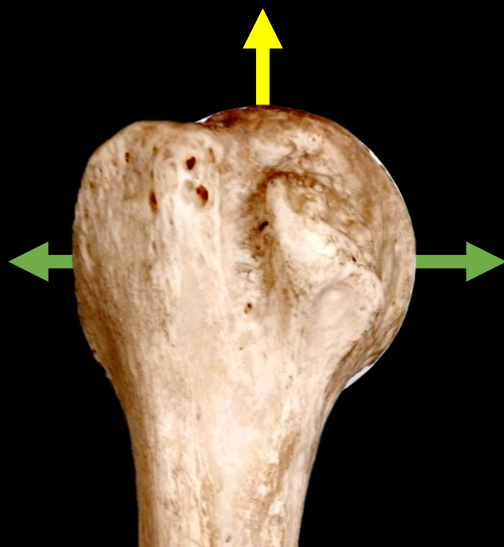


Surfaces articulaires



29

Articulation scapulo-humérale



Flexion / Extension
Abduction / Adduction
Rotations Latérale / Médiale

30

Articulation scapulo-humérale

80° / 20°

80° / 20°

30° / 30°

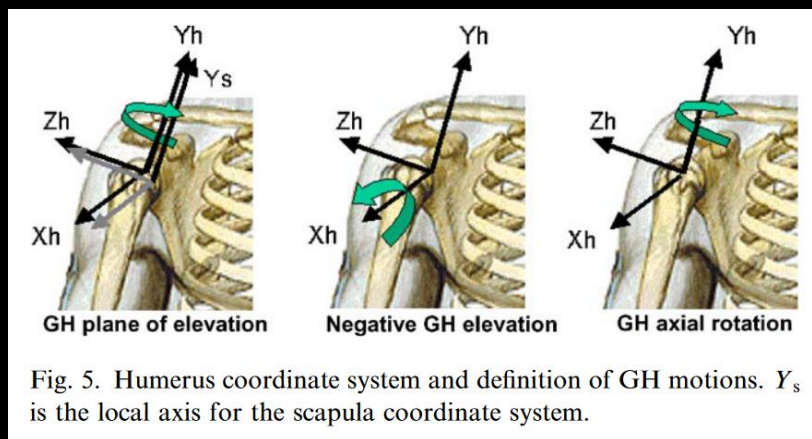
Flexion / Extension

Abduction / Adduction

Rotations Latérale / Médiale

31

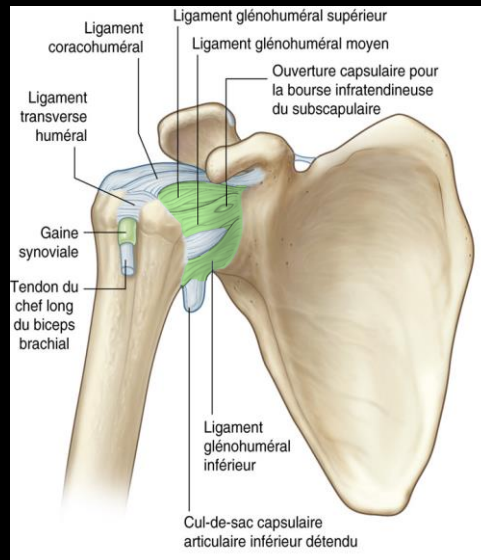
Articulation scapulo-humérale



Wu G, van der Helm FC, Veeger HE, Makhssous M, Van Roy P, Anglin C, Nagels J, Karduna AR, McQuade K, Wang X, Werner FW, Buchholz B; International Society of Biomechanics. ISB recommendation on definitions of joint coordinate systems of various joints for the reporting of human joint motion--Part II: shoulder, elbow, wrist and hand. J Biomech. 2005 May;38(5):981-992. doi: 10.1016/j.jbiomech.2004.05.042. PMID: 15844264.

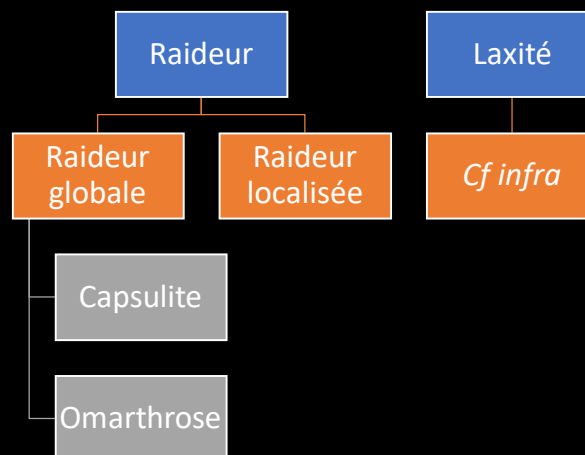
32

Moyens d'union passive

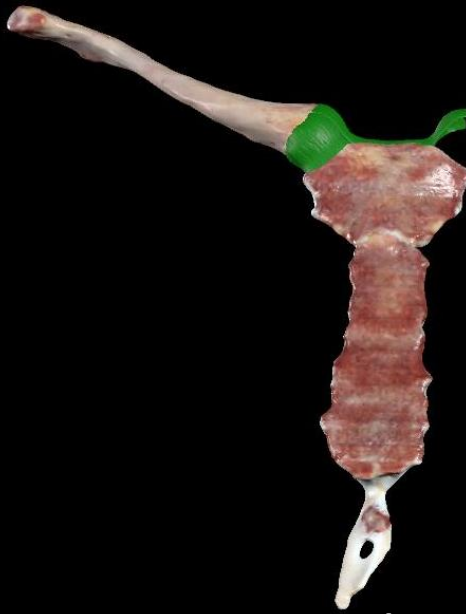


33

Articulation scapulo-humérale



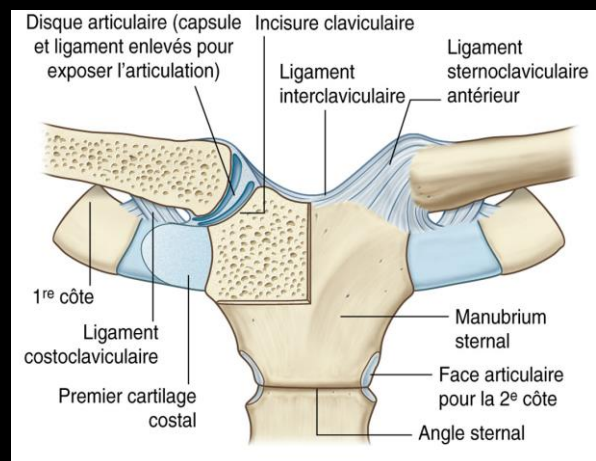
34



Articulation sterno-claviculaire

35

Articulation sterno-claviculaire



« En selle » - Idem MCP

36

Articulation sterno-claviculaire



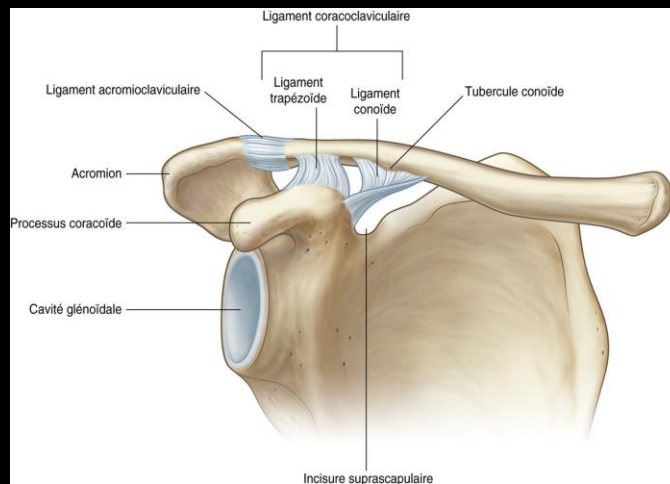
37



Articulation acromio-claviculaire

38

Articulation acromio-claviculaire



39



Conflit = contact entre 2 structures

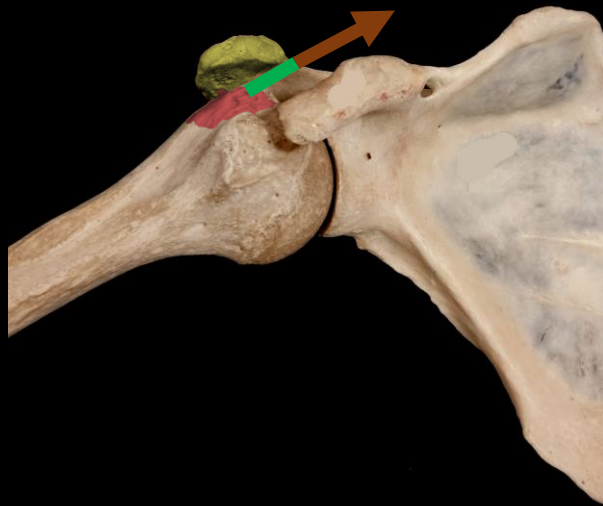
Examen passif +++



Conflit antéro-latéral
Conflit antéro-supérieur
Conflit sub-acromial

Acromion
Tubercule majeur

Conflit antéro-latéral



Conflit antéro-latéral



Test de Neer

Se 59-72%
Sp 60%

43

Conflit antéro-latéral



Test de
Hawkins-Kennedy

Se 58-80%
Sp 56-67%

44



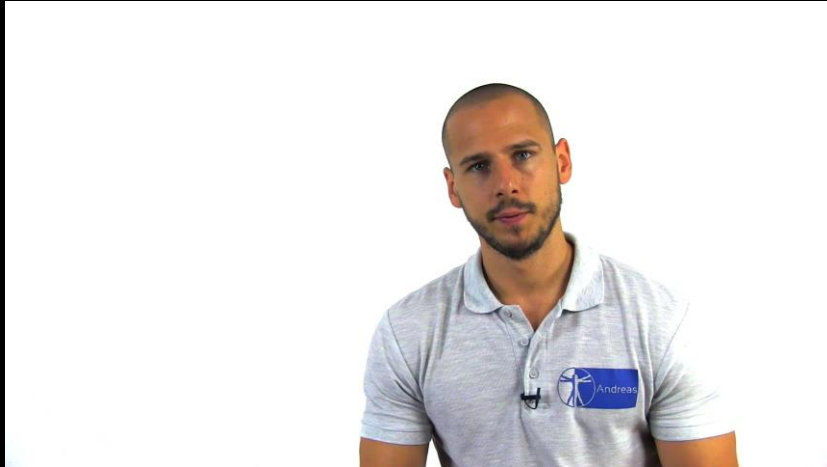
Conflit antéro-médial
Conflit antéro-interne
Conflit sub-coracoïdien

