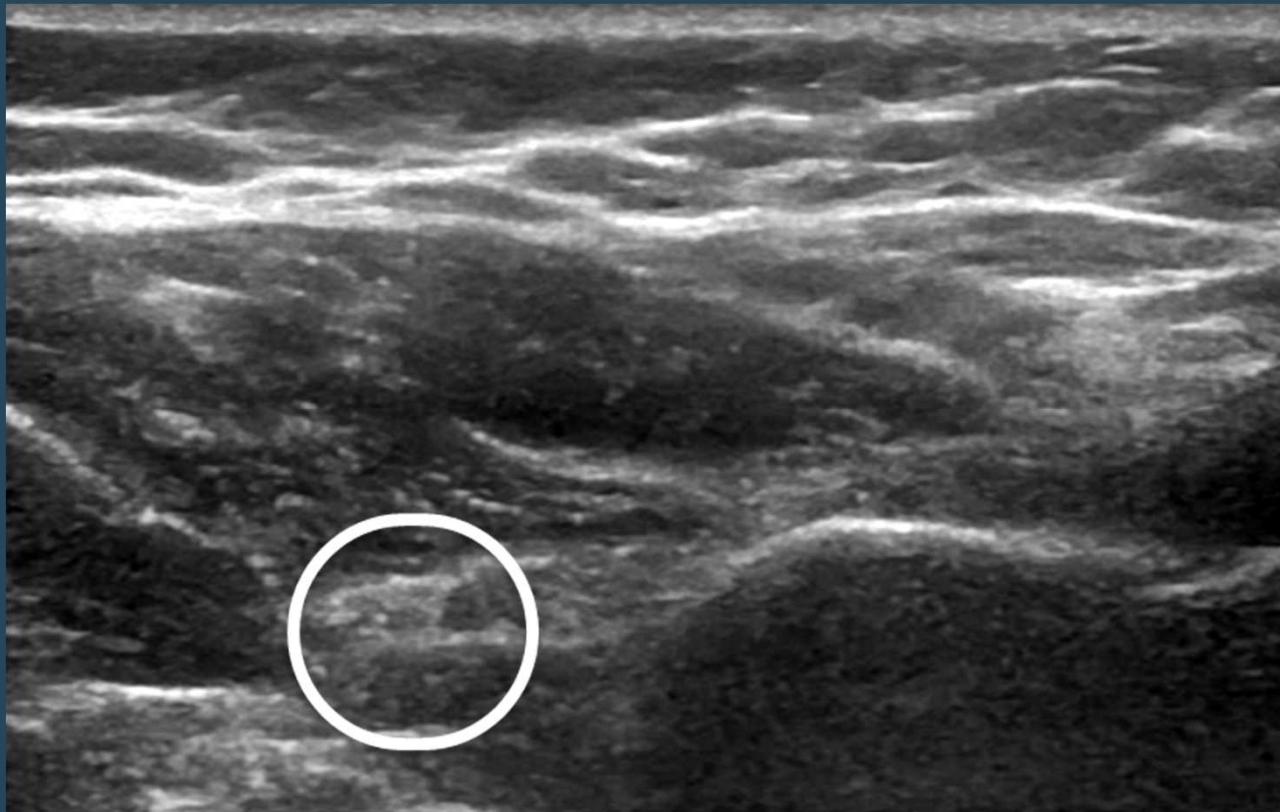


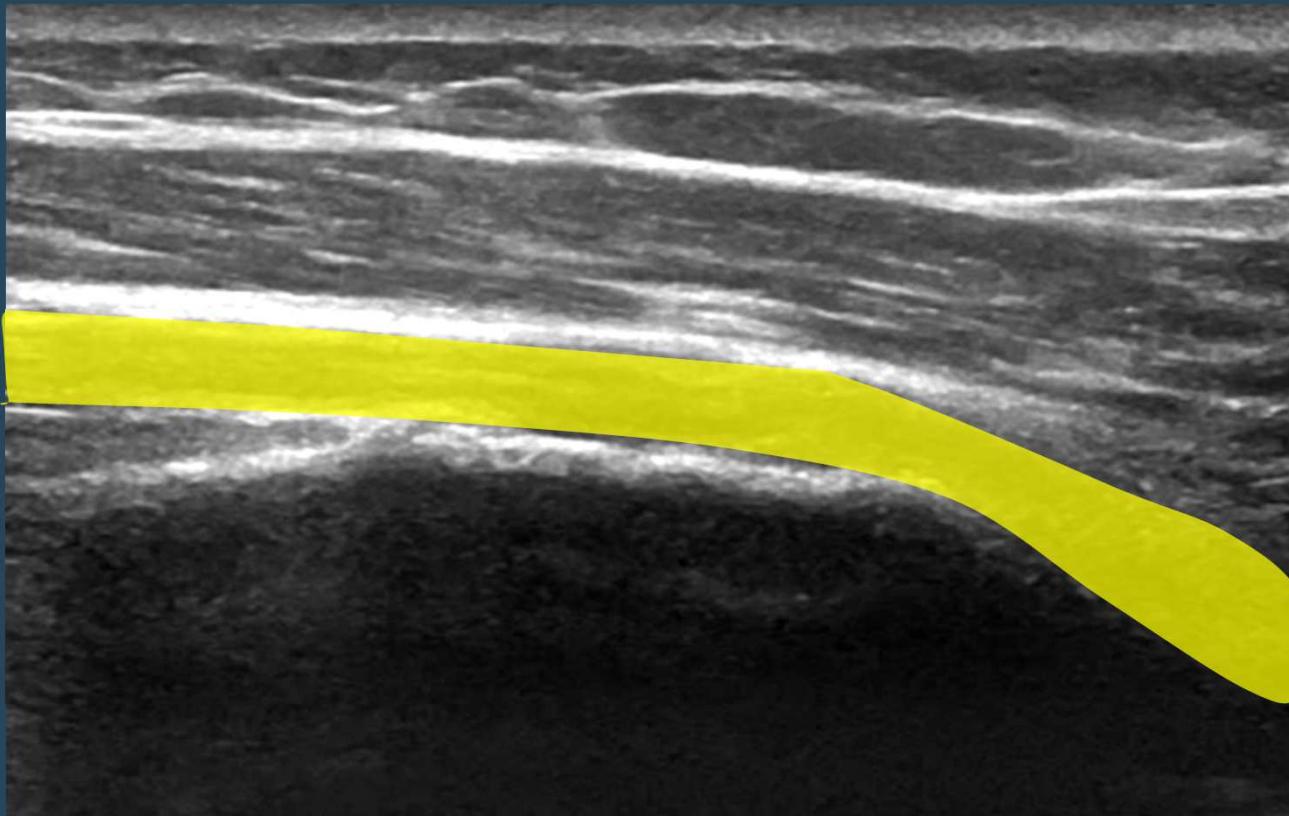
N. Radialis im Kallus



Hochgradige Axonotmesis



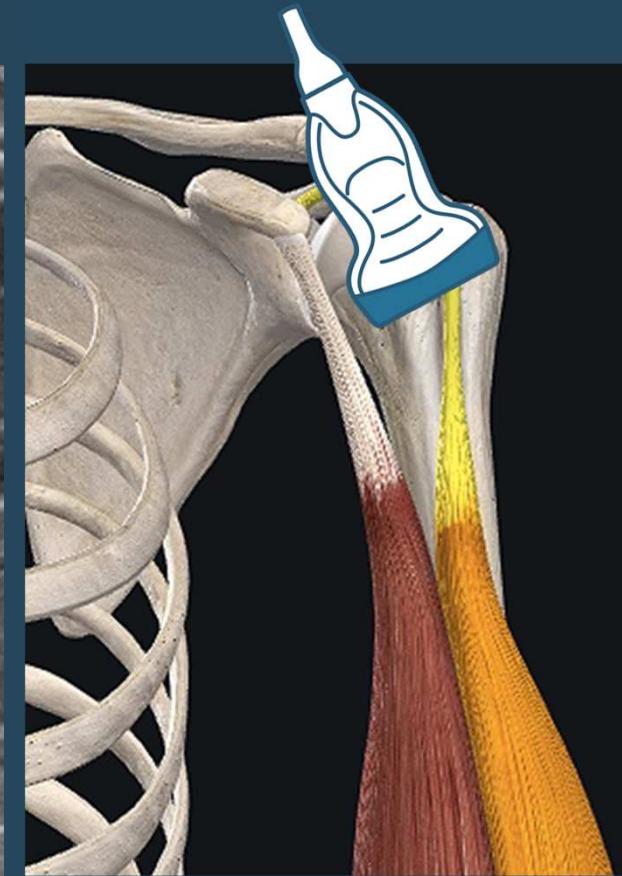
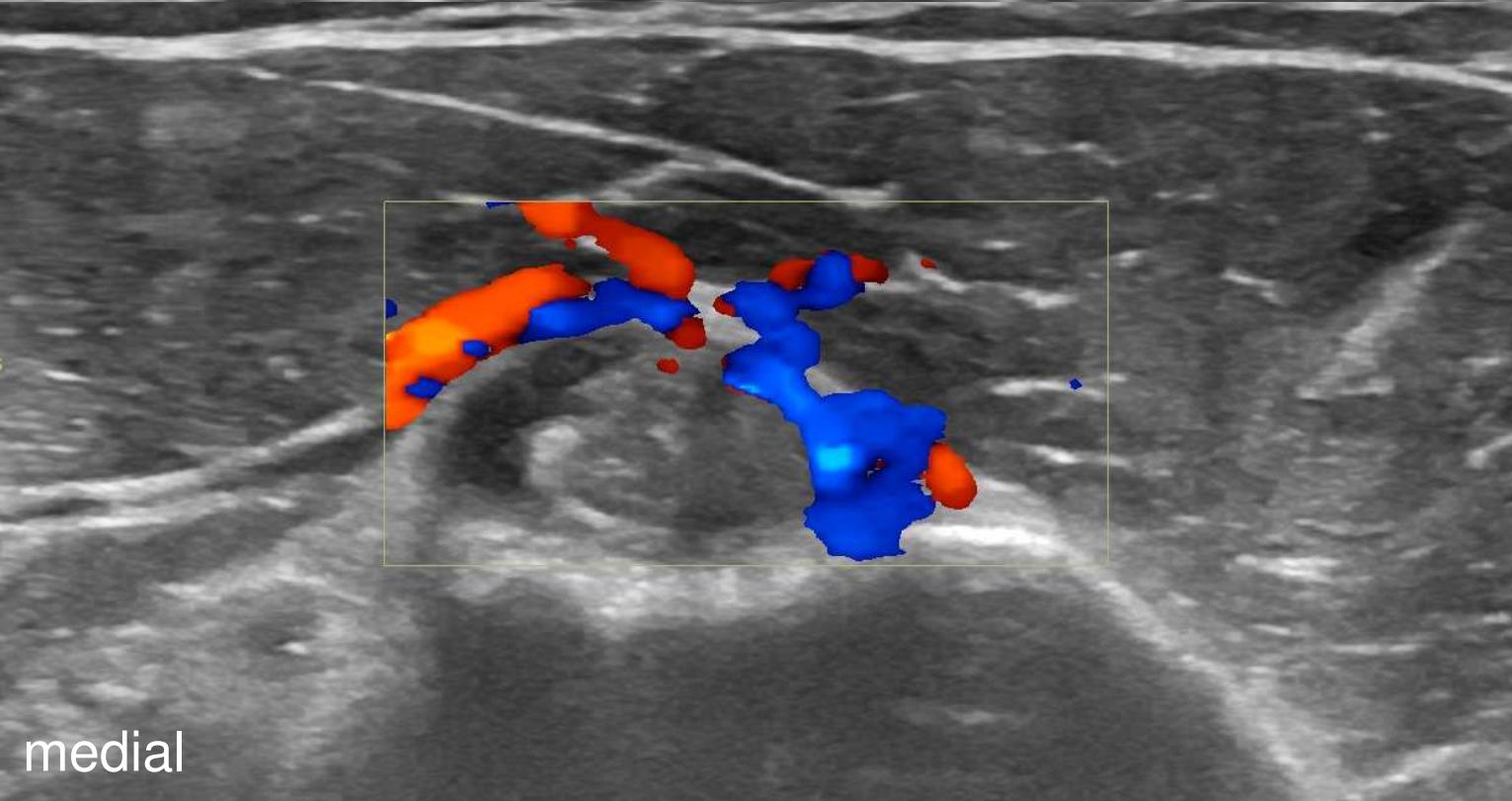
Hochgradige Axonotmesis