Processus coracoïde
Tubercule mineur

Conflit antéro-médial



Conflit antéro-médial



Cross body
Adduction test

Se 77%
Sp 79%

47



Conflit postérieur
Conflit de Walsh

**Bord postérieur
de la cavité glénoïdale**
Tubercule majeur

Conflit postérieur



49

Conflit postérieur



50

Conflit postérieur

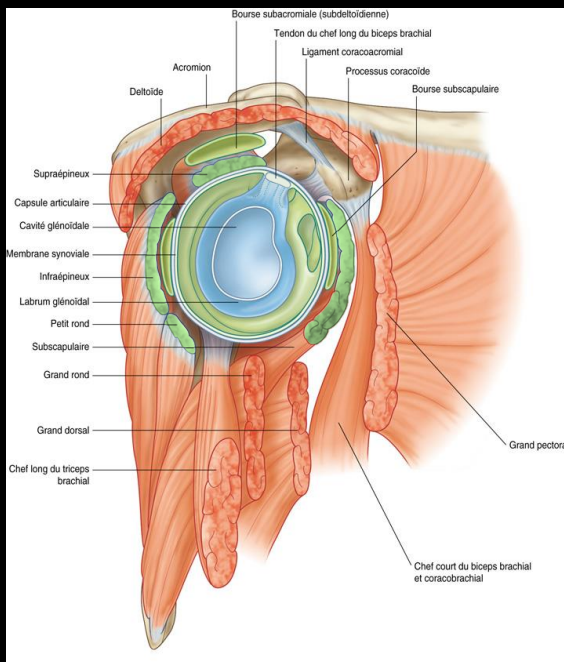


Test de l'armé

Se 76%
Sp 85%

51

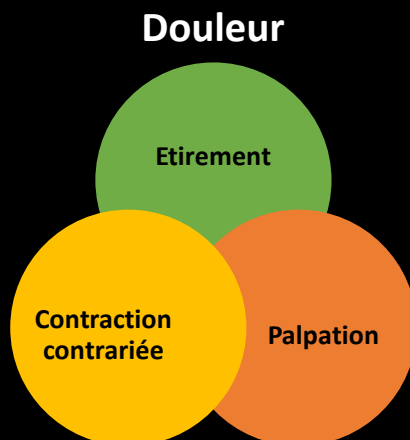




Examen actif +++

4+1

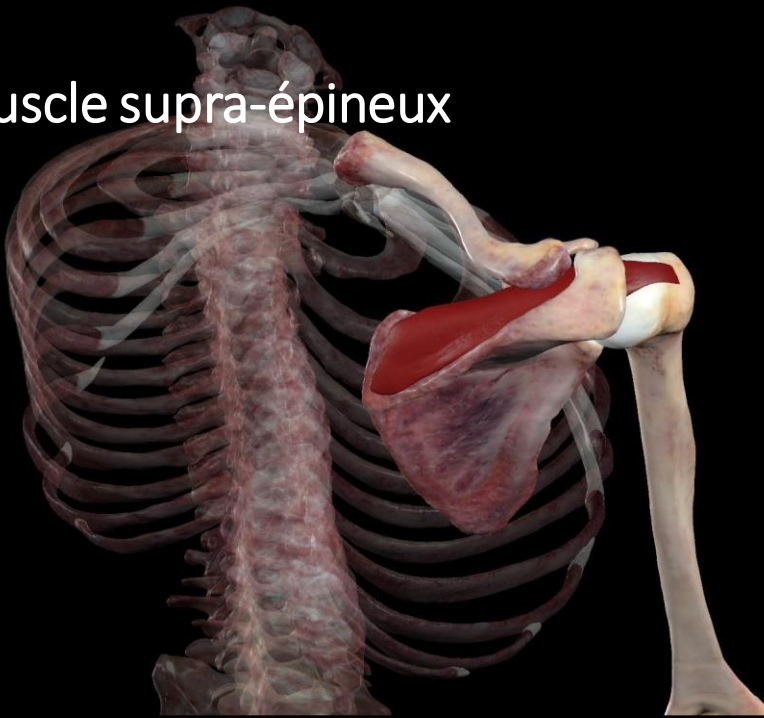
Triade tendineuse



Préférentiellement
en course externe

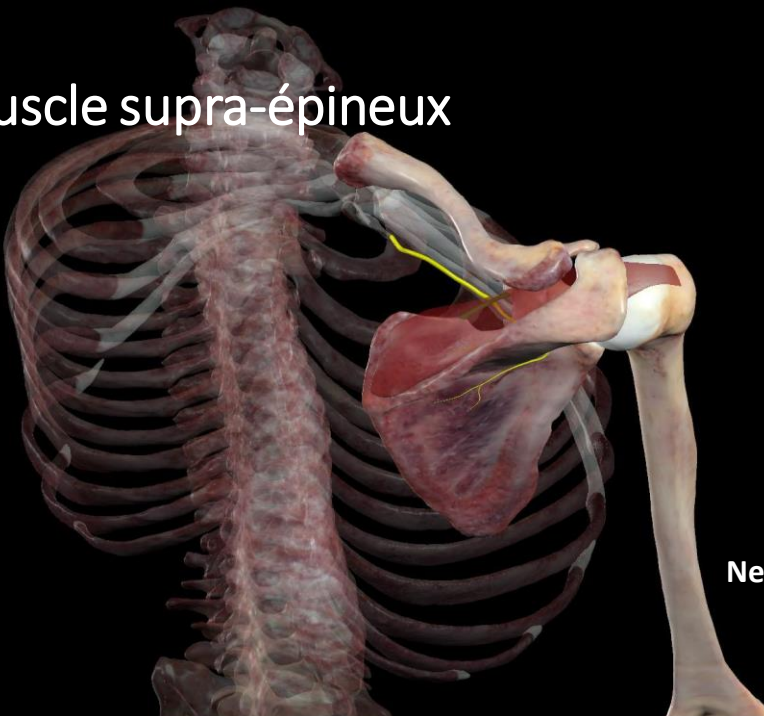


Muscle supra-épineux



55

Muscle supra-épineux



Nerf supra-scapulaire
C5-C6

56

Muscle supra-épineux



Test de Jobe
Empty can test

Se 74%
Sp 30%

57

Muscle supra-épineux

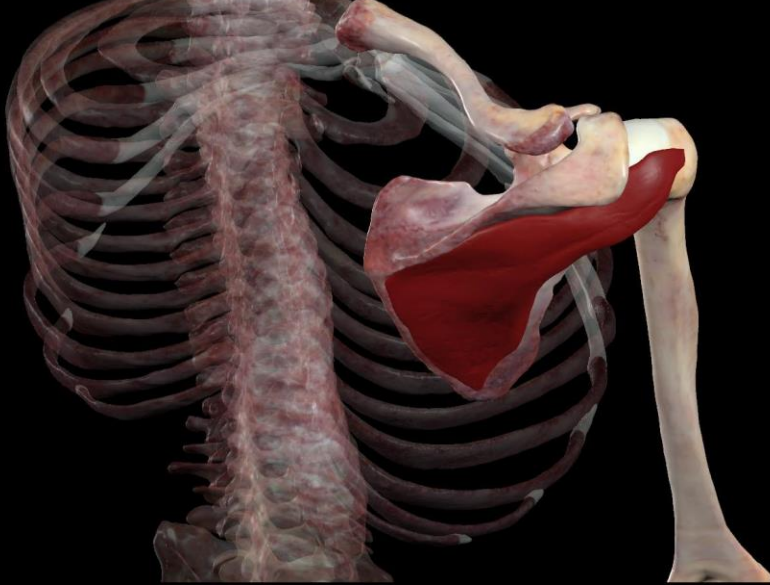


Champagne toast

"So, next time you want to evaluate the supraspinatus, try asking your patient to raise a toast instead of pouring soda all over your exam floor."

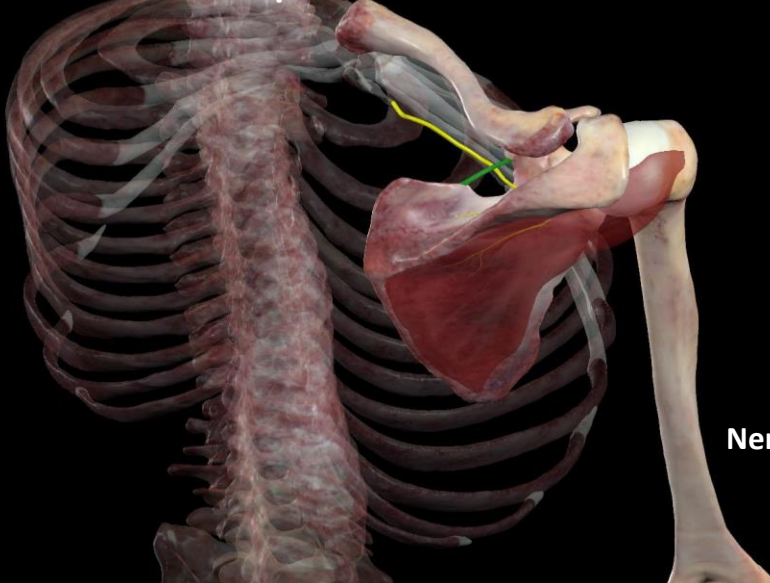
58

Muscle infra-épineux



59

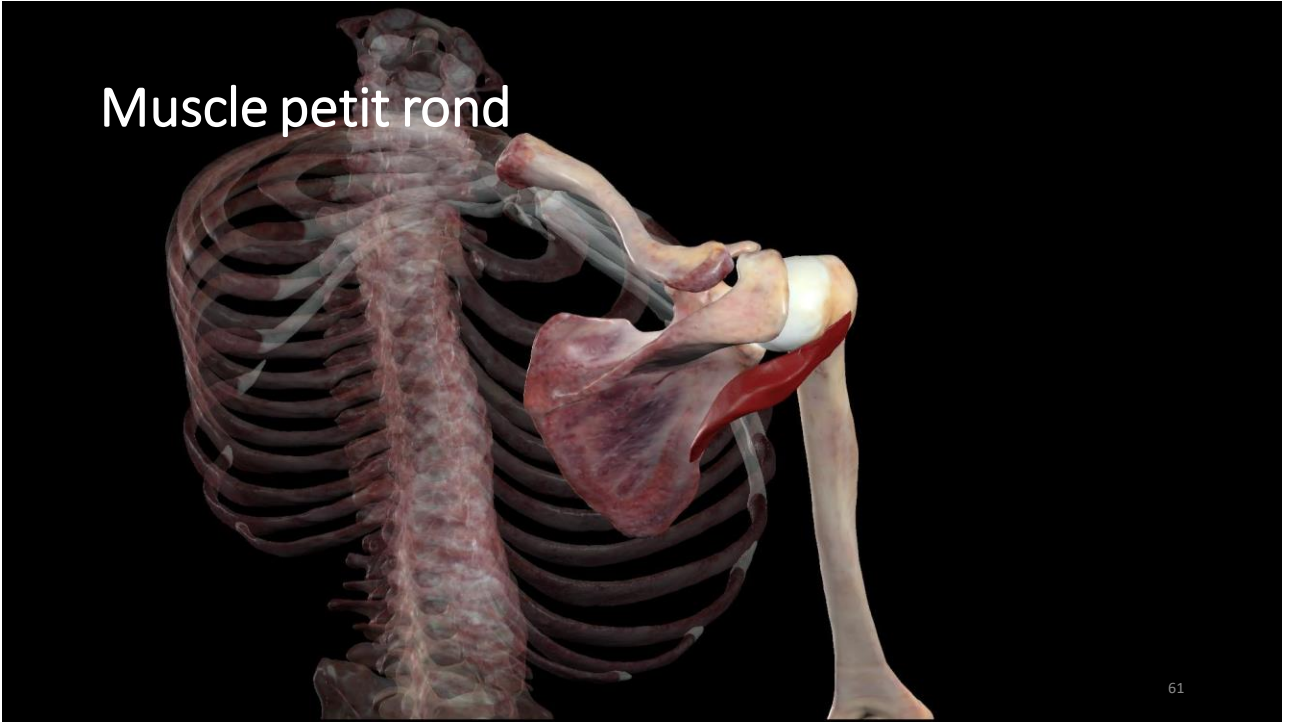
Muscle infra-épineux



Nerf supra-scapulaire
C5-C6

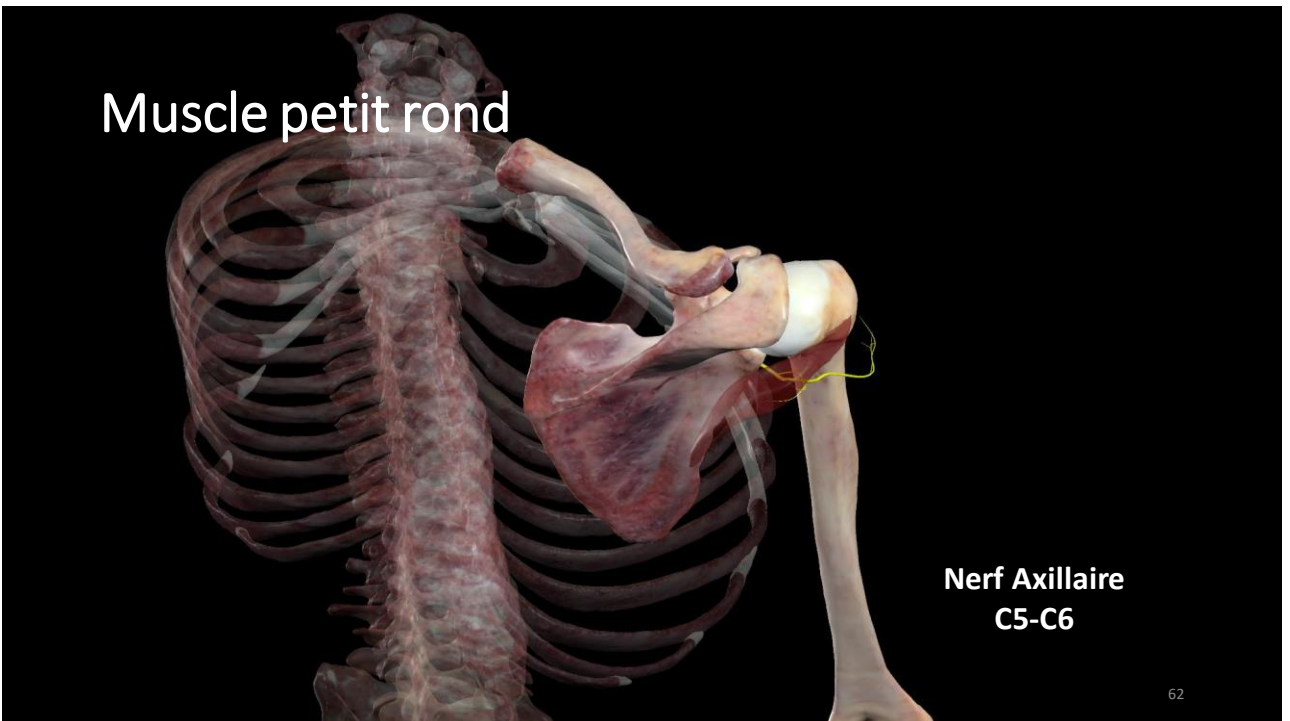
60

Muscle petit rond



61

Muscle petit rond



Nerf Axillaire
C5-C6

62

Muscles infra-épineux et petit rond

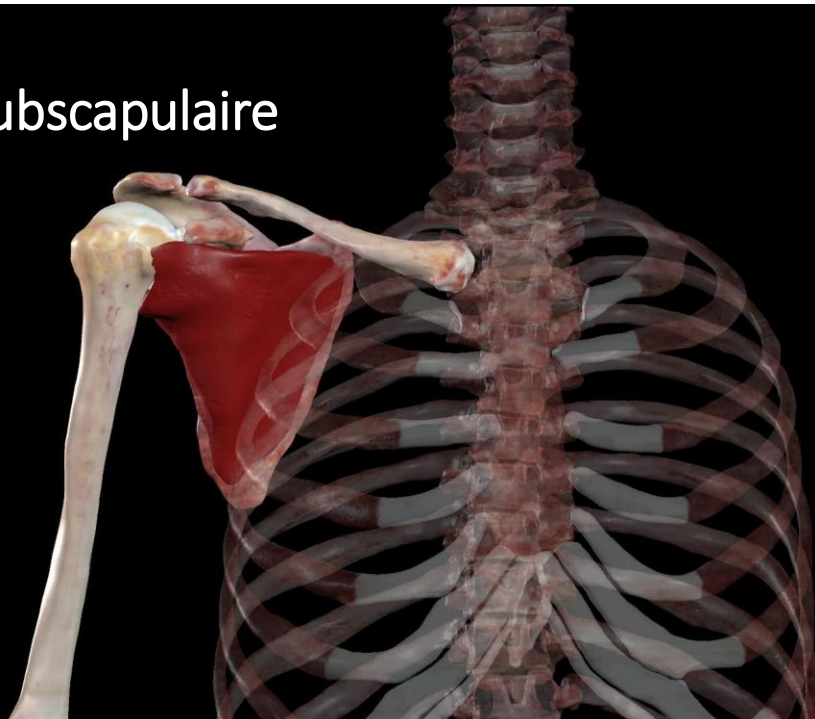


Signe de Patte

Se 17%
Sp 96%

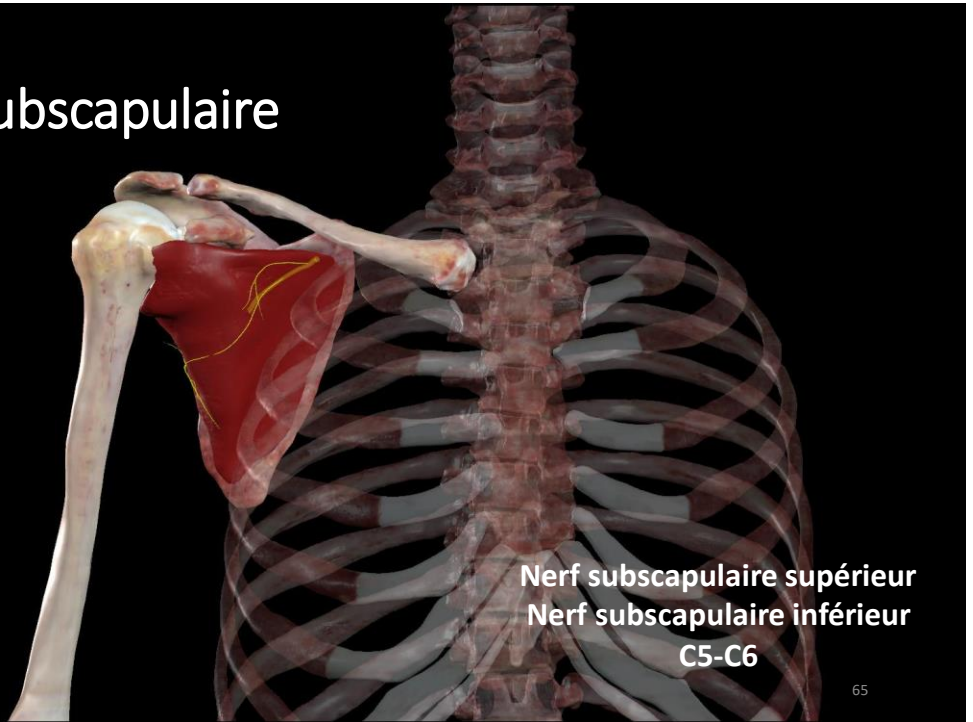
63

Muscle subscapulaire



64

Muscle subscapulaire



Muscle subscapulaire

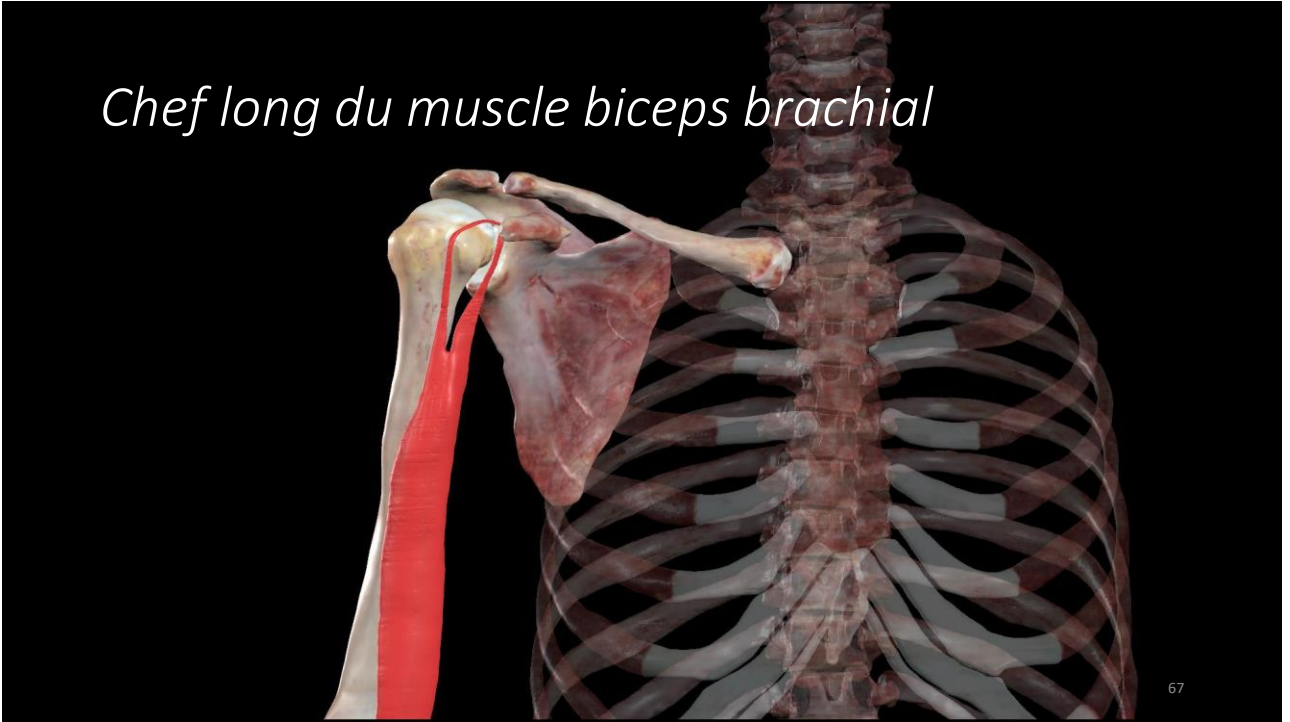


Lift off test
Gerber

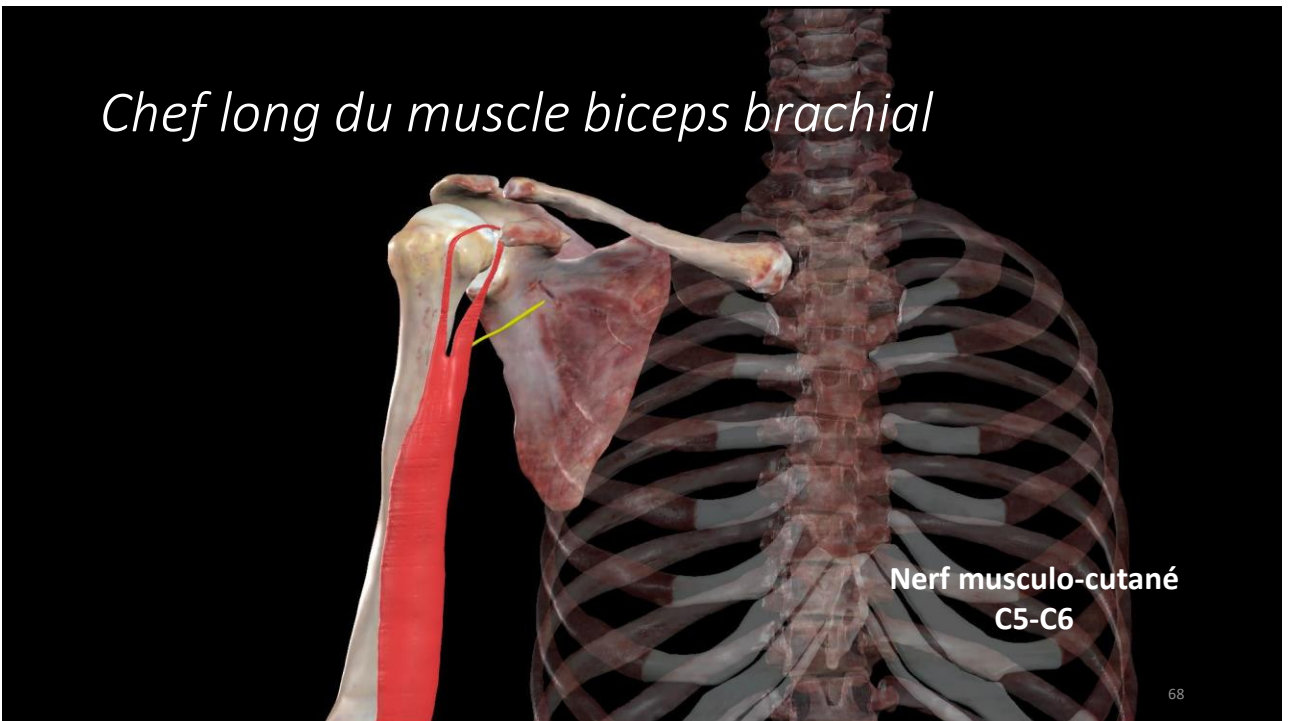
Se 35%
Sp 75%

66

Chef long du muscle biceps brachial



Chef long du muscle biceps brachial



Chef long du muscle biceps brachial