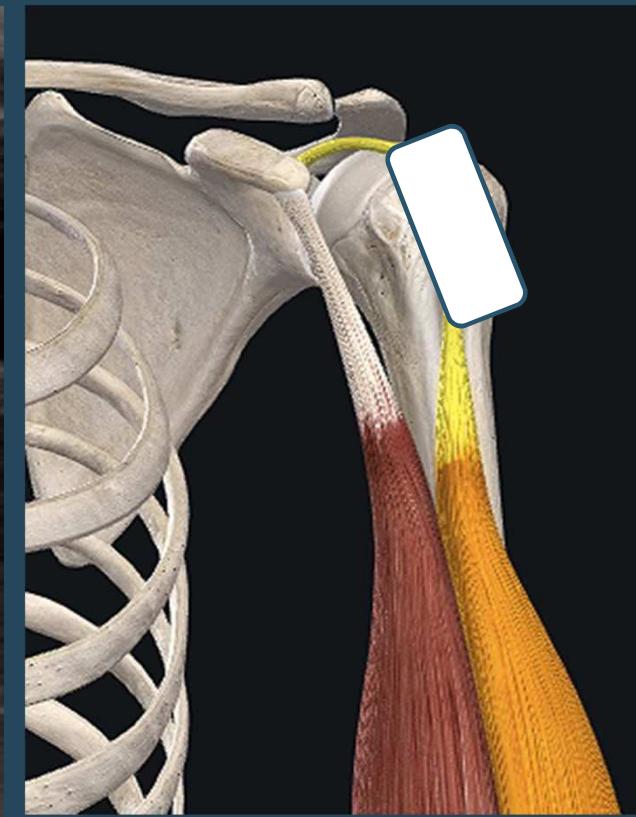
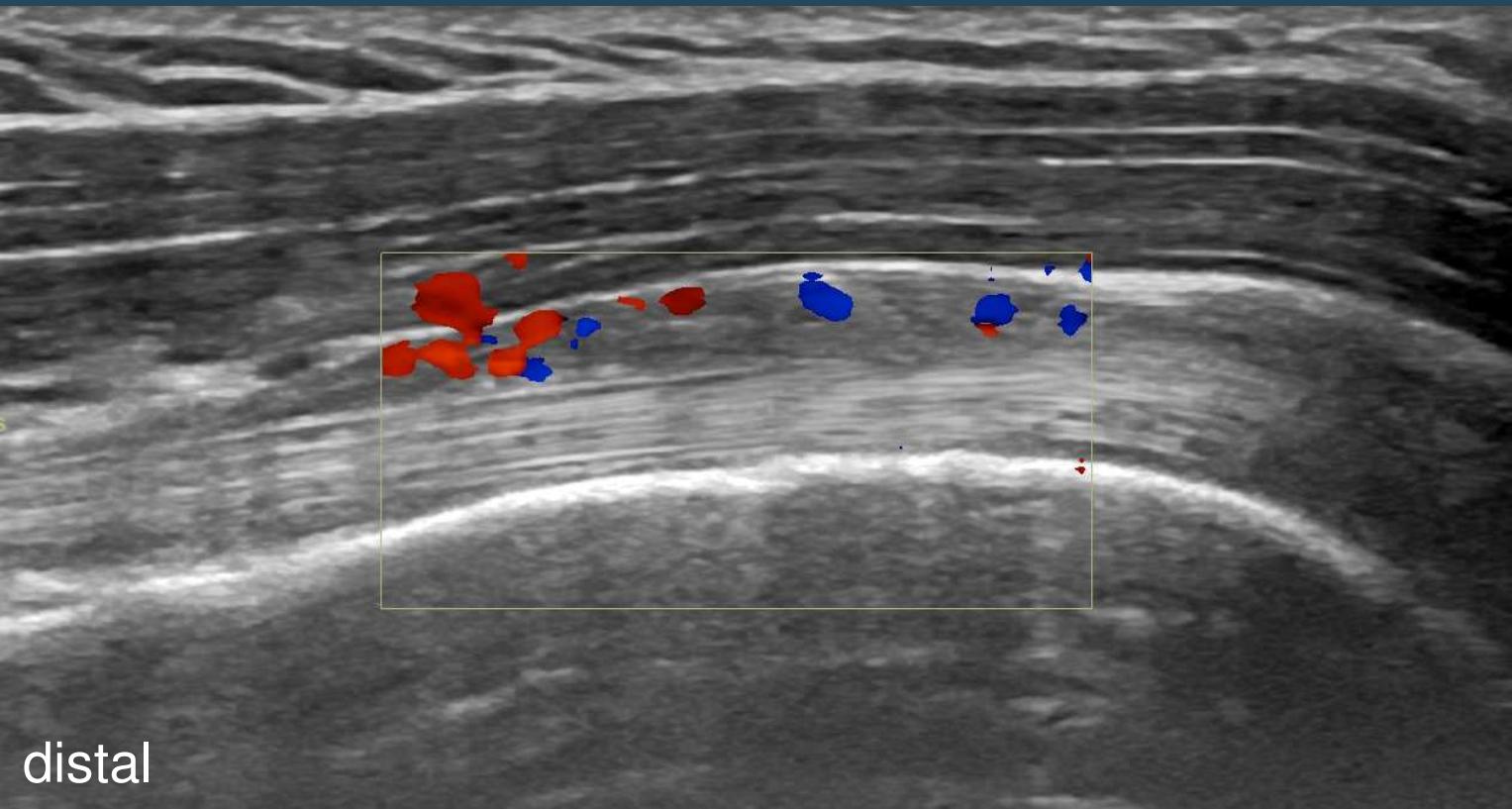
Pathologien