Palm up test

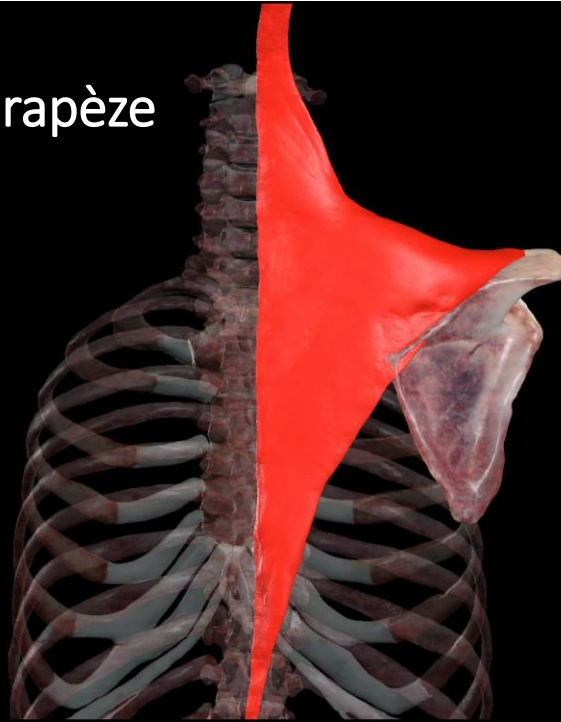
Se 20%
Sp 78%

69

Testing des muscles stabilisateurs de la ceinture scapulaire



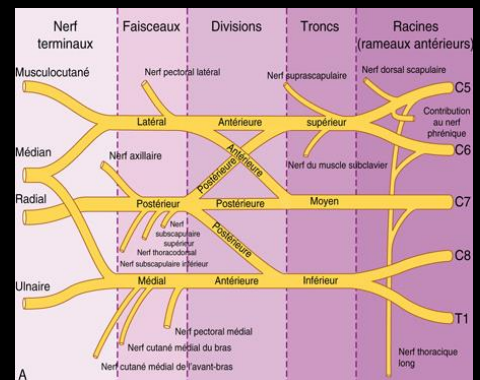
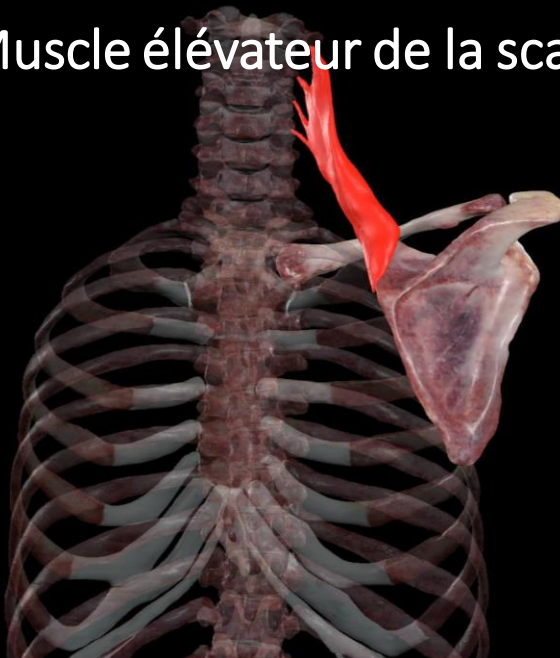
Muscle trapèze



Nerf accessoire
XI

71

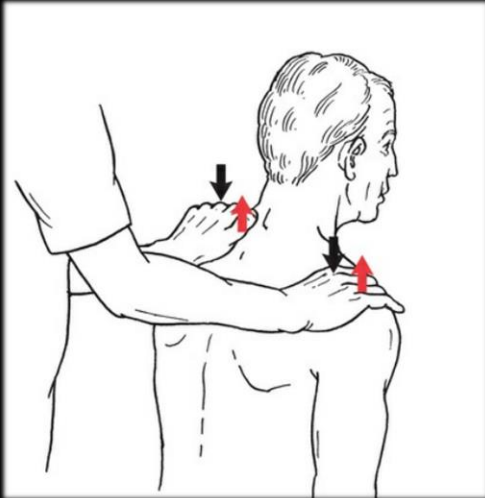
Muscle élévateur de la scapula



Nerf dorsal de la scapula
C5

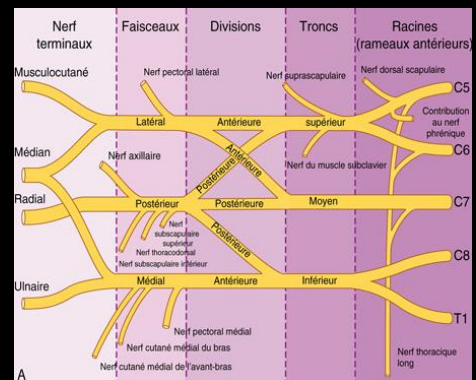
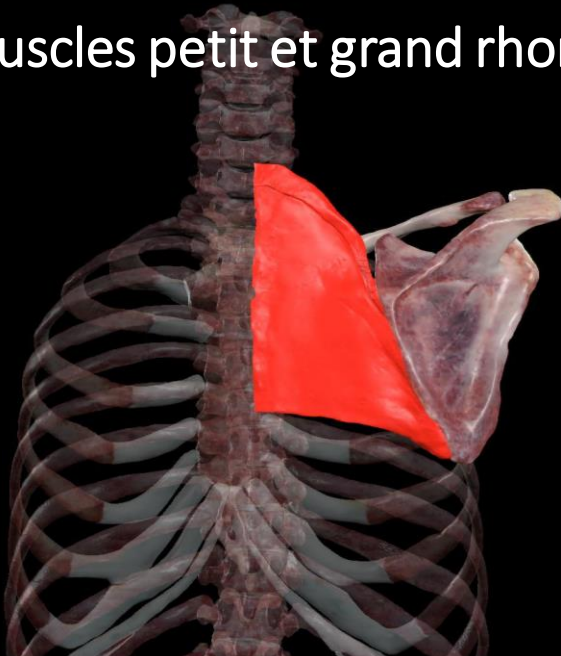
72

Muscles trapèze et élévateur de la scapula



73

Muscles petit et grand rhomboïdes



Nerf dorsal de la scapula
C5

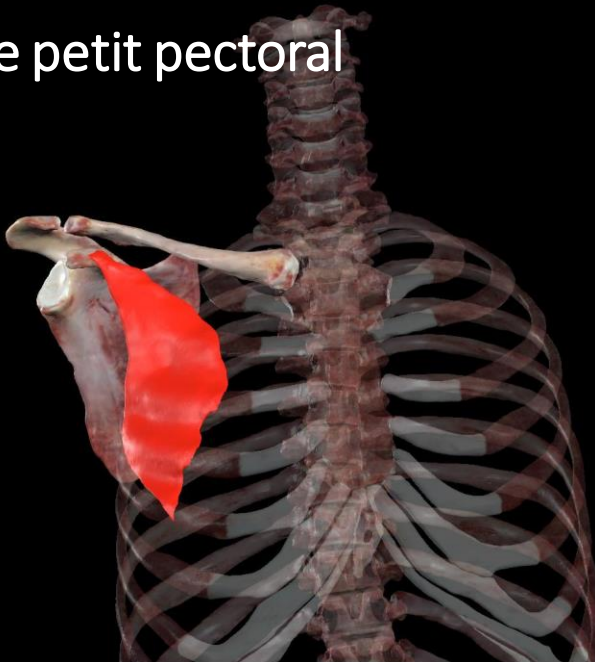
74

Muscles trapèze et rhomboïdes



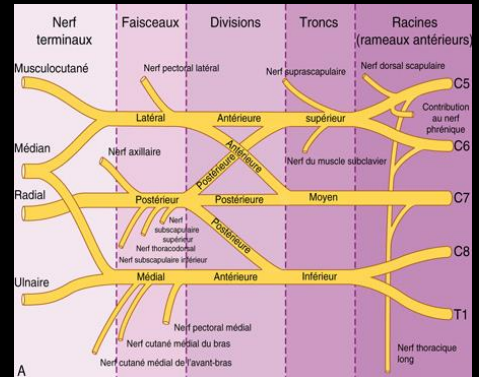
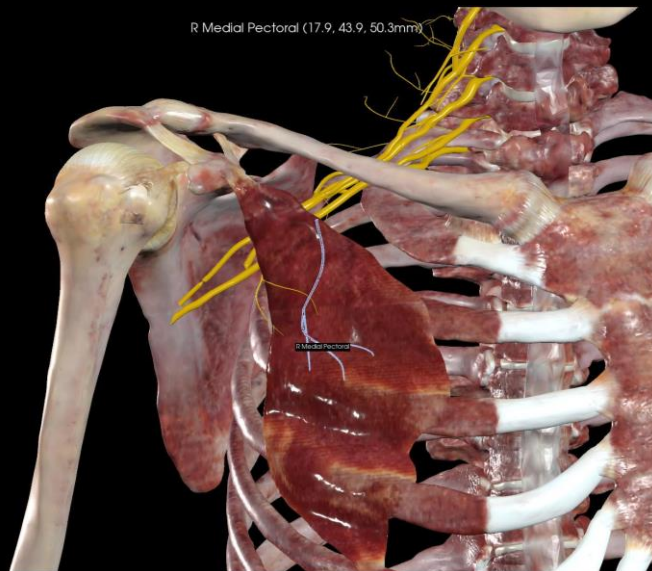
75