M. Biceps brachii Sehne

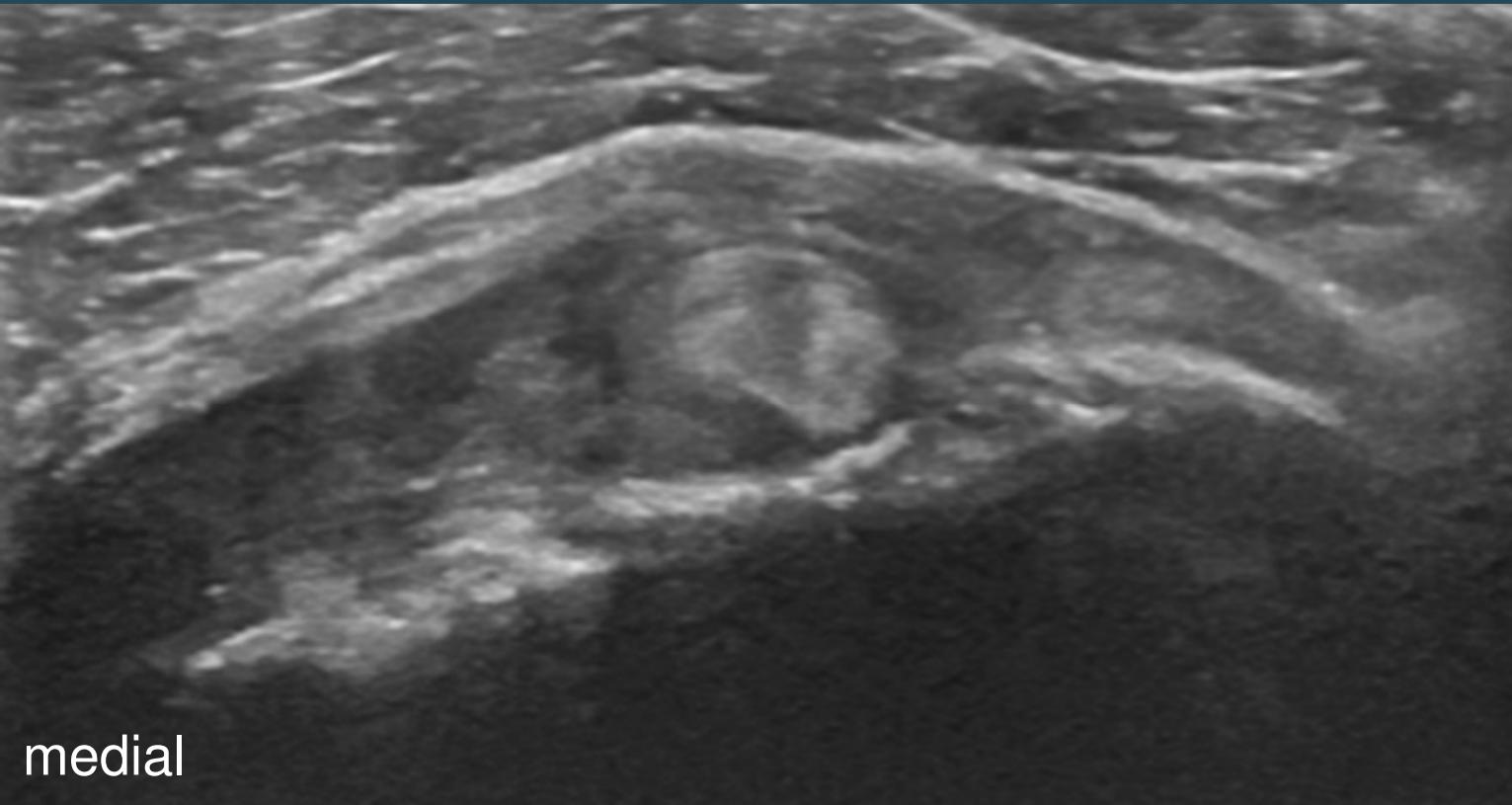
Tendovaginitis



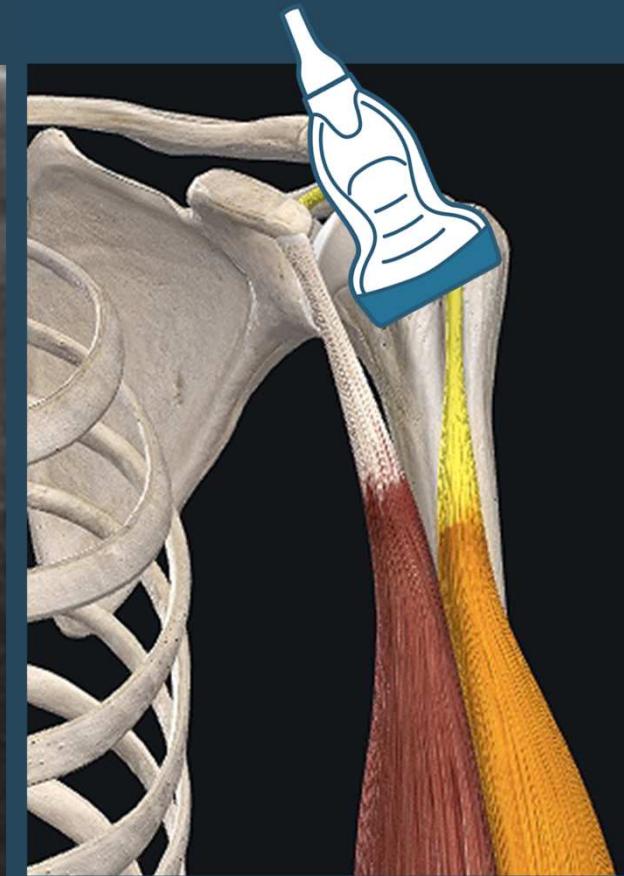
Tendovaginitis



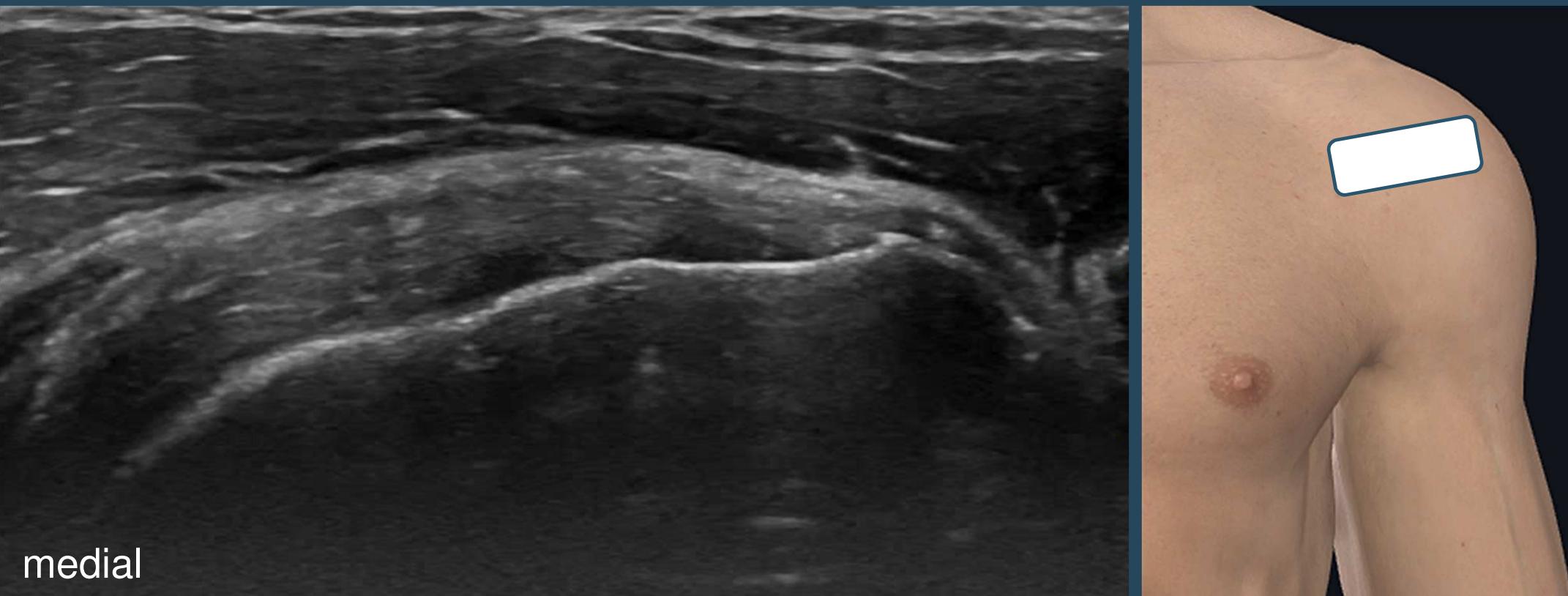
Bicepssehnenriss



medial



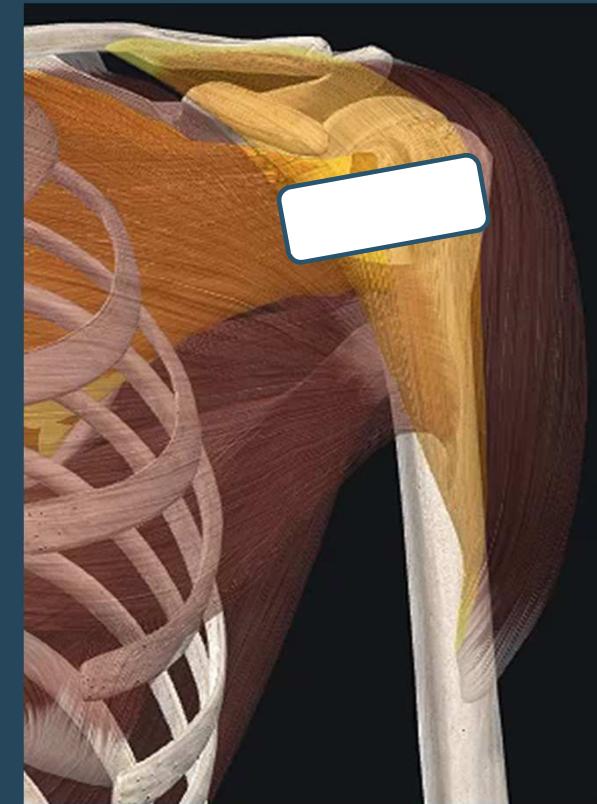
M. Subscapularis & Sehne



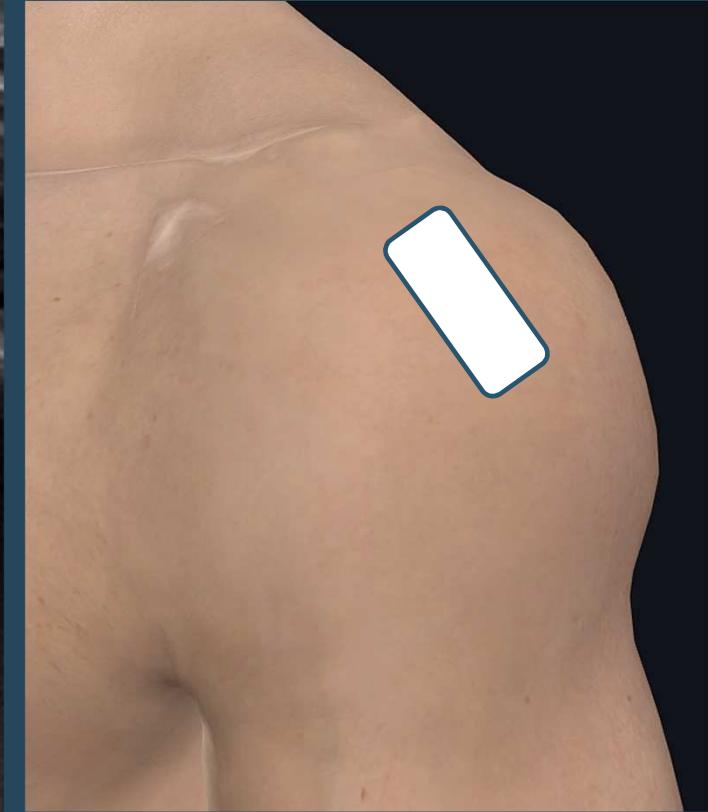
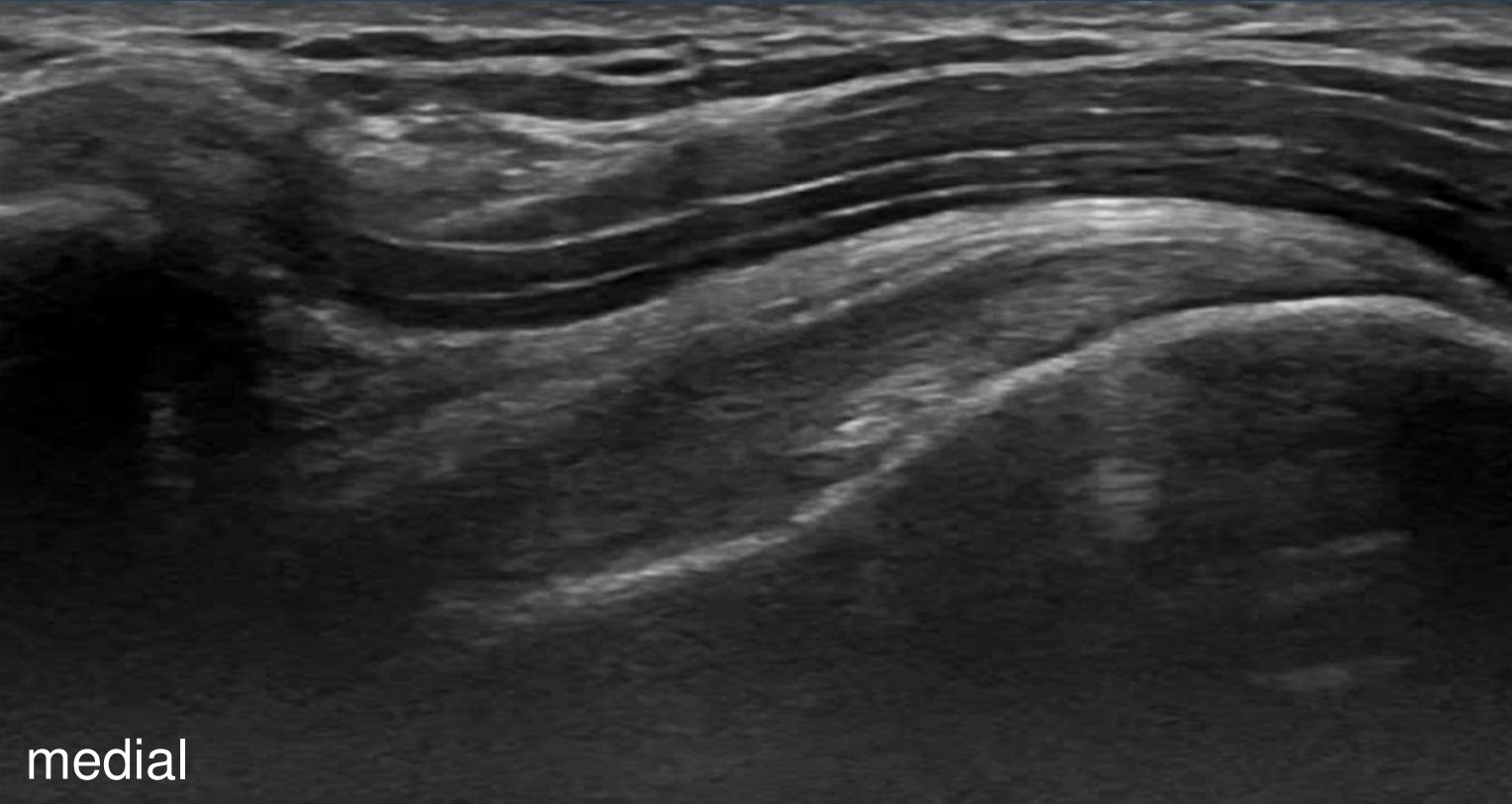
Pathologien

M. Subscapularis Sehne

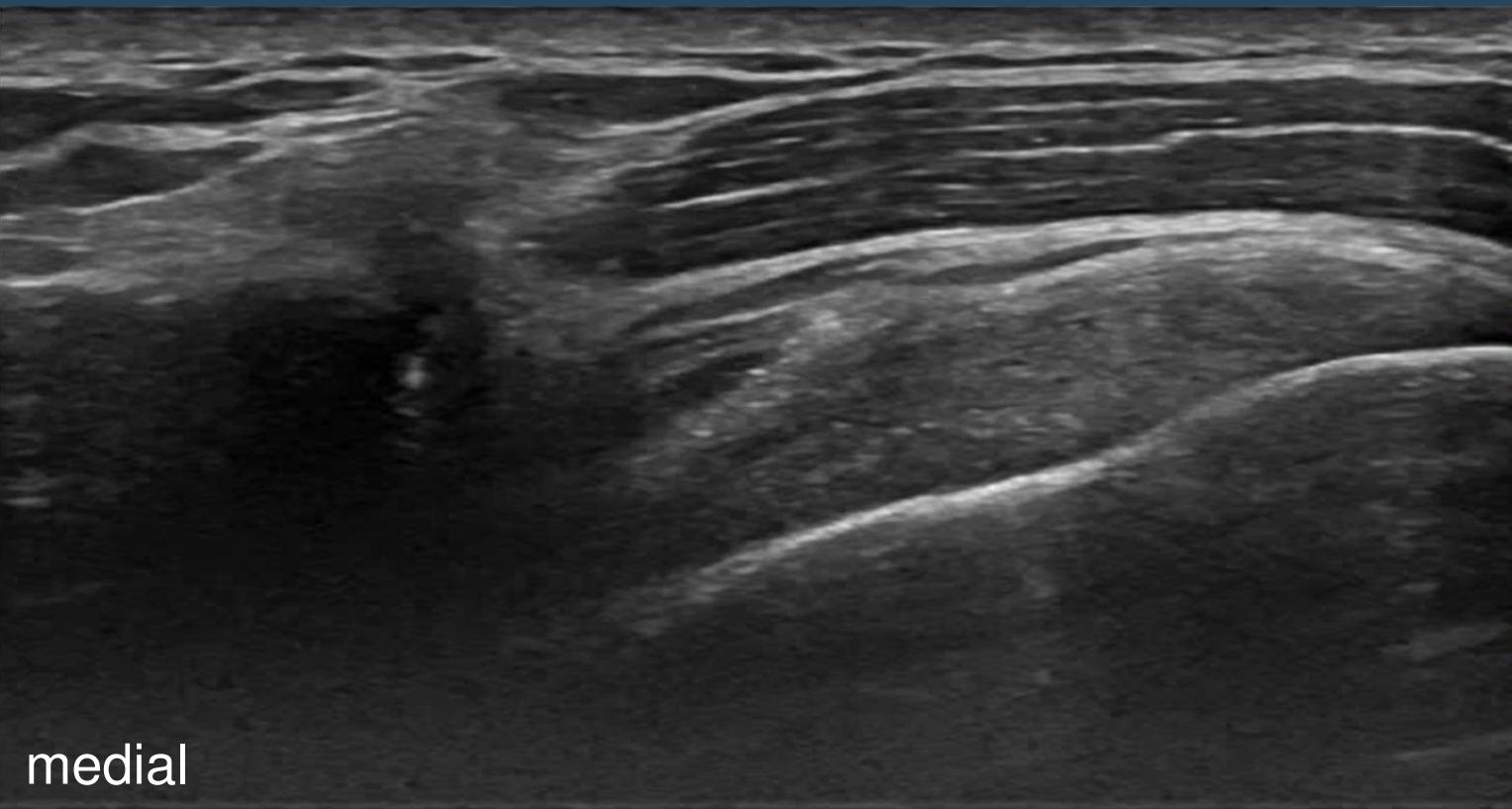
Komplette Ruptur



Supraspinatussehne



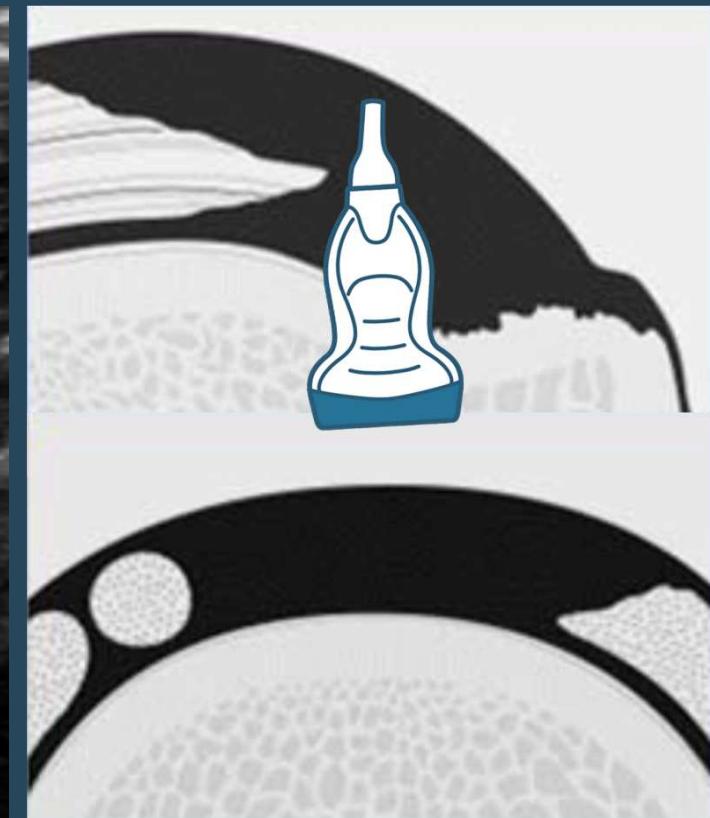
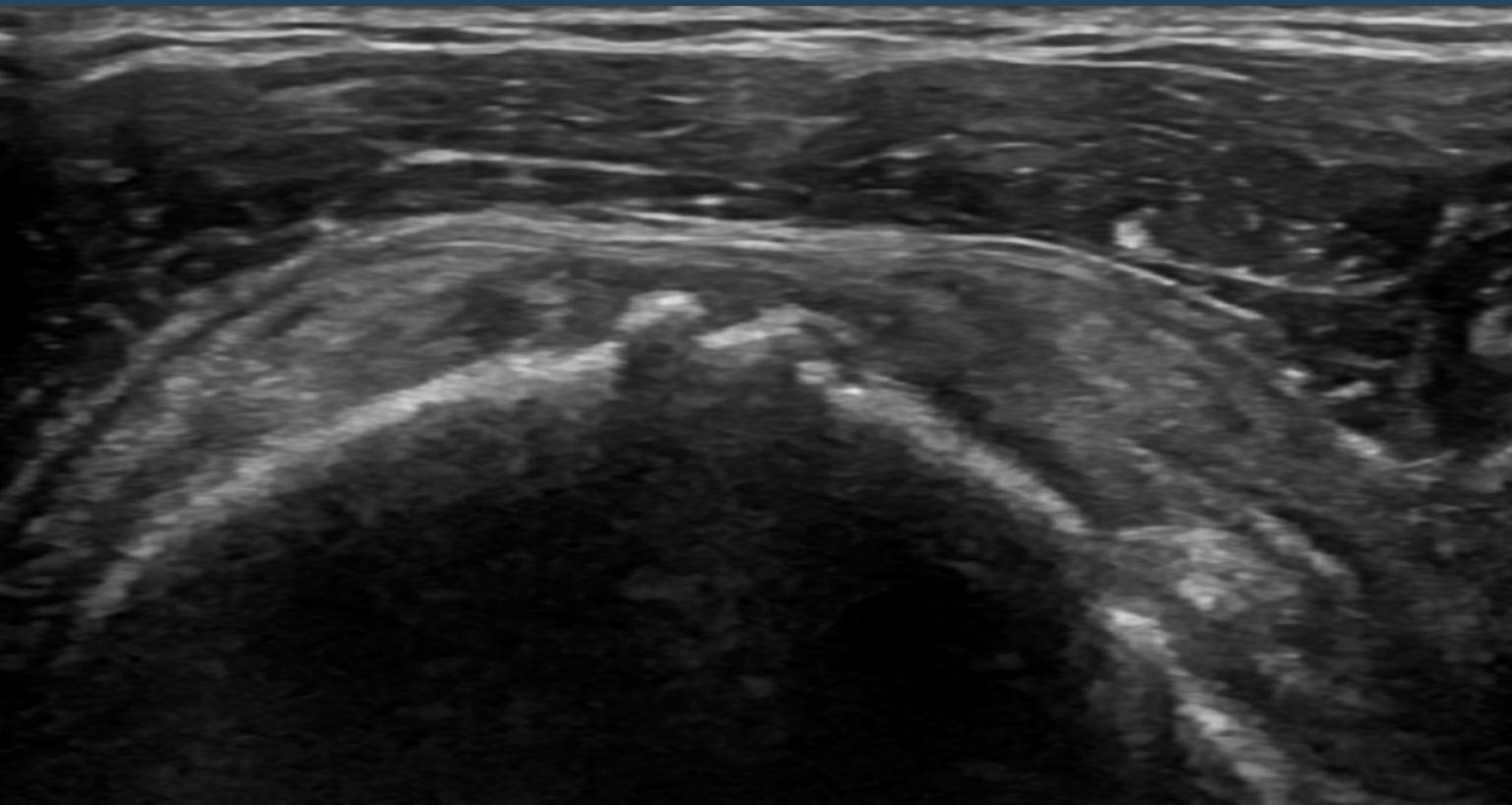
Supraspinatussehne Abduktion