Muscle petit pectoral



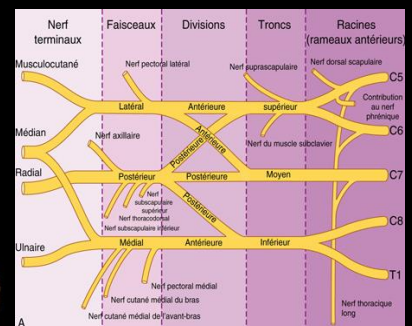
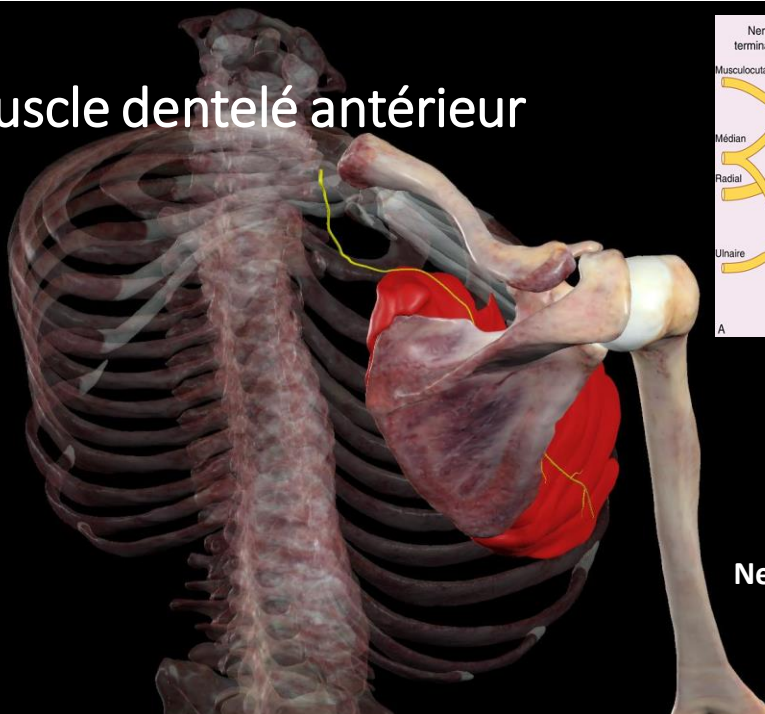
76

Muscle petit pectoral



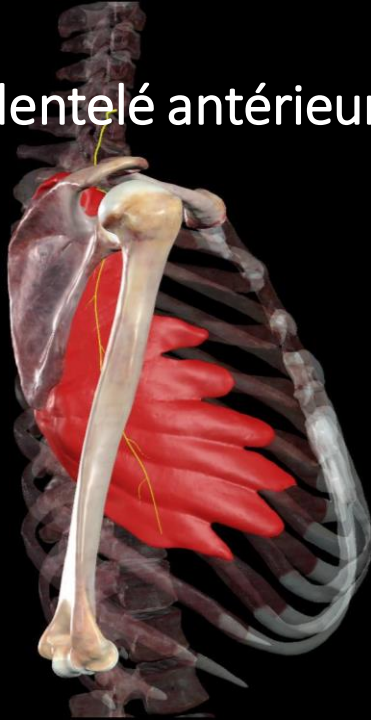
**Nerf pectoral médial
C8-Th1**

Muscle dentelé antérieur



**Nerf thoracique long
C5-C6-C7**

Muscle dentelé antérieur



79

Muscles petit pectoral et dentelé antérieur

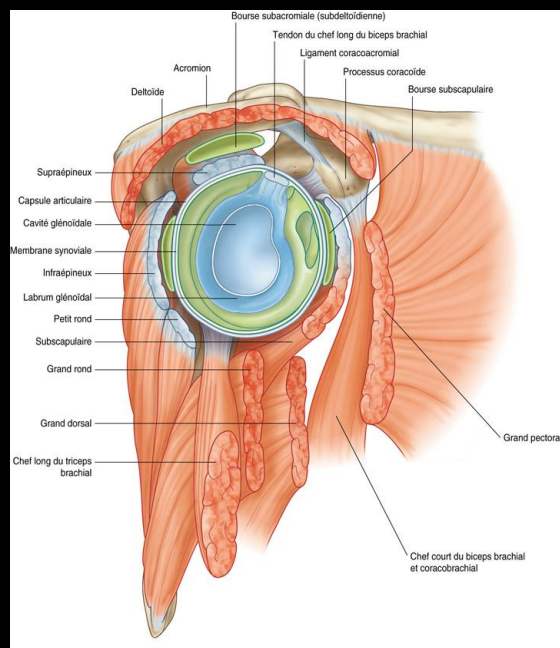
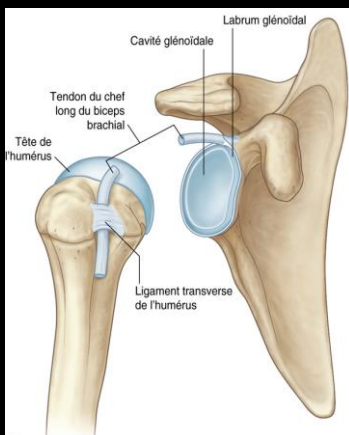


80



Le Labrum

Labrum



82

SLAP lesions

Superior labrum anterior to posterior



Uppercut test

Se 73%
Sp 78%

83

Lésions postéro-inférieures



Jerk test

Se 90%
Sp 85%

84



Laxité

Mesure de la capacité
du système capsulo-ligamentaire
à se laisser étirer passivement

Indépendant
des symptômes

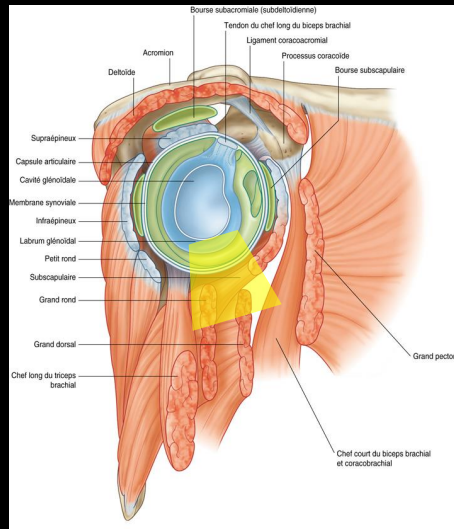
Capsule et ligaments ↔ Mécanorecepteurs articulaires capsulo-ligamentaires

Instabilité

Symptôme = **subjectif**

Douleur
Appréhension

Système capsulo-ligamentaire



87

Laxité antérieure et postérieure



25% du $\varnothing$ de la tête
humérale en avant
50% du $\varnothing$ en
arrière...

Tiroir

Se 38%
Sp 89%

88

Laxité inférieure

> 105°



Test de Gagey

Se 46%
Sp 38%

89



Instabilité

Instabilité antérieure



Test d'appréhension

Se 66%
Sp 95%

91

Instabilité antérieure



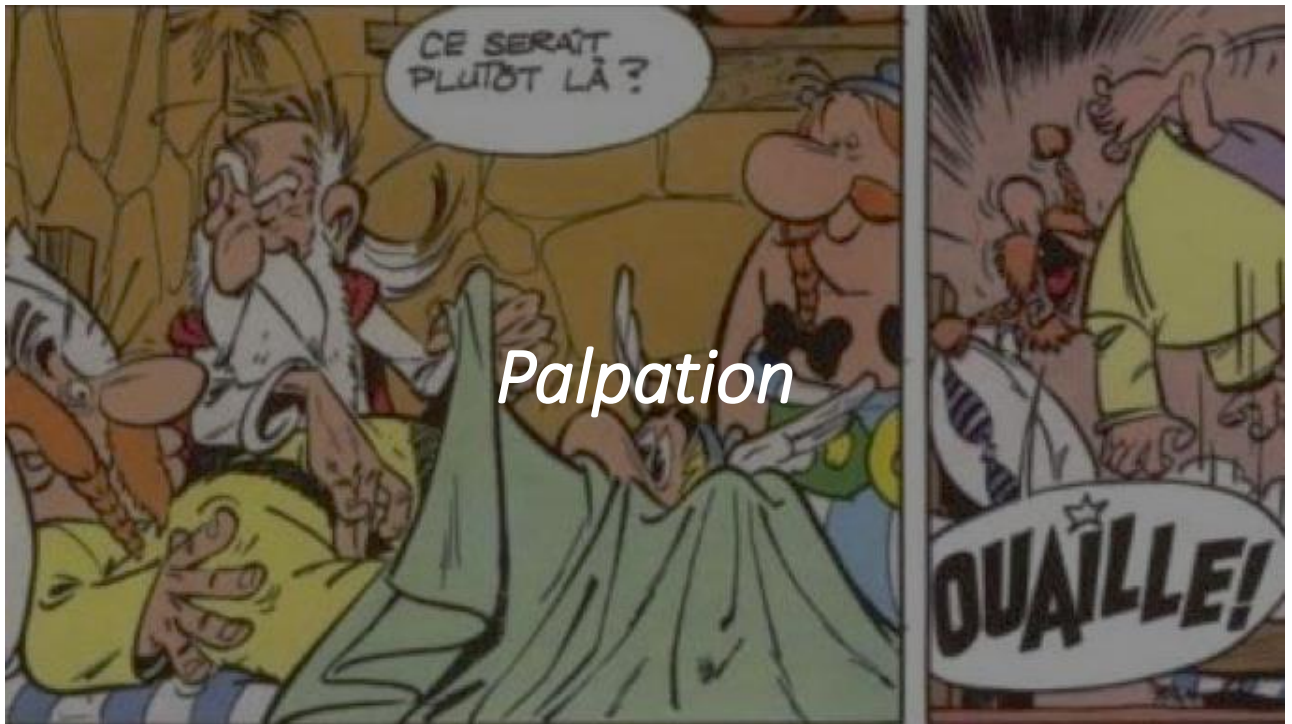
Relocation test

Se 65%
Sp 90%

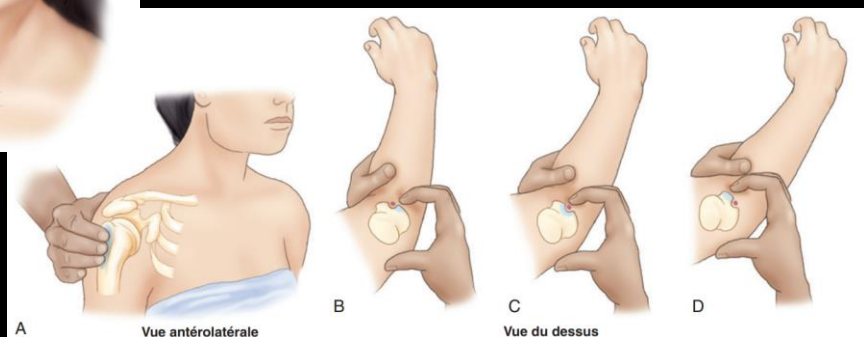
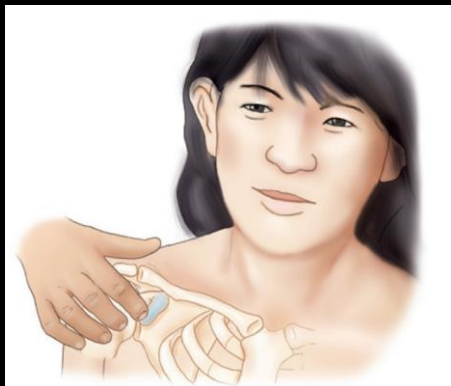
Cluster

Se 81%
Sp 98%

92



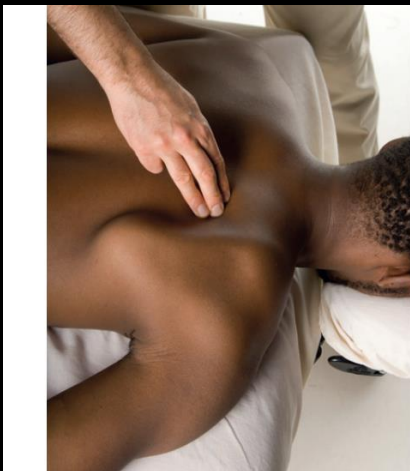
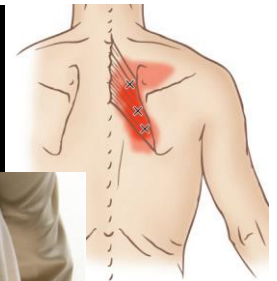
Os