Komplettrupturen

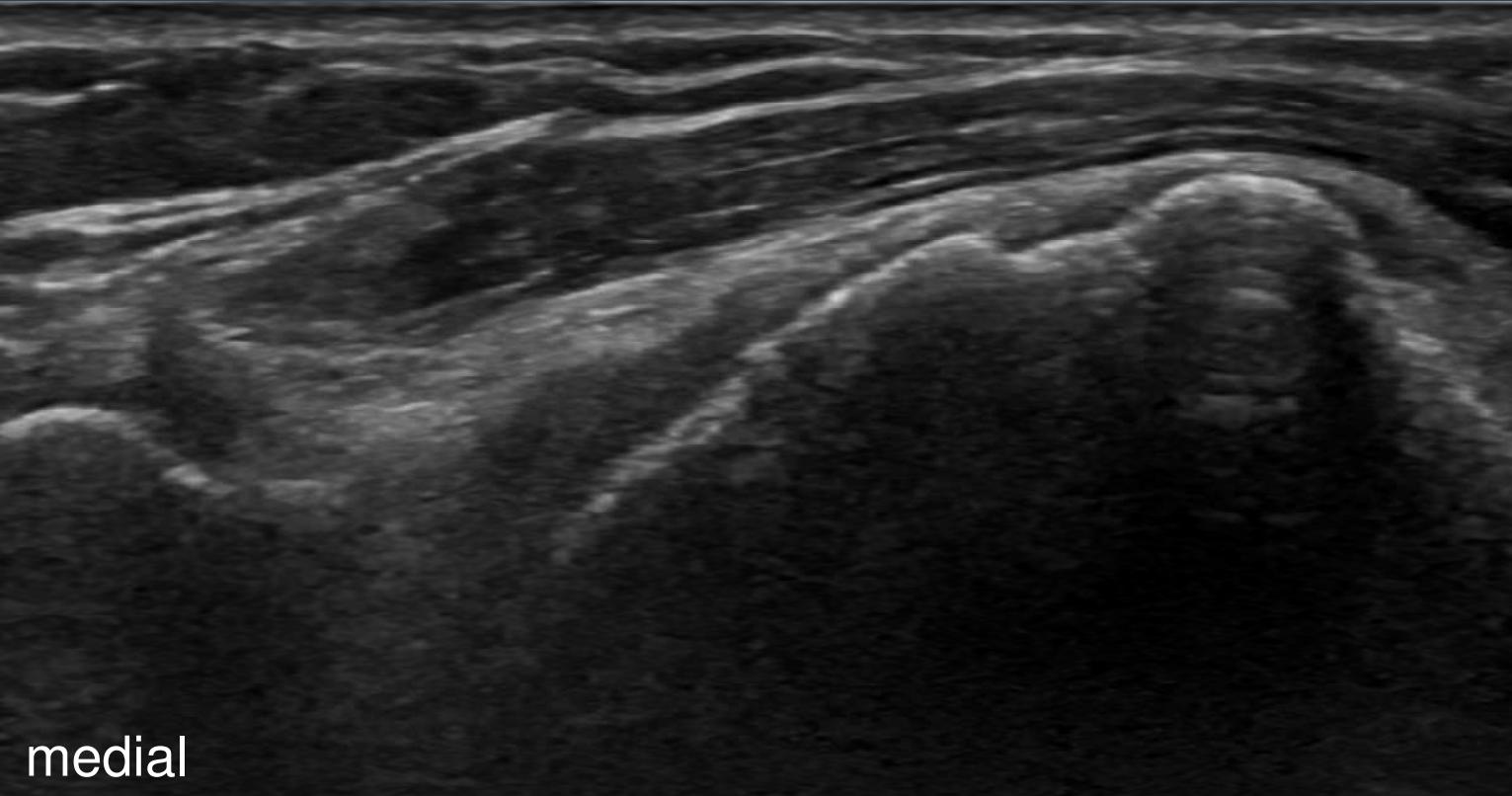
M. Supraspinatus

Komplette Ruptur



J. A. Jacobson, *Fundamentals of Musculoskeletal Ultrasound*

Komplette Ruptur

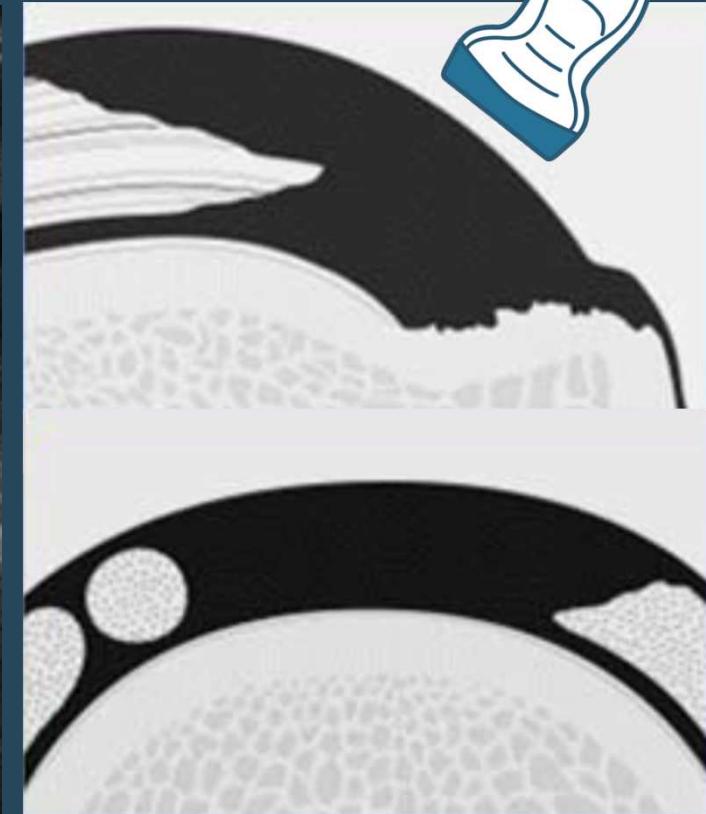
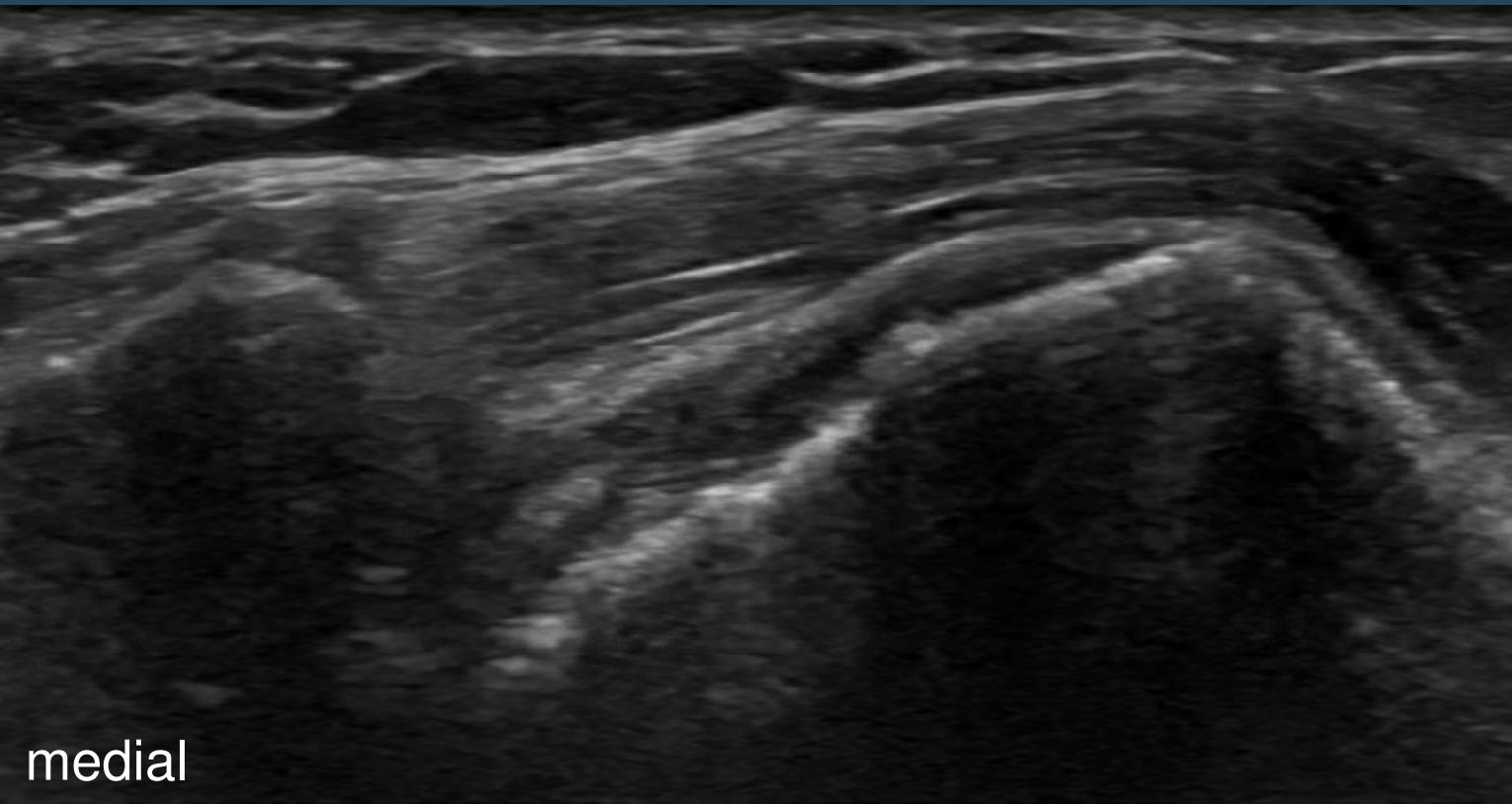


medial



J. A. Jacobson, *Fundamentals of Musculoskeletal Ultrasound*

Komplette Ruptur

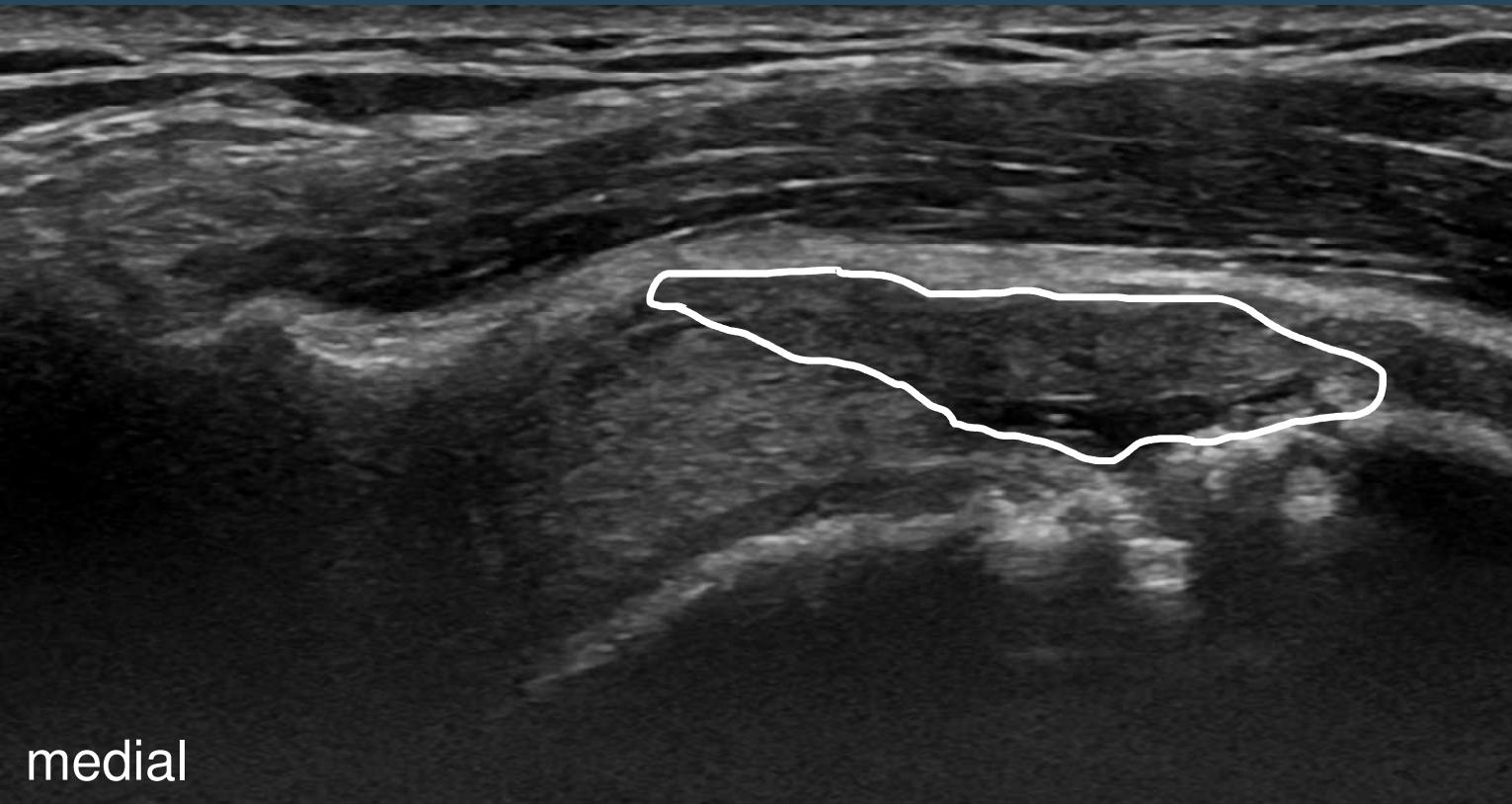


medial

J. A. Jacobson, *Fundamentals of Musculoskeletal Ultrasound*

PUC

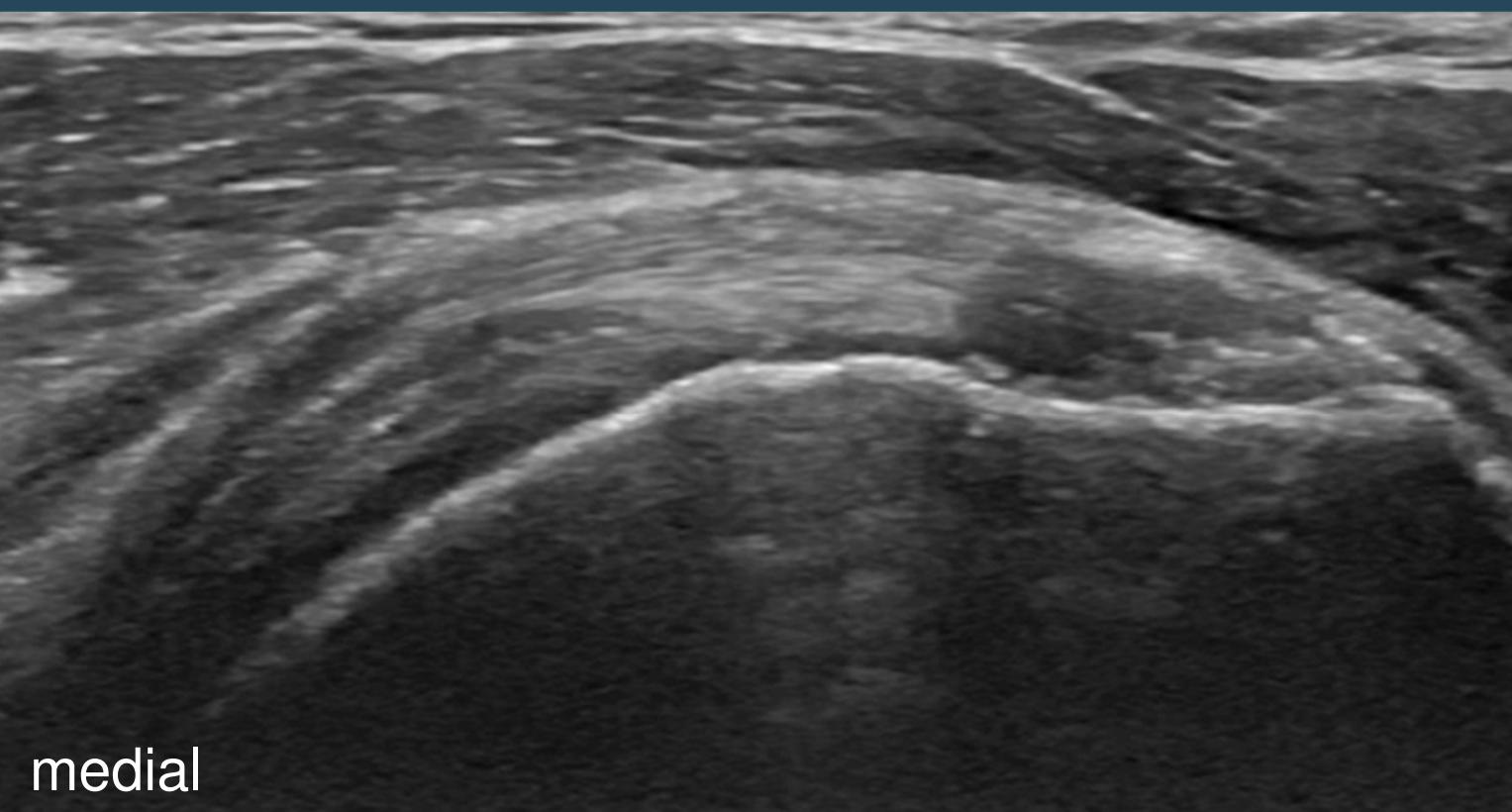
Bursaseitige Teilruptur



J. A. Jacobson, *Fundamentals of Musculoskeletal Ultrasound*

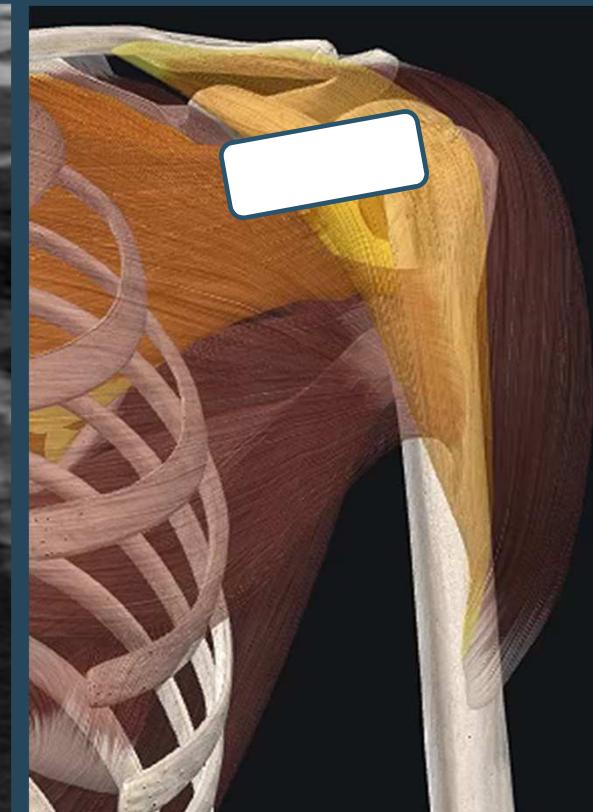
PUC

Degenerative Verkalkungen



medial

Sehne des M. Subscapularis

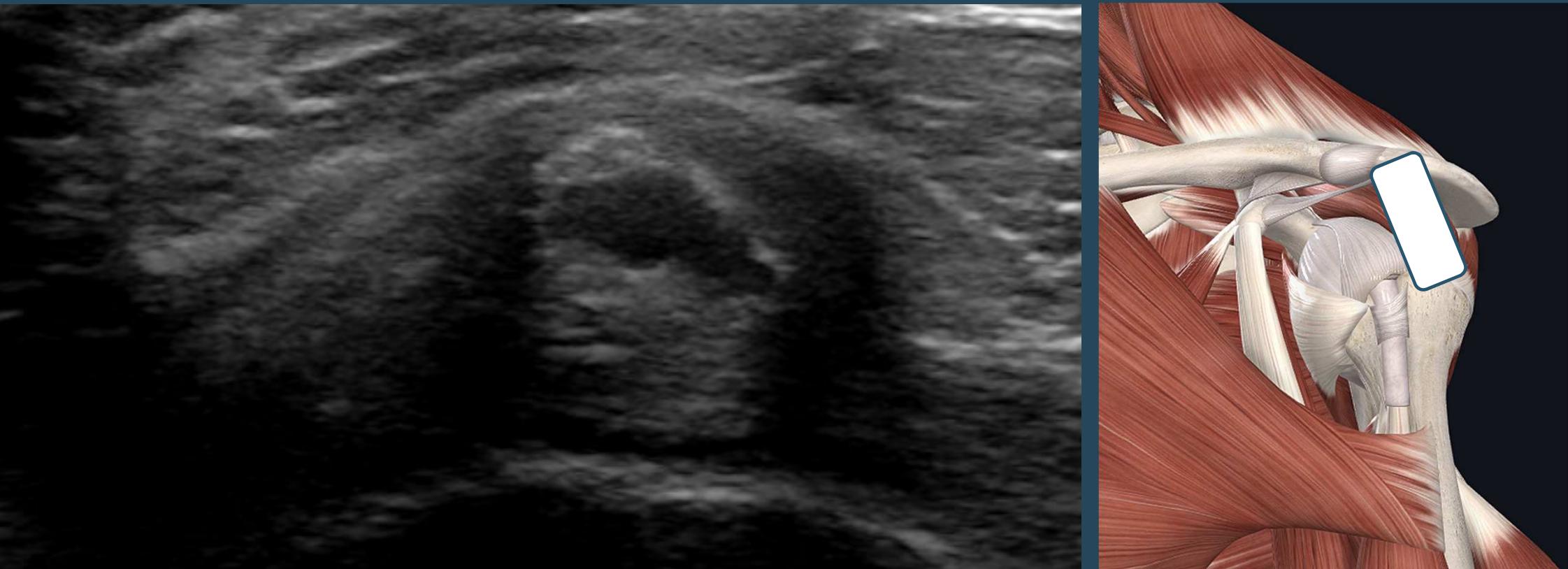


Resorbierende Phase*

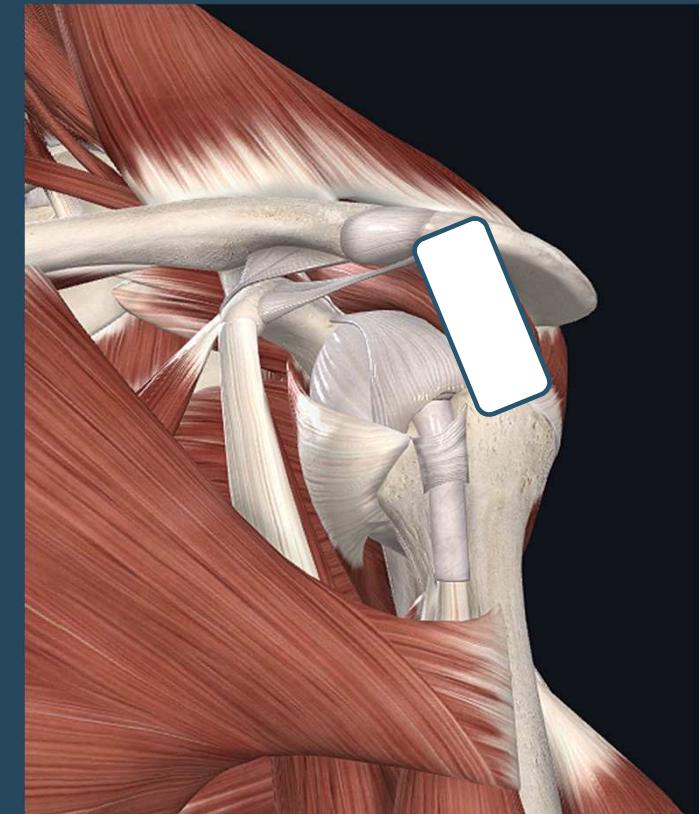
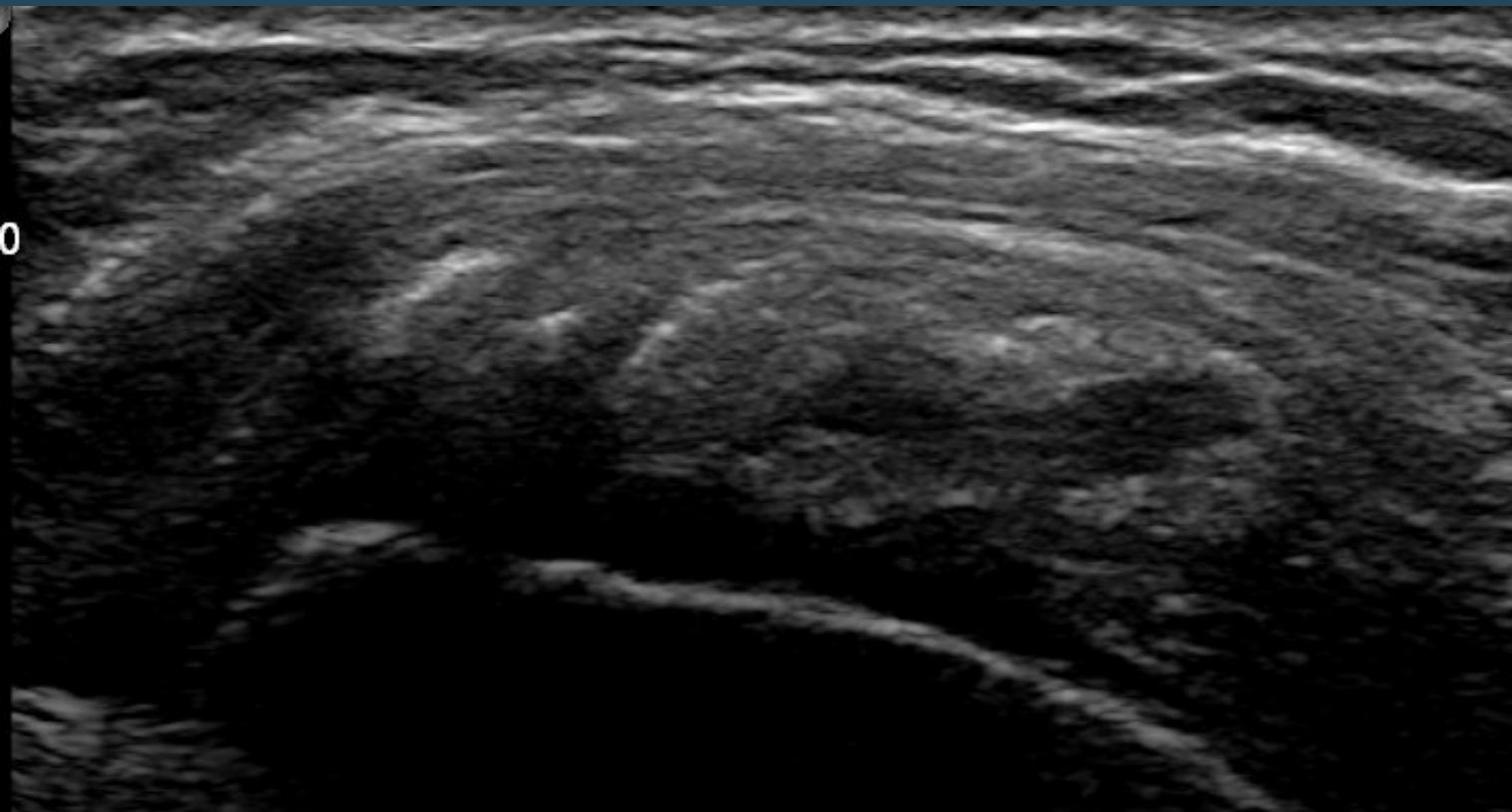
rundlich, amorph, variabler
Schallschatten
schmerhaft