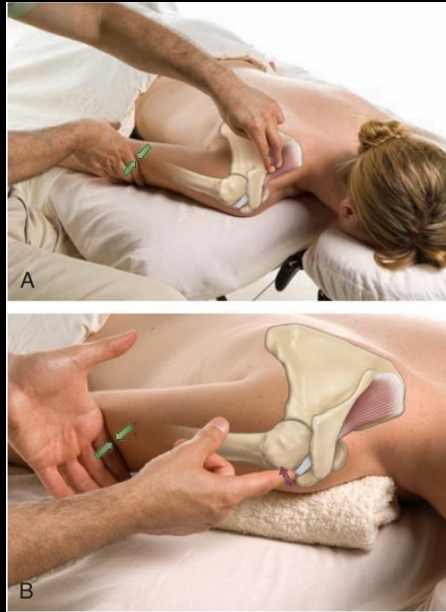
Muscle élévateur de la scapula



Muscles rhomboïdes



Muscle supra-épineux



Muscle subscapulaire



Muscle petit pectoral



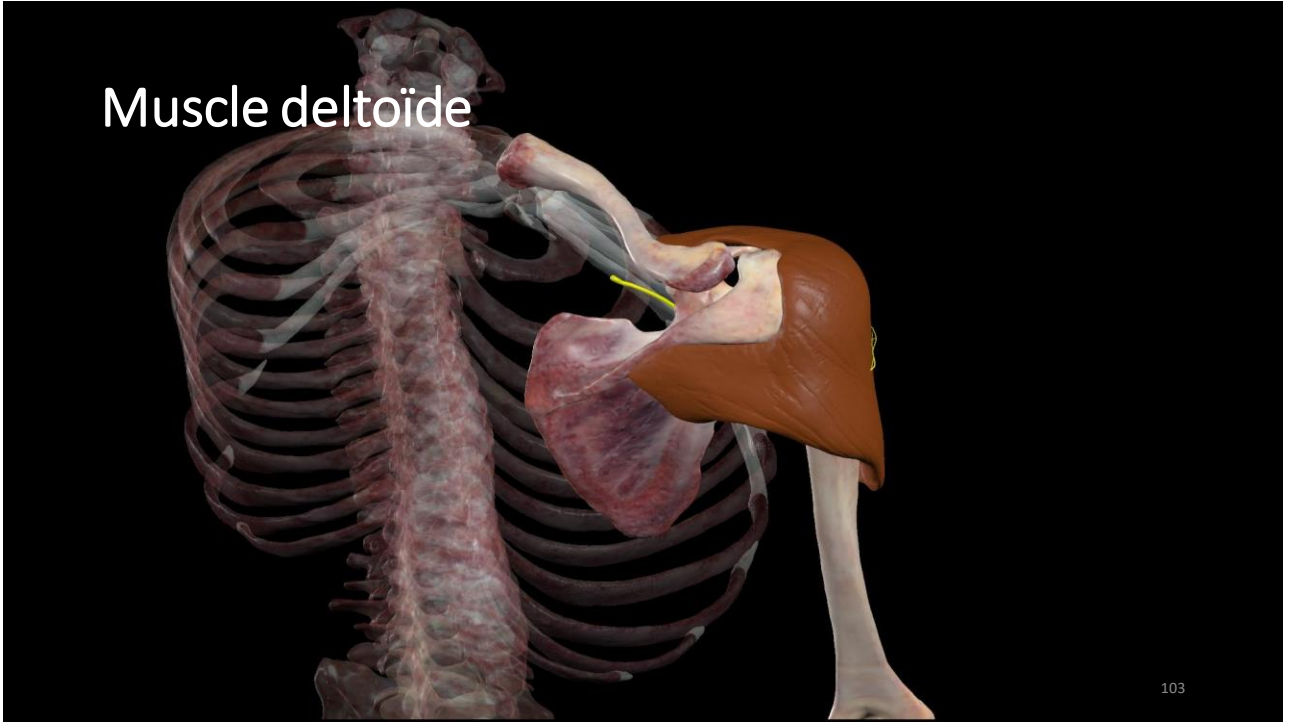
Muscle coraco-brachial



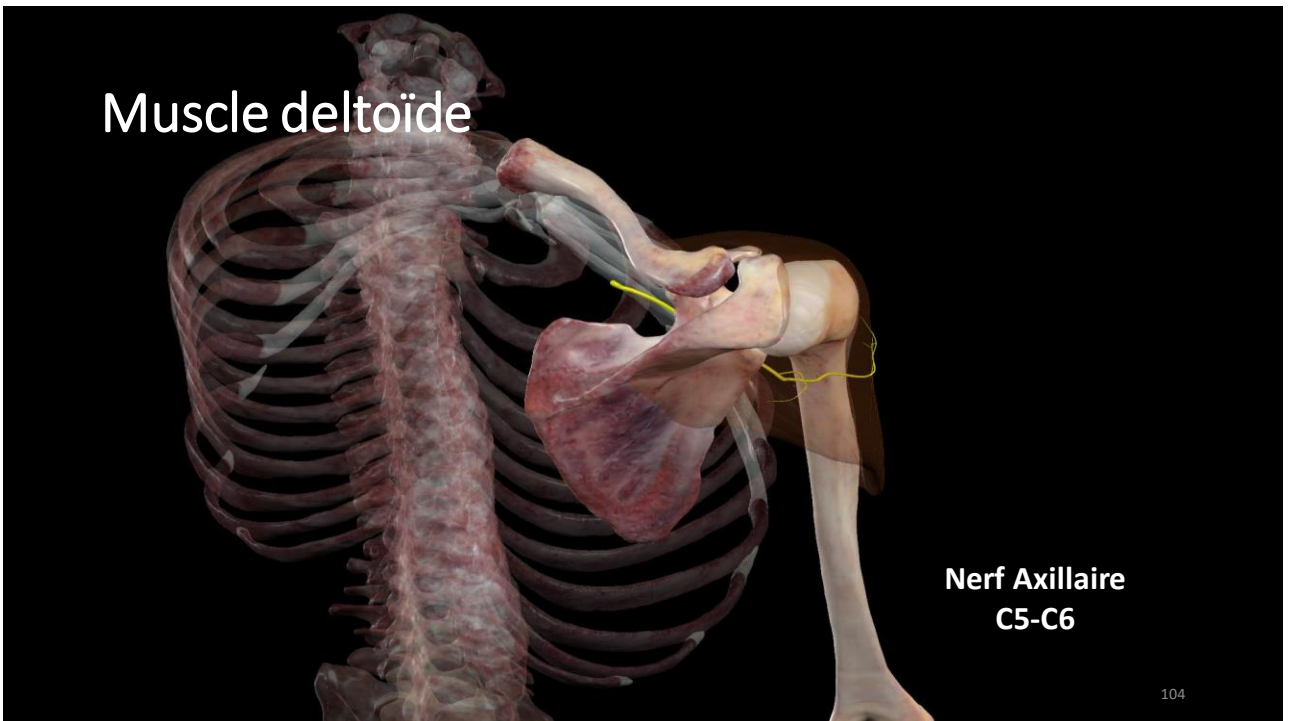


Muscles de l'épaule

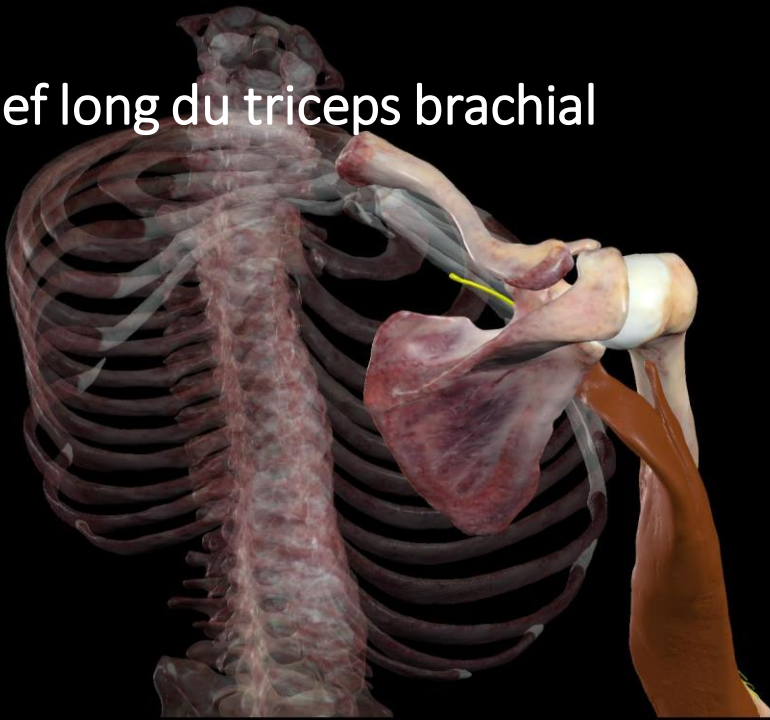
Muscle deltoïde



Muscle deltoïde

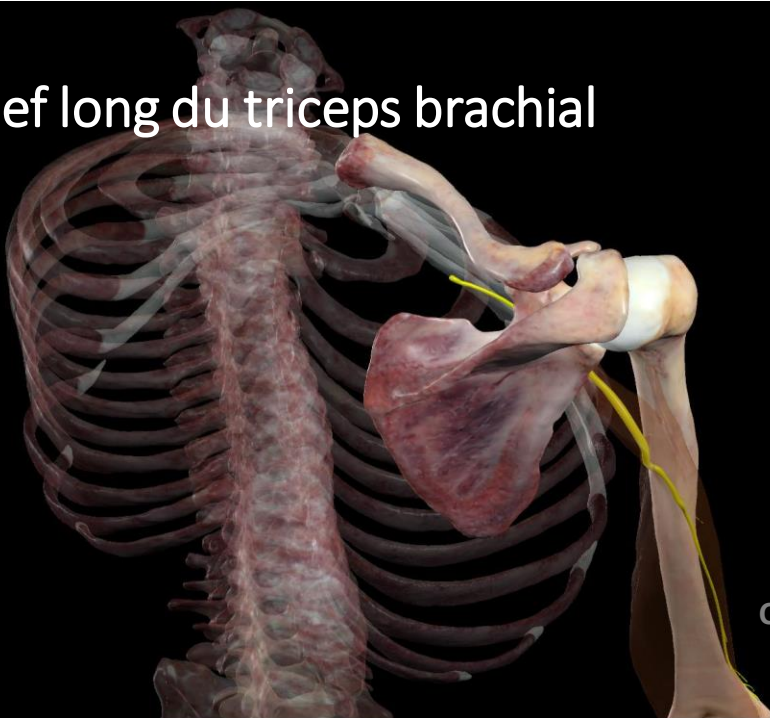


Chef long du triceps brachial



105

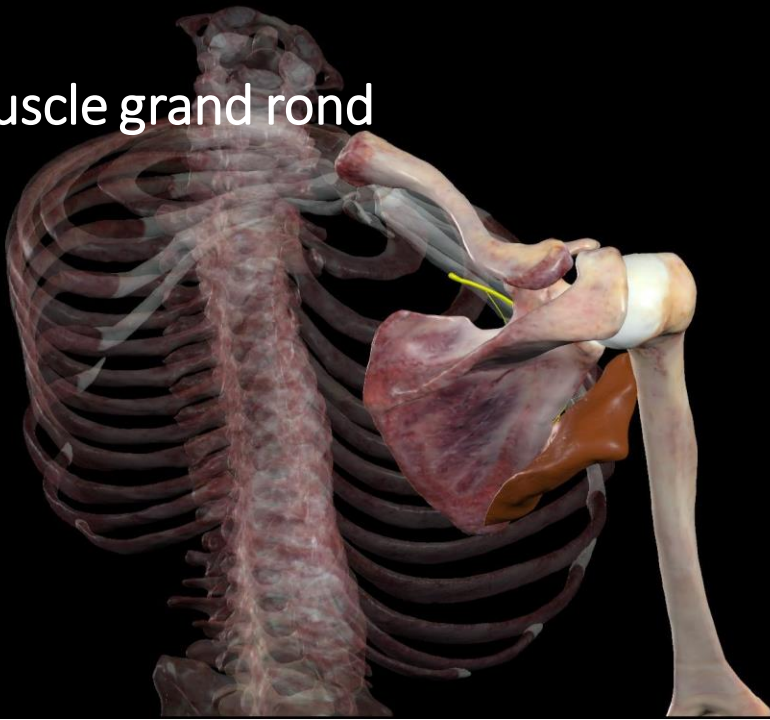
Chef long du triceps brachial



Nerf Radial
C5-C6-C7-C8-Th1

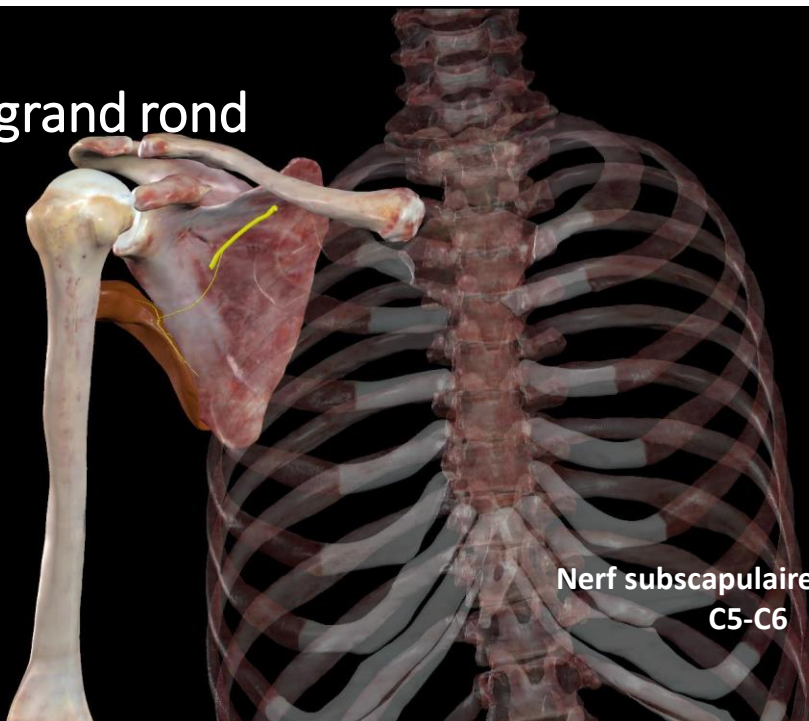
106

Muscle grand rond



107

Muscle grand rond



Nerf subscapulaire inférieur
C5-C6

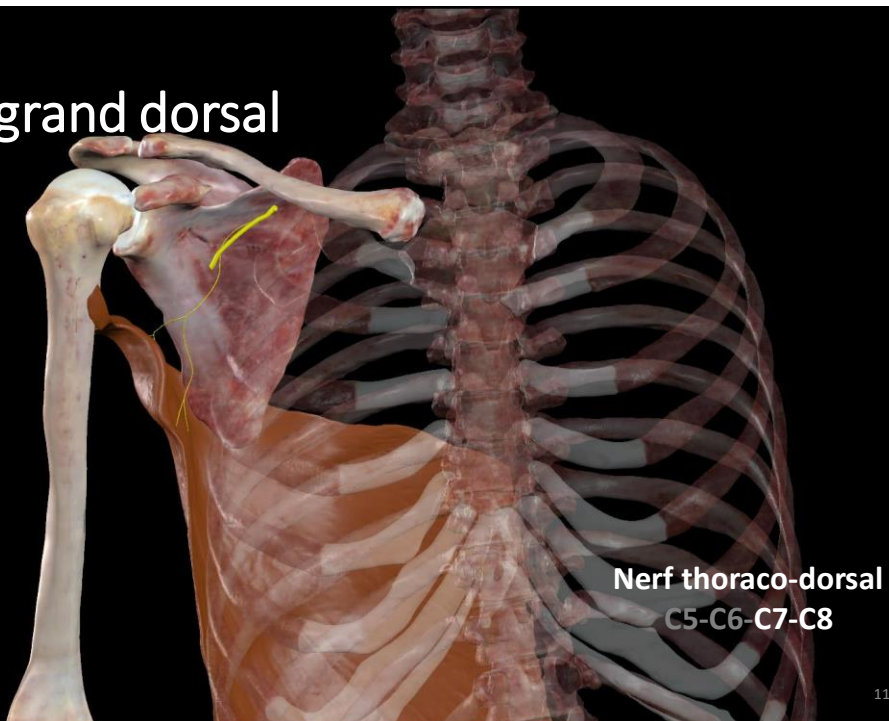
108

Muscle grand dorsal



109

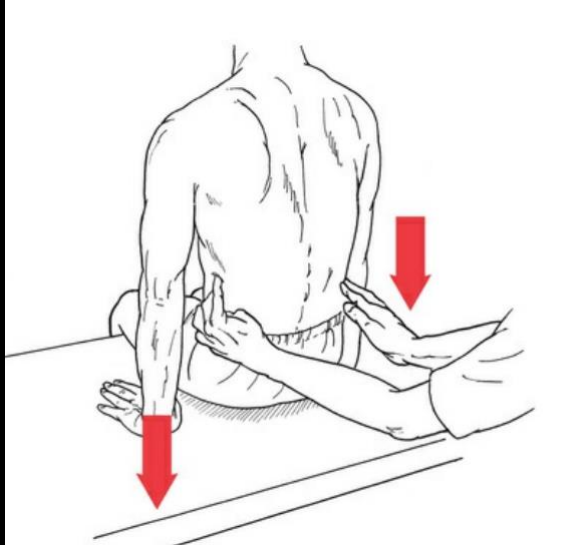
Muscle grand dorsal



Nerf thoraco-dorsal
C5-C6-C7-C8

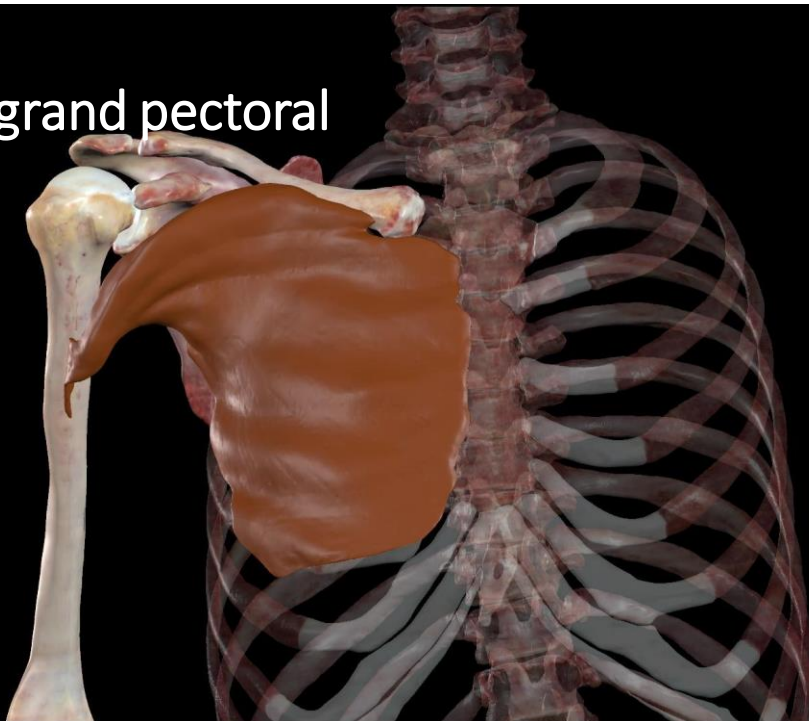
110

Muscle grand dorsal



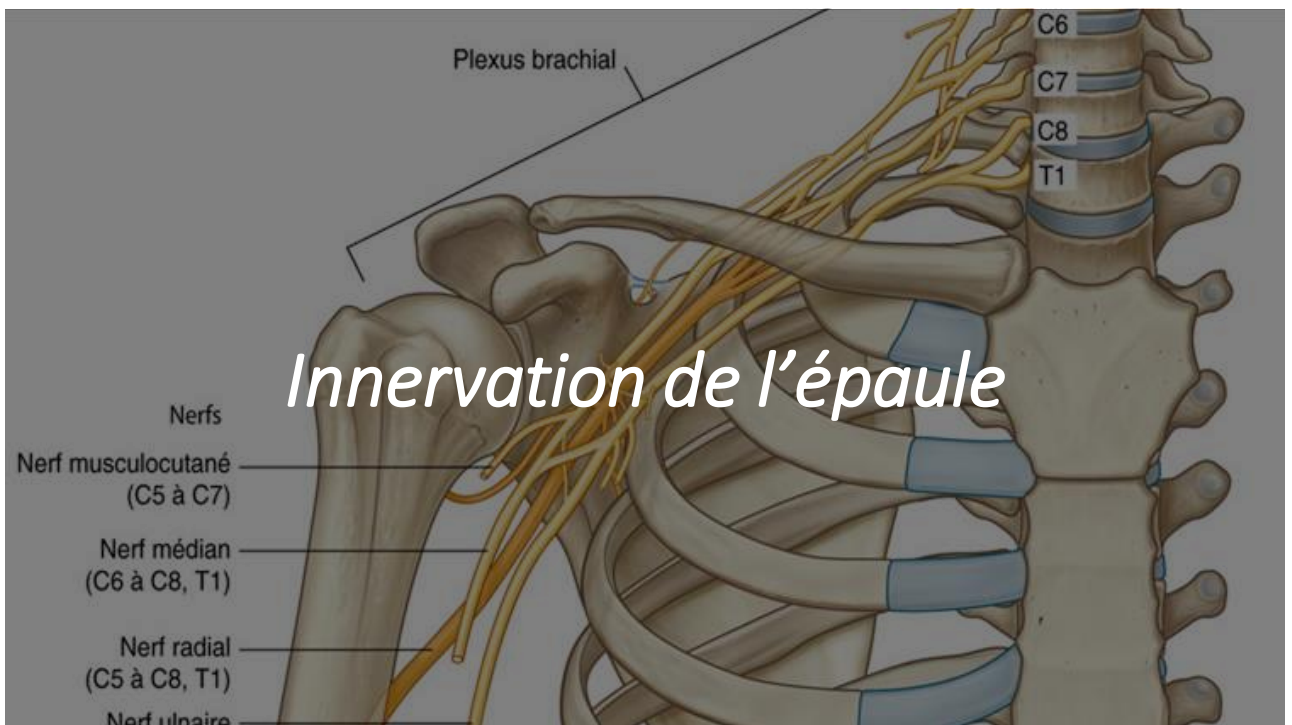
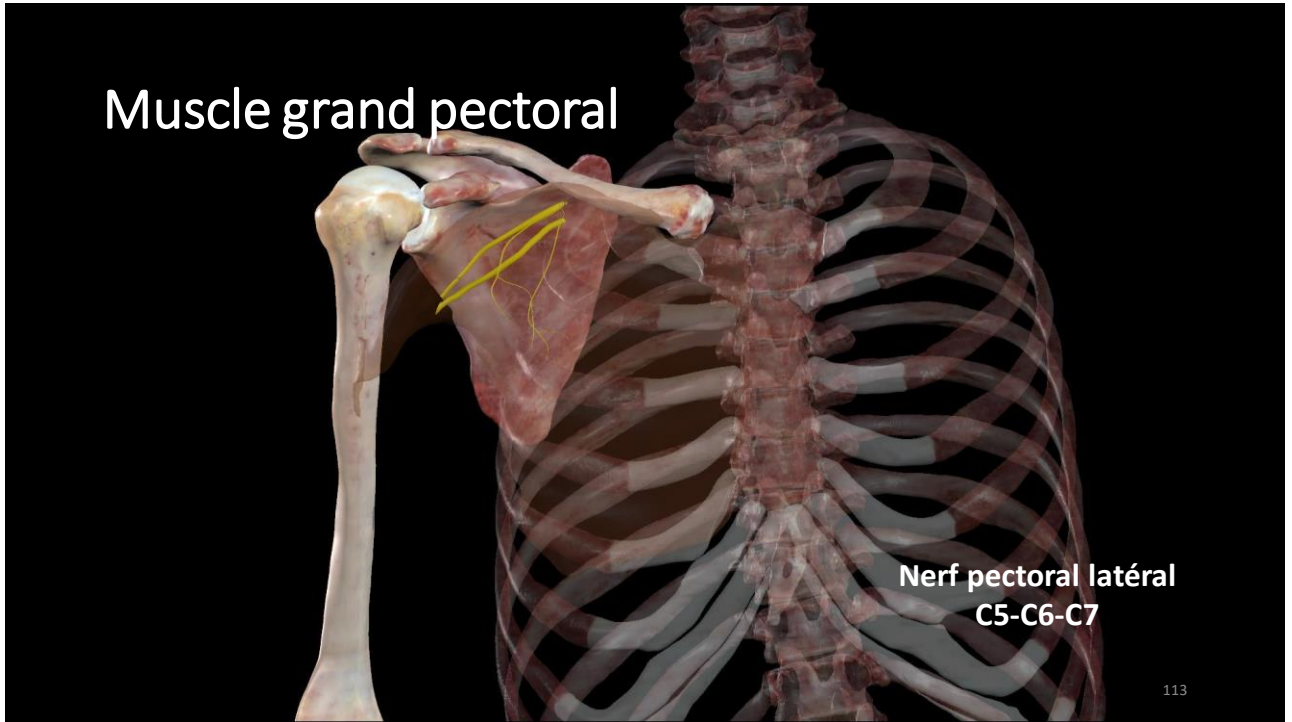
111