* Chancen bei Lavage

Kalk

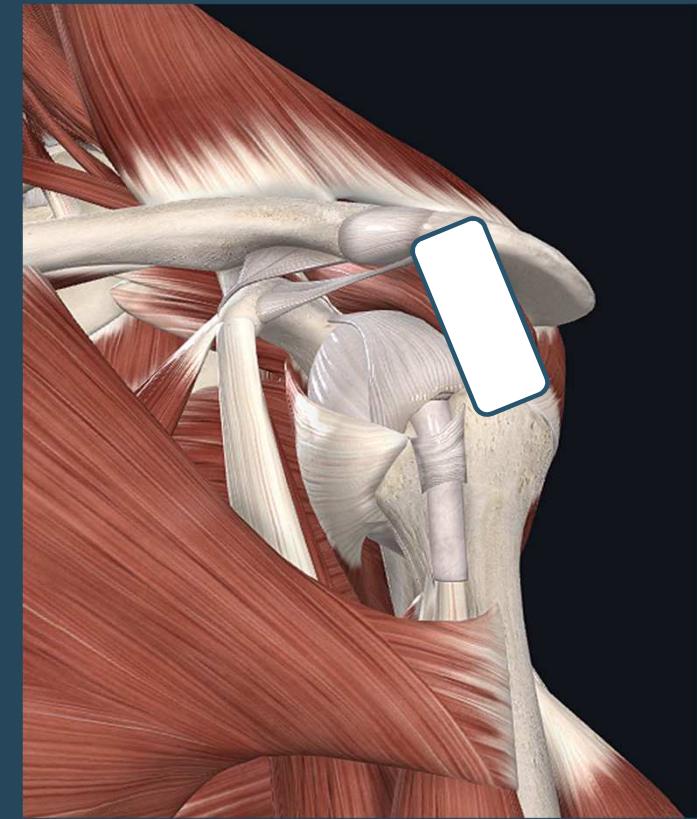
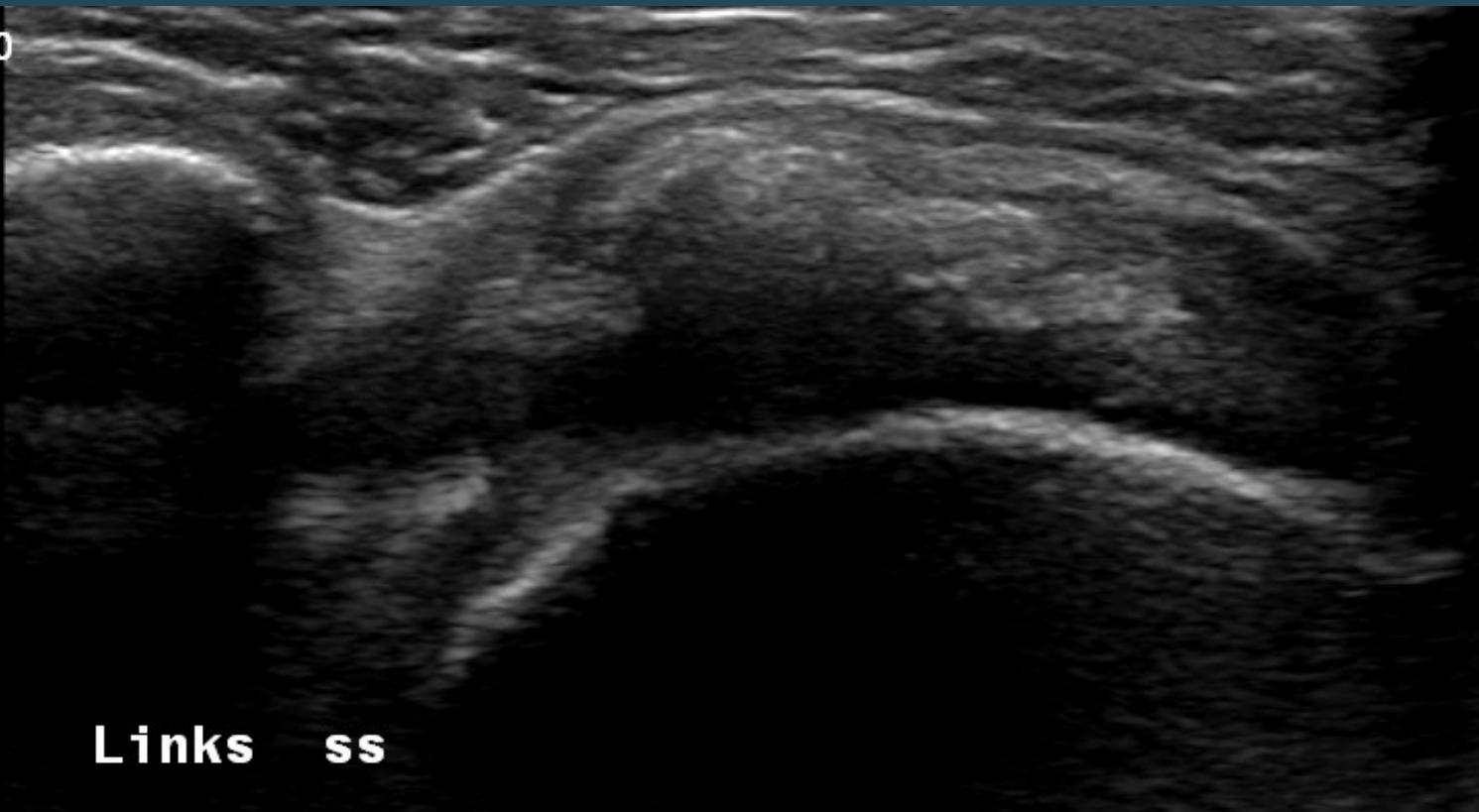


Kalk

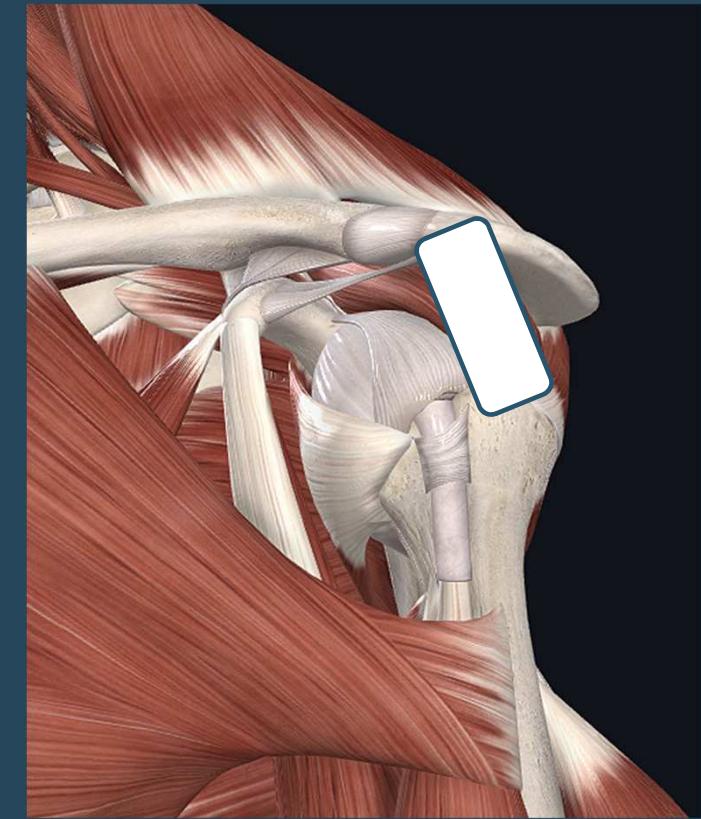
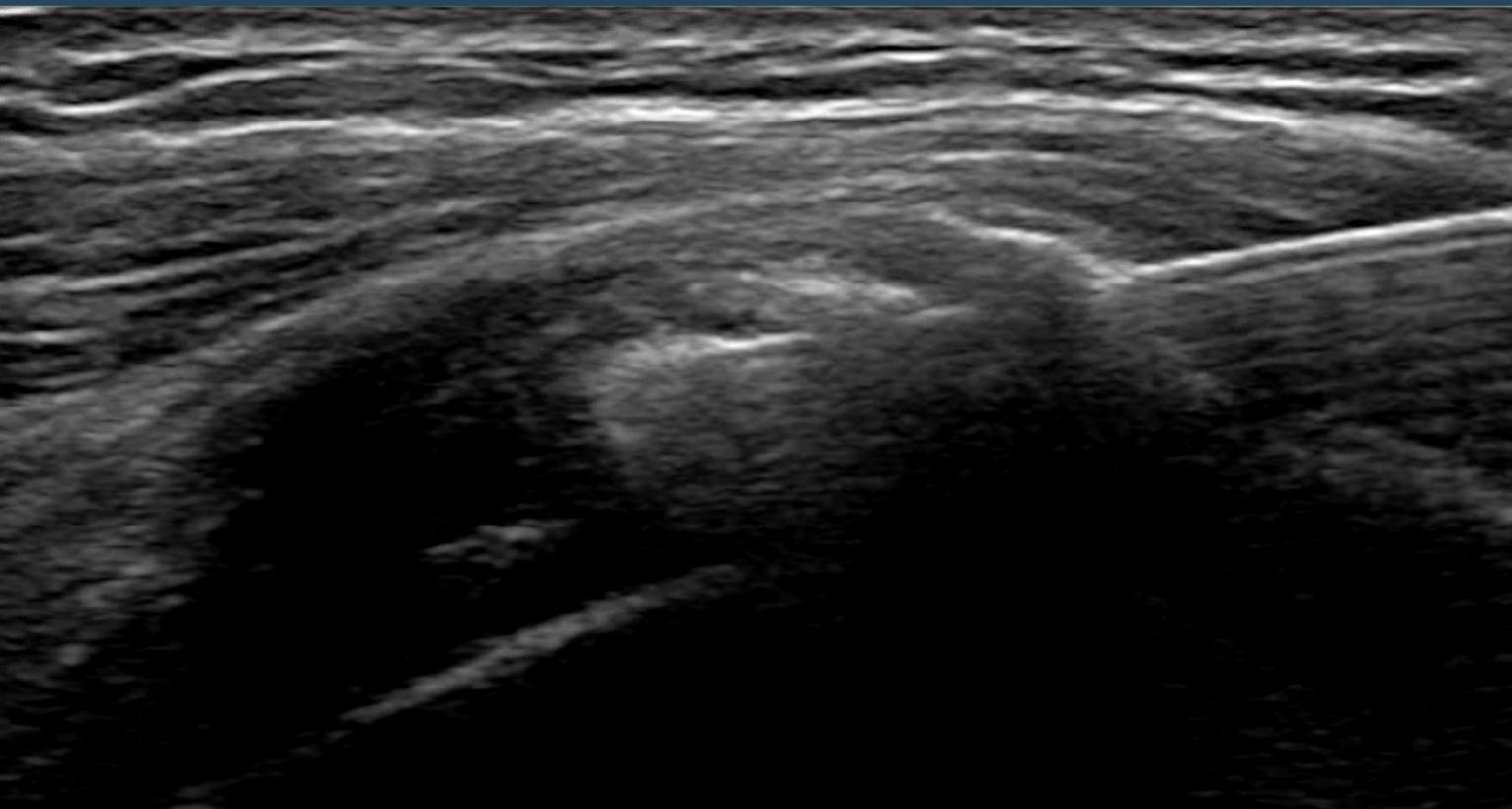