Muscle grand pectoral

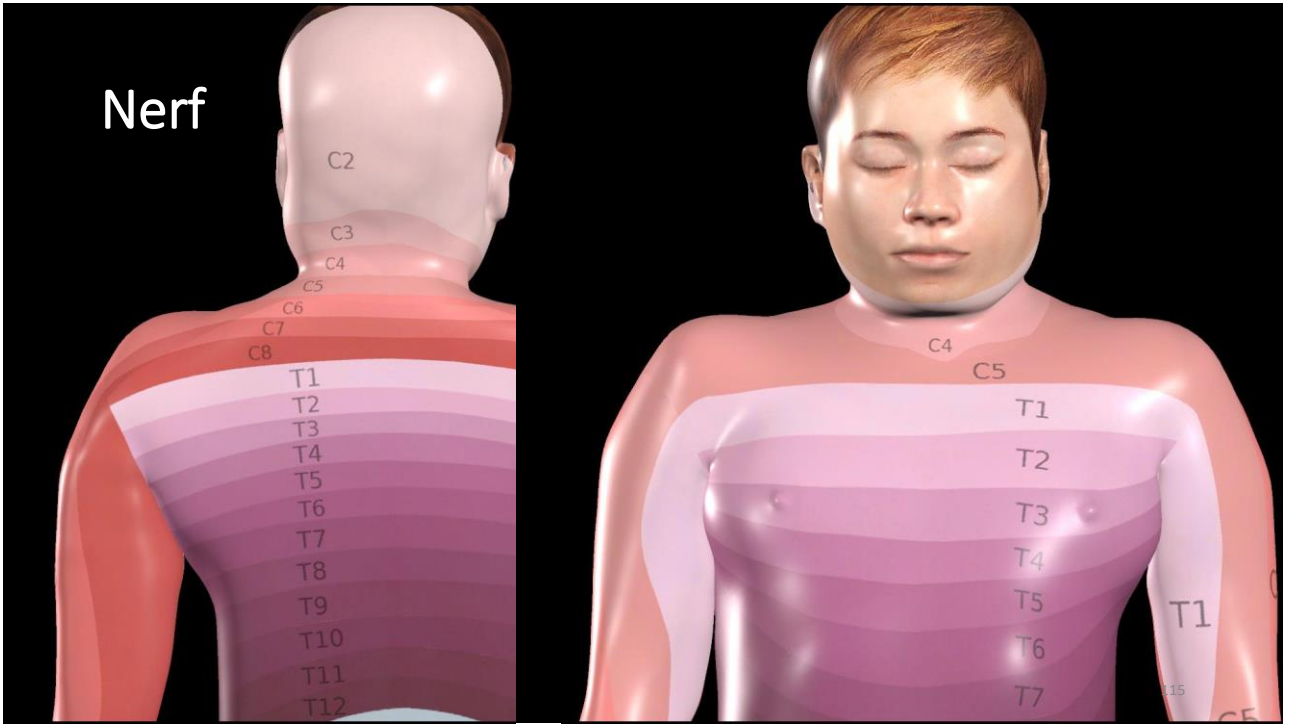


112

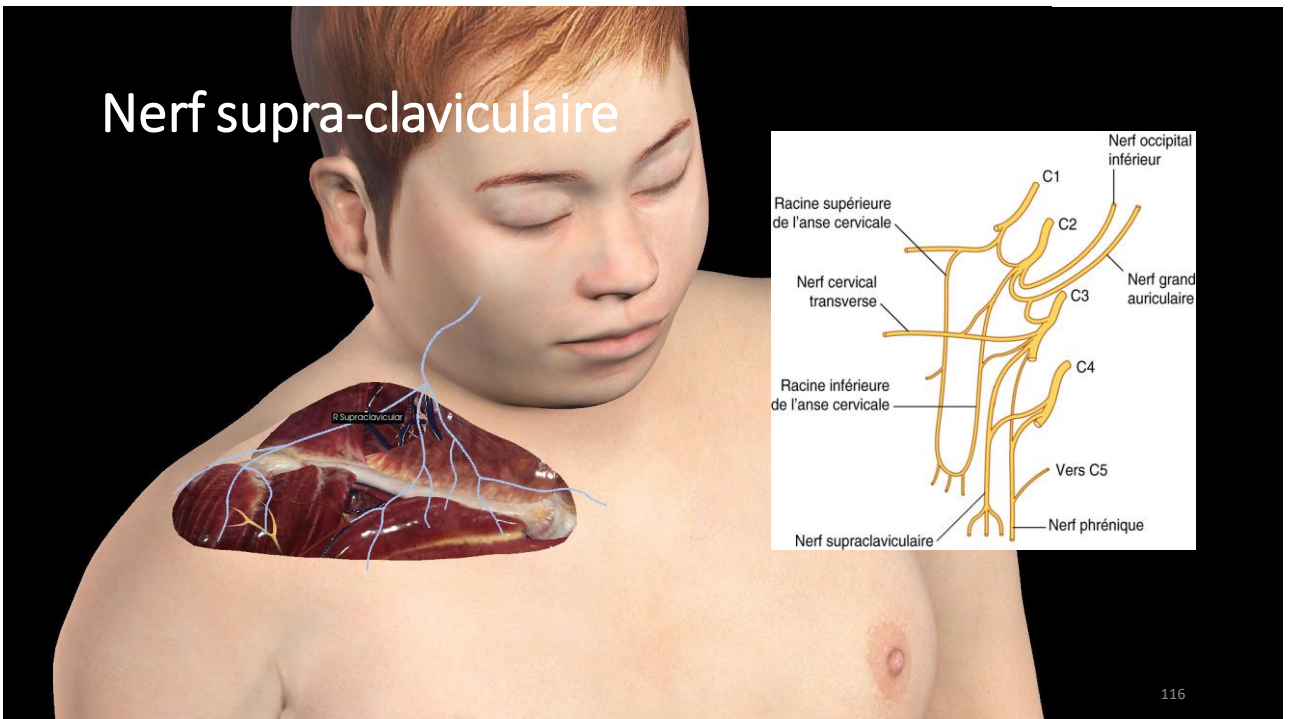
Muscle grand pectoral



Nerf

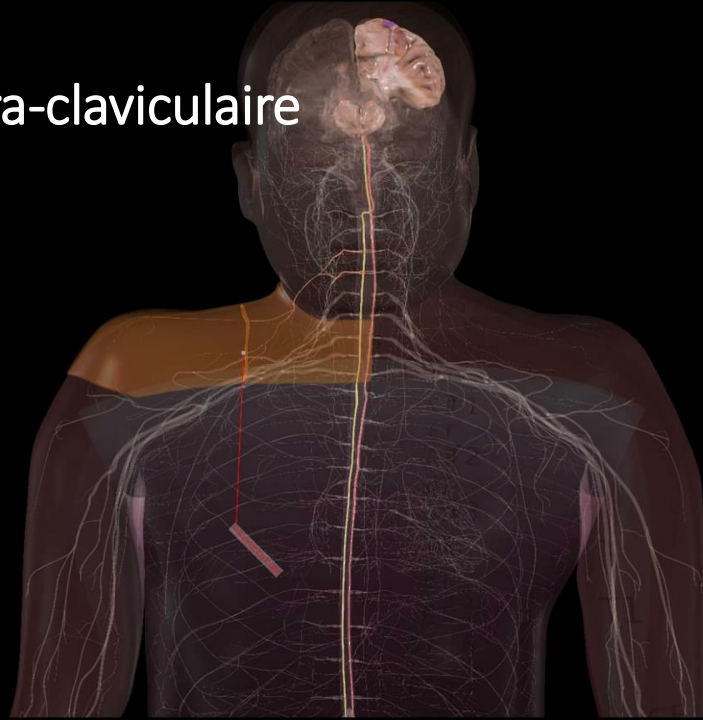


Nerf supra-claviculaire



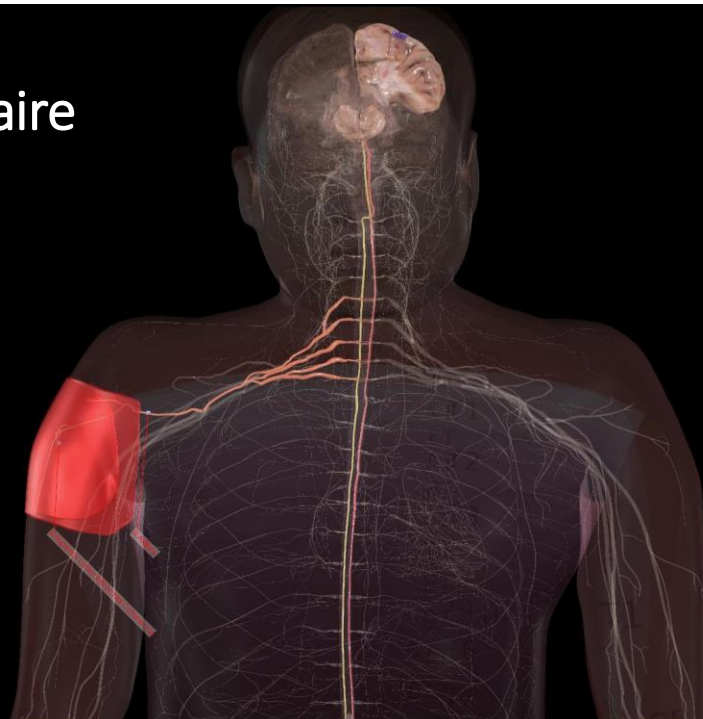
116

Nerf supra-claviculaire



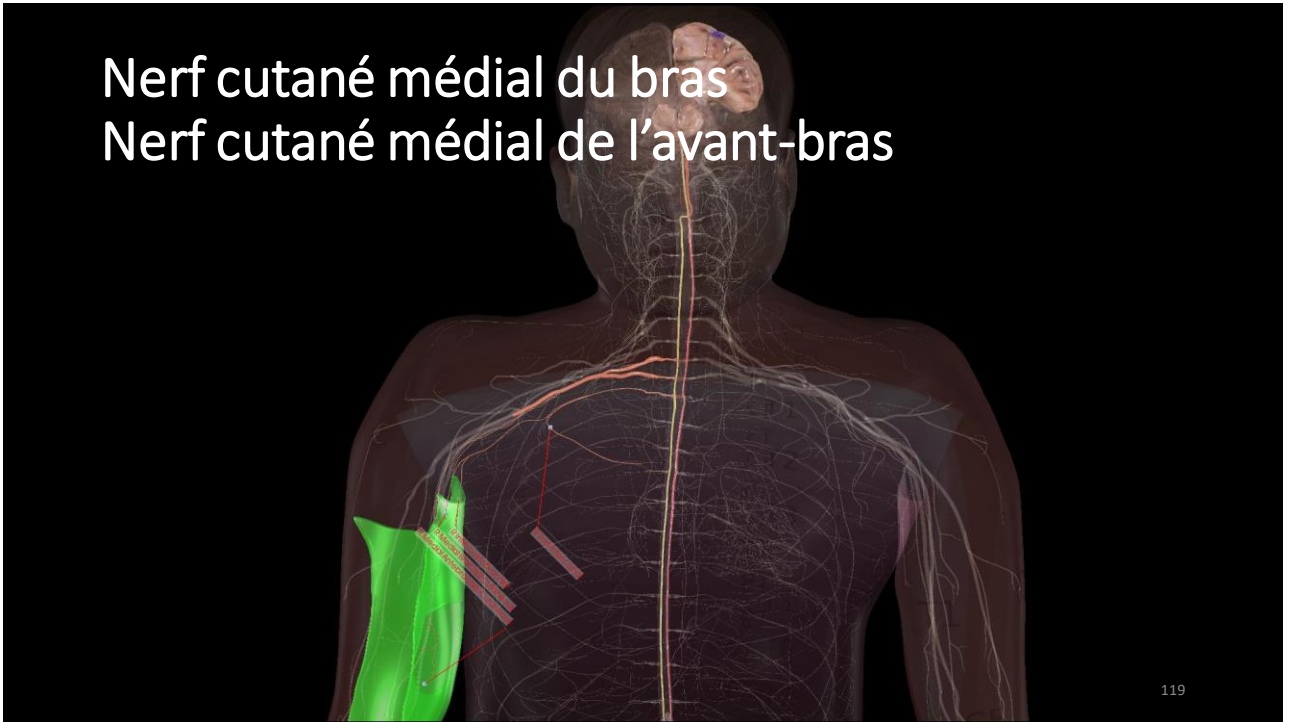
117

Nerf axillaire

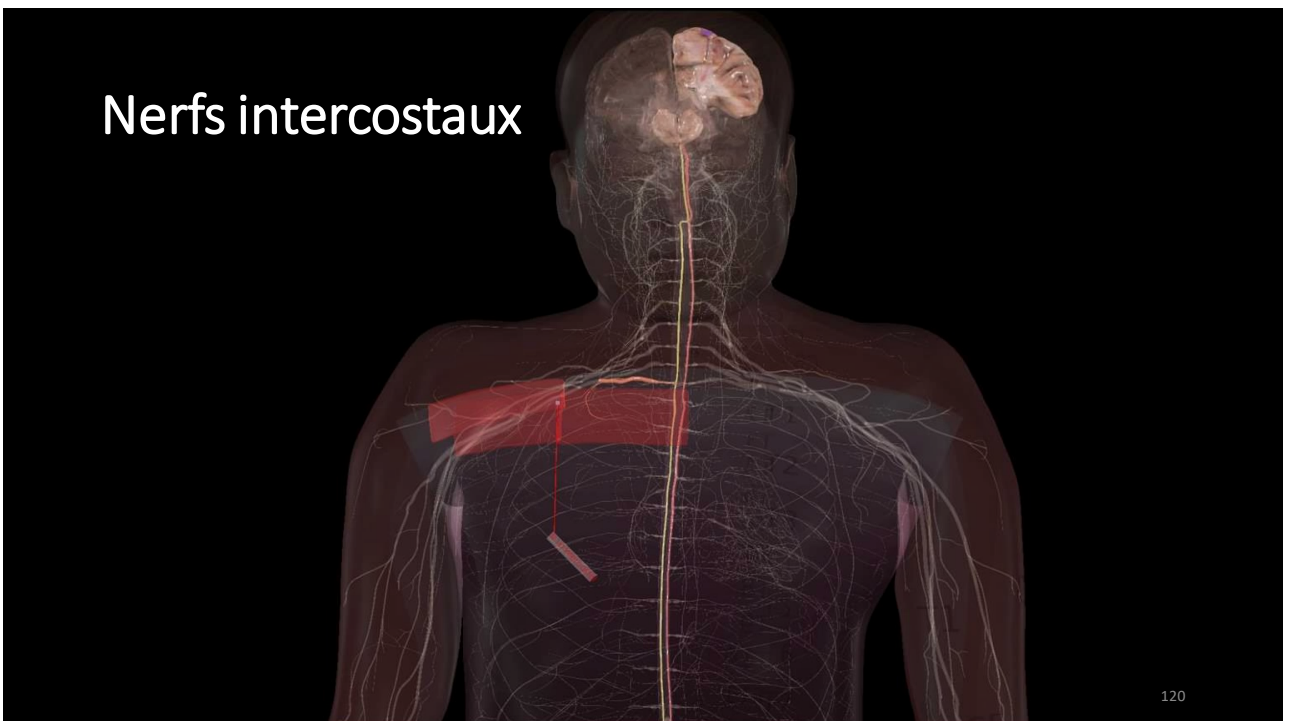


118

Nerf cutané médial du bras Nerf cutané médial de l'avant-bras

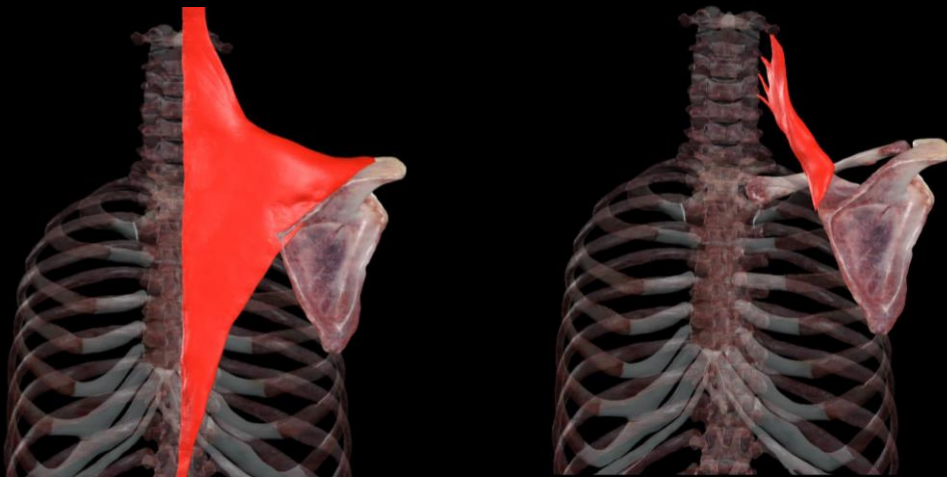


Nerfs intercostaux



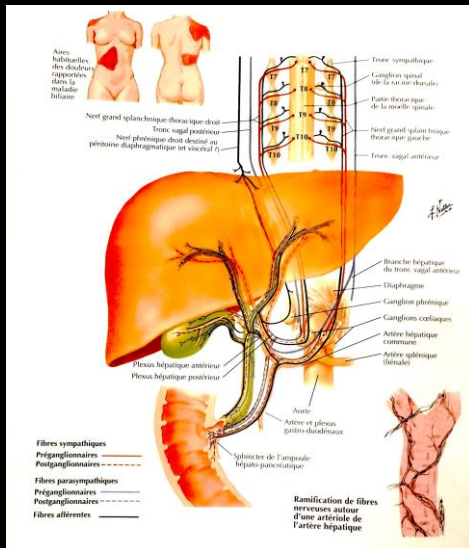


Rachis cervical et thoracique



122

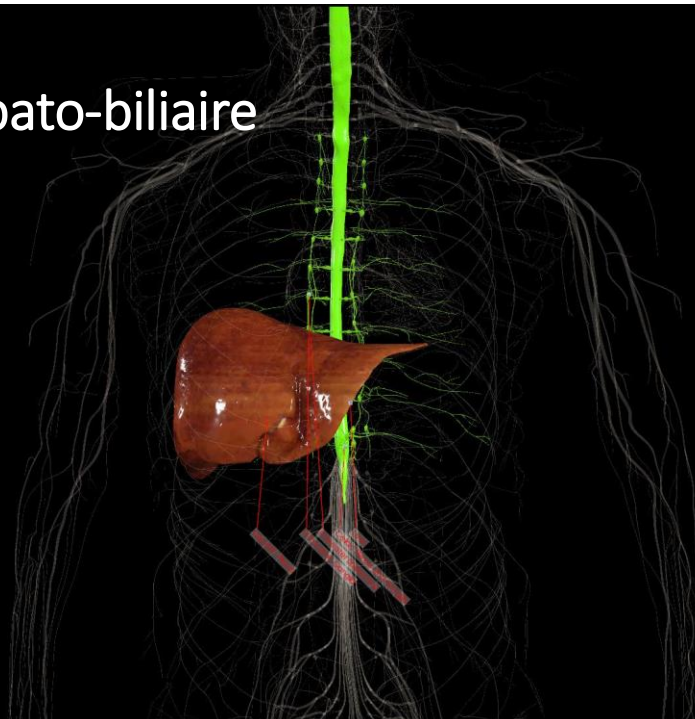
Douleur hépato-biliaire



« L'acromioplastie ne traite pas le cancer de la tête du pancréas ... »

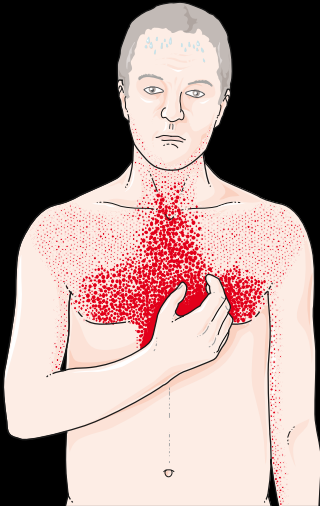
123

Douleur hépato-biliaire



124

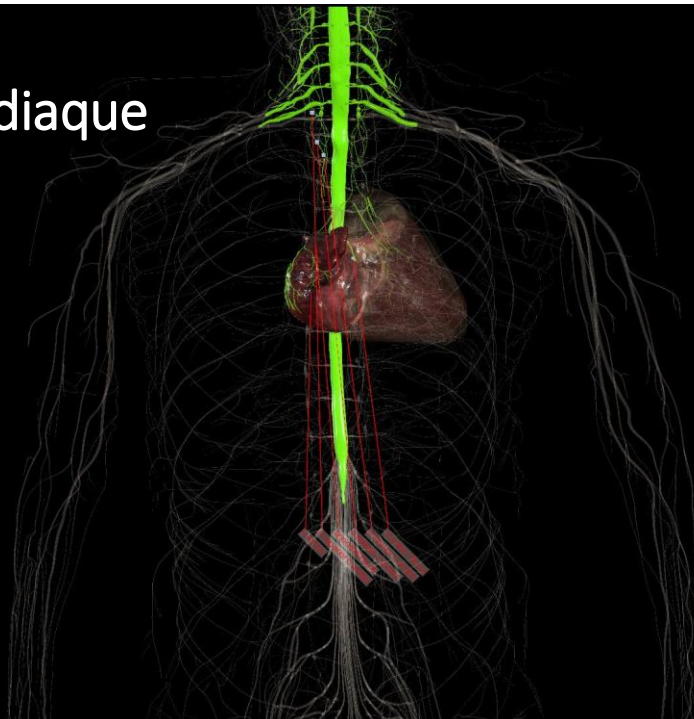
Douleur cardiaque



« ni la coronaropathie... »

125

Douleur cardiaque



126

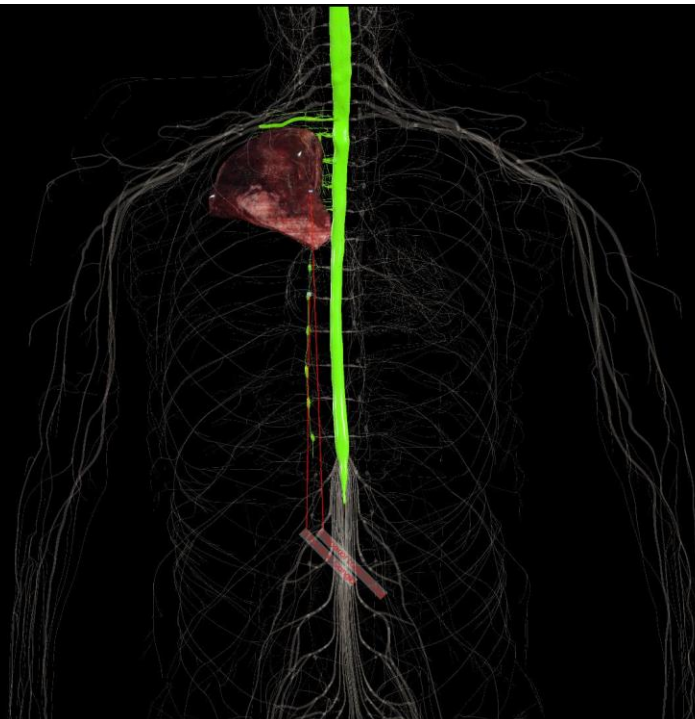
Thorax



« ni la tumeur de l'apex
pulmonaire... »

127

Thorax

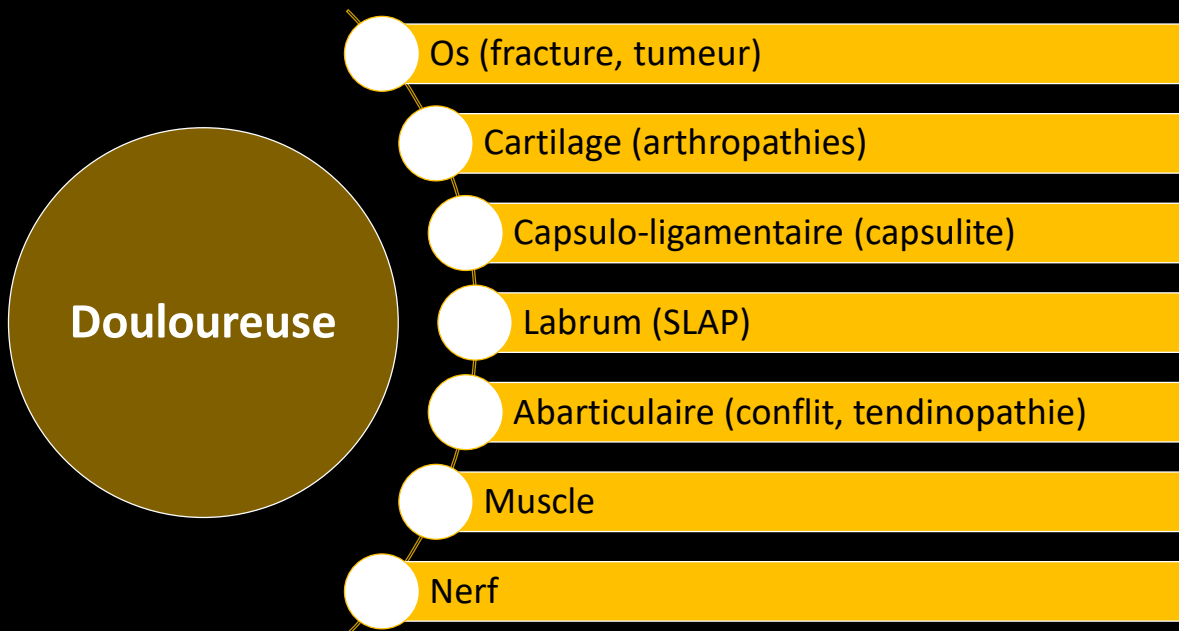
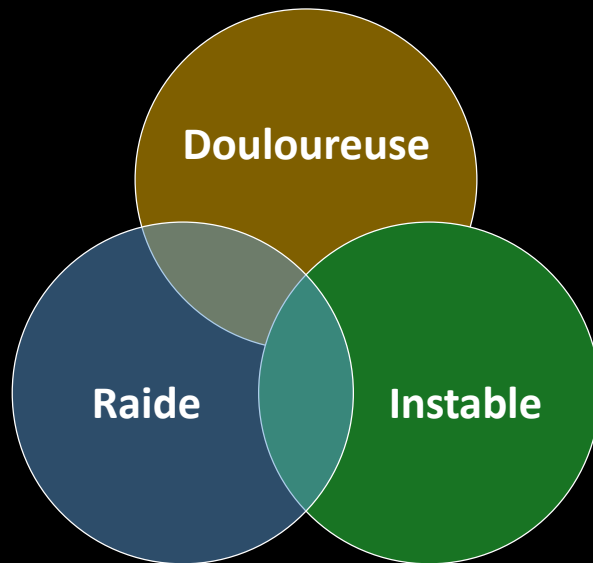


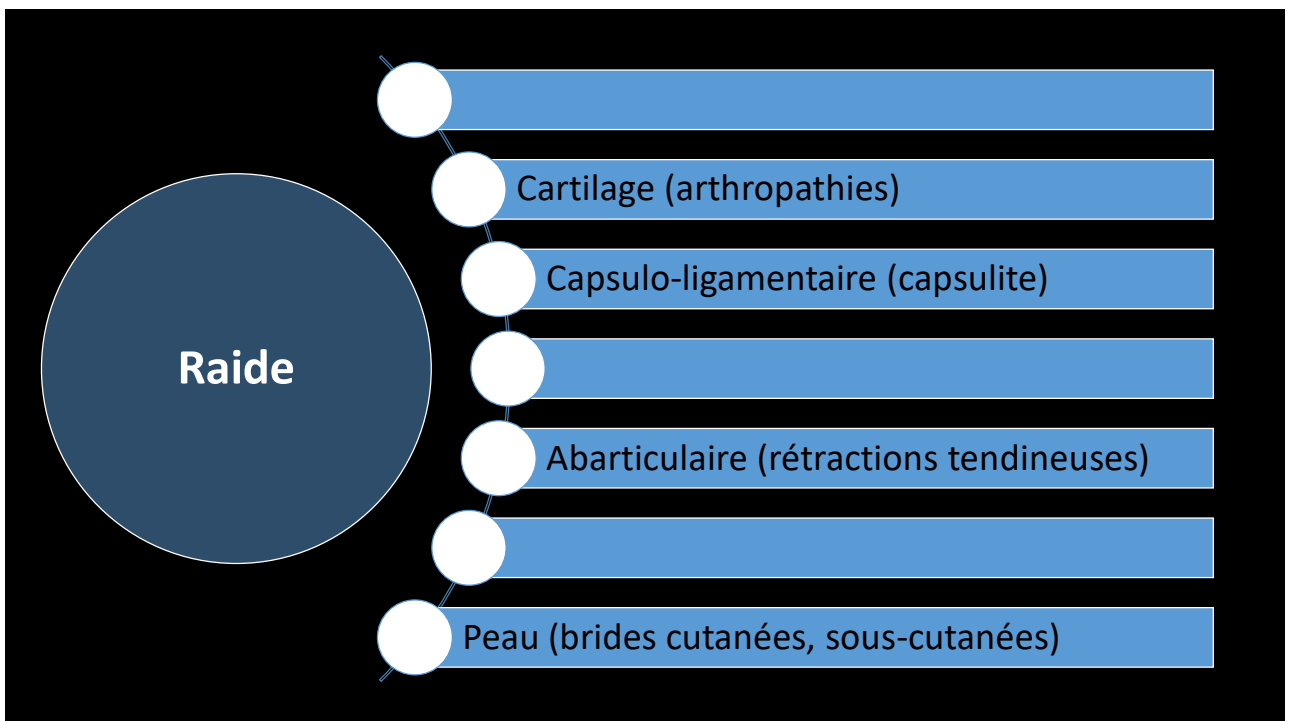
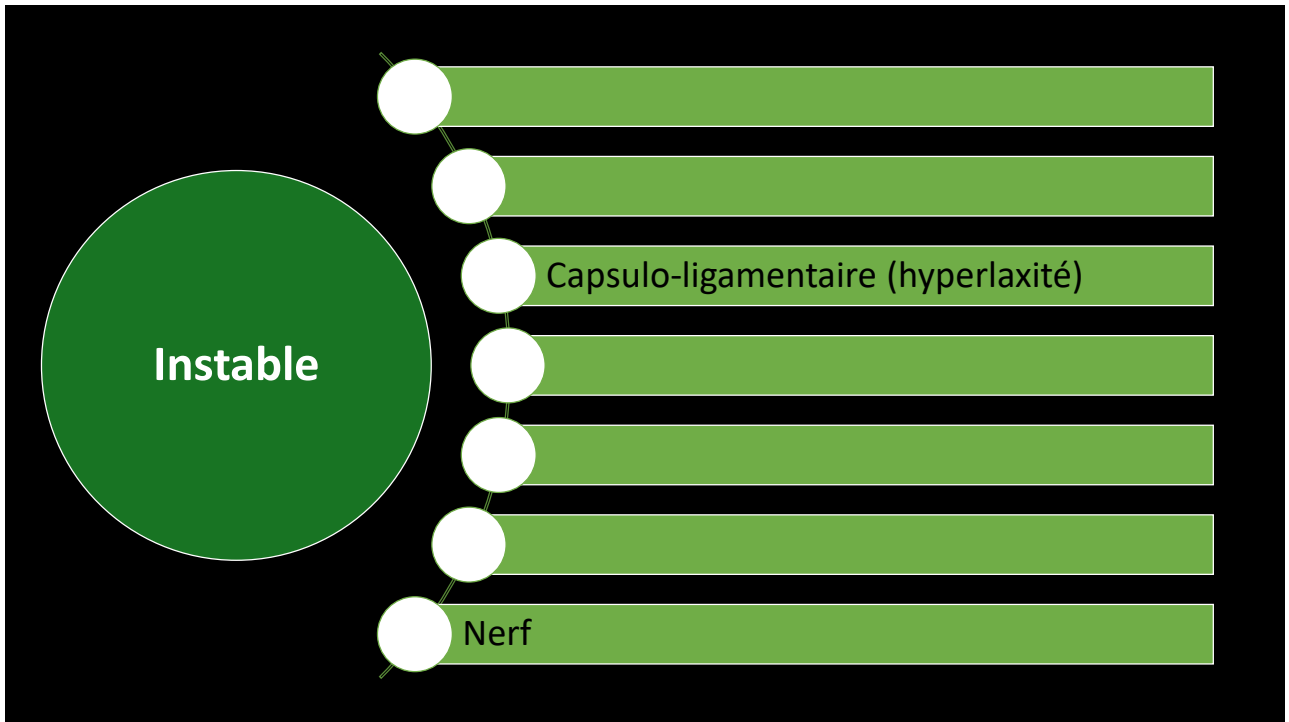
128

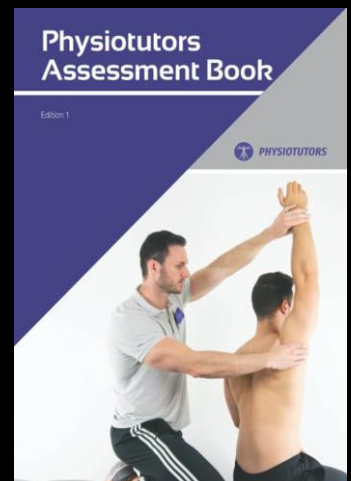
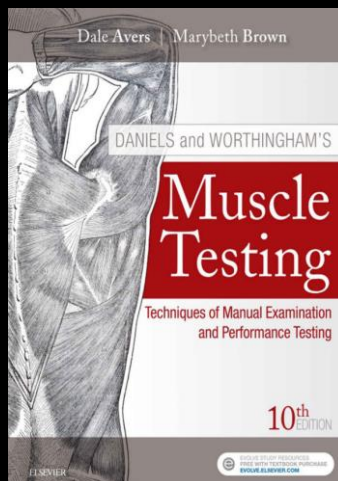
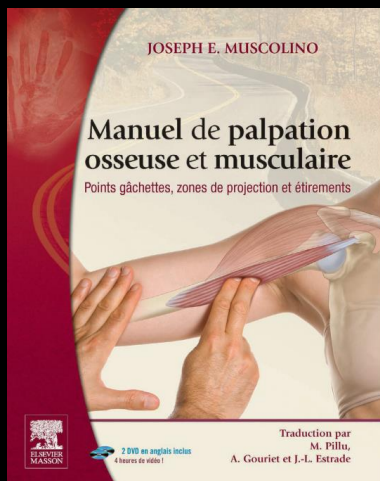
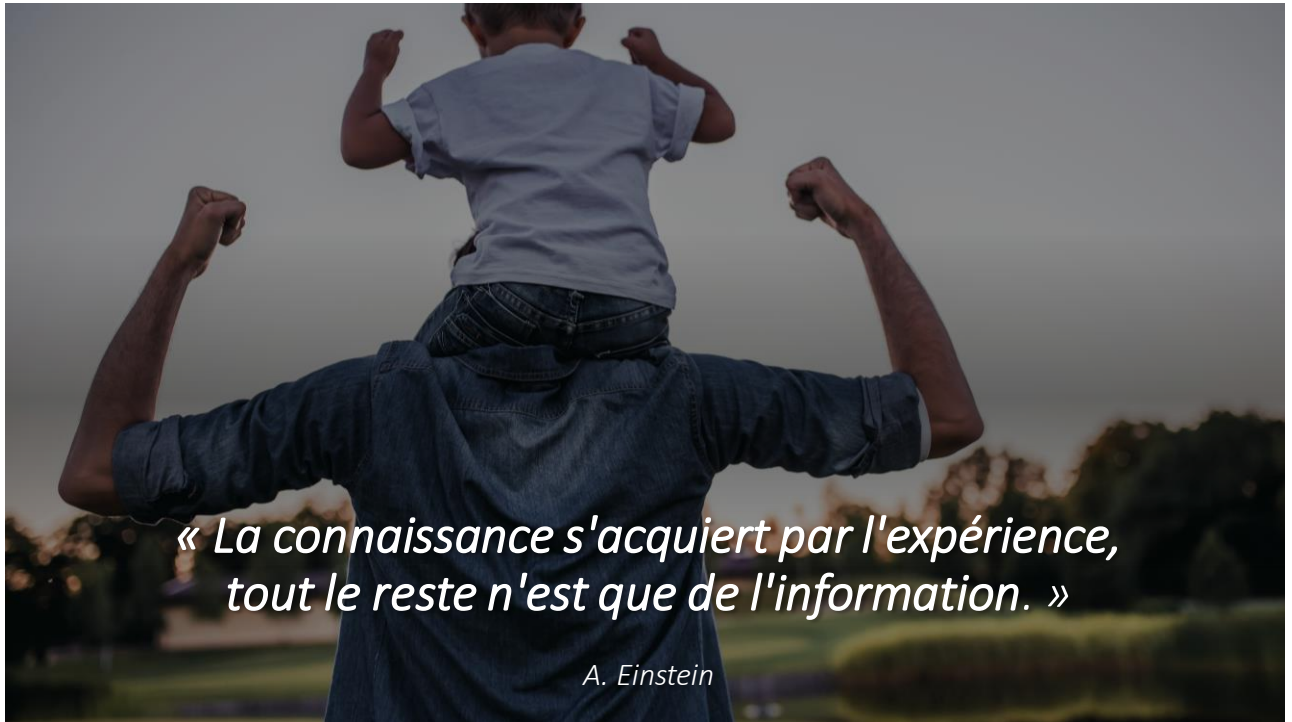
Conclusion

Inspection	Amyotrophie / Ecchymose / Tuméfaction / Déformation
Mobilités	Scapulo-humérales / Globales / Rythme scapulaire
Conflits	Antéro-latéral / Antéro-médial / Postérieur
« Testing » de coiffe	Supra-épineux / Infra-épineux Petit rond / Subscapulaire + LB
Racine du MS	Trapèze / Elev de S. / Rhomboïdes / Petit pectoral / Dentelé A
Labrum	SLAP / Labrum postérieur
Laxité	Antérieure / Postérieure / Inférieure
Instabilité	Antérieure et inférieure
Palpation	Os / Articulations / Tendons et muscles / Nerfs

Rachis cervical
Rachis thoracique
Hépatobiliaire
Cœur
Poumon







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