Kalkmilch

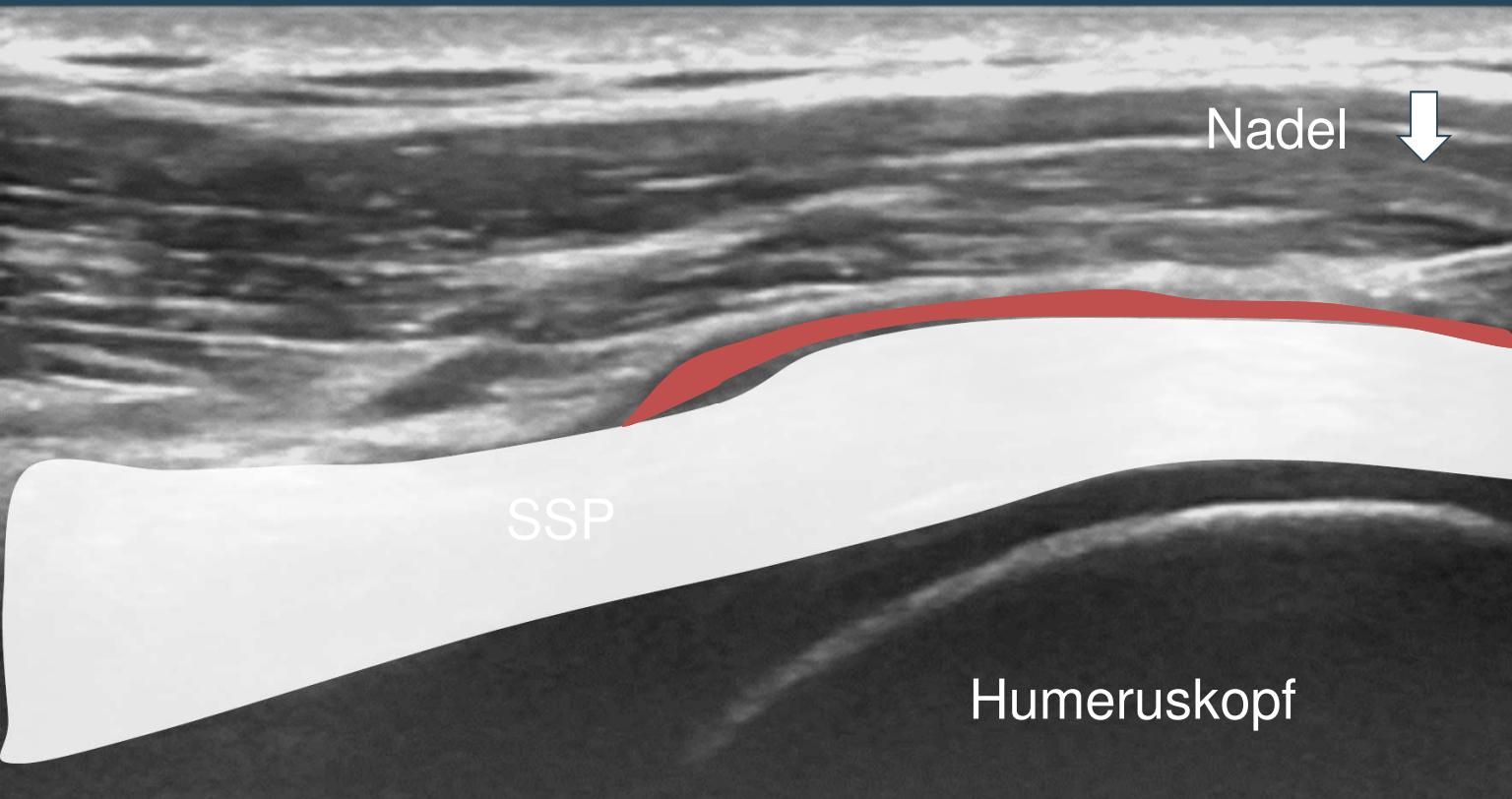
60



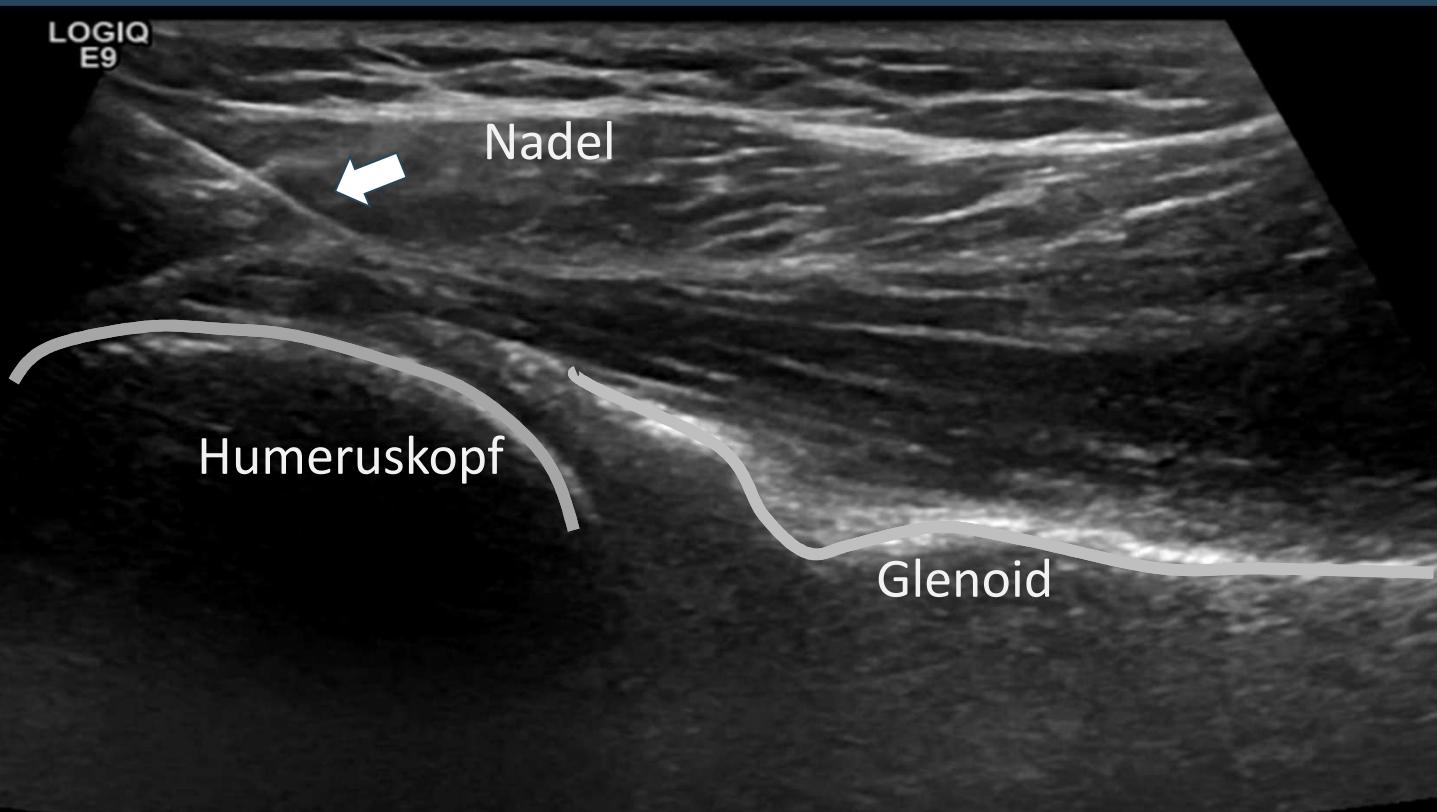
Lavage



Bursitis subacromialis-subdeltoidaea



Frozen shoulder - Hydrodissektion



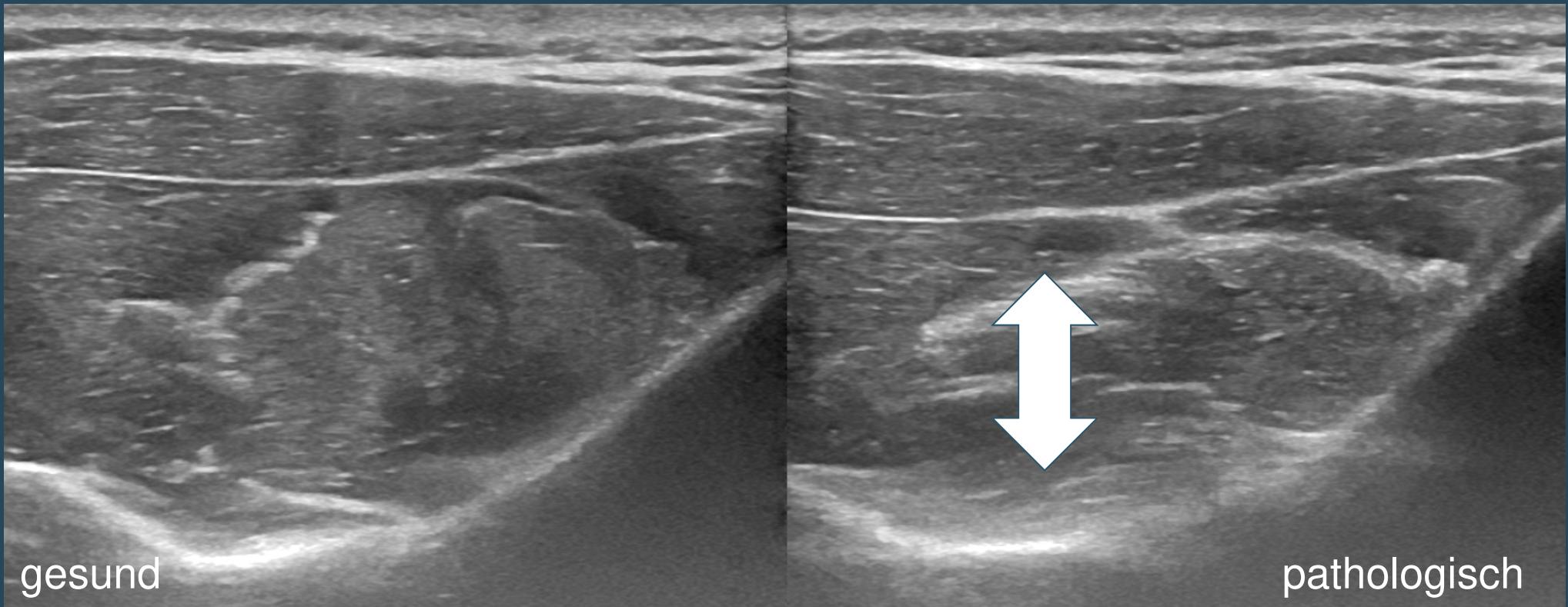
Vorher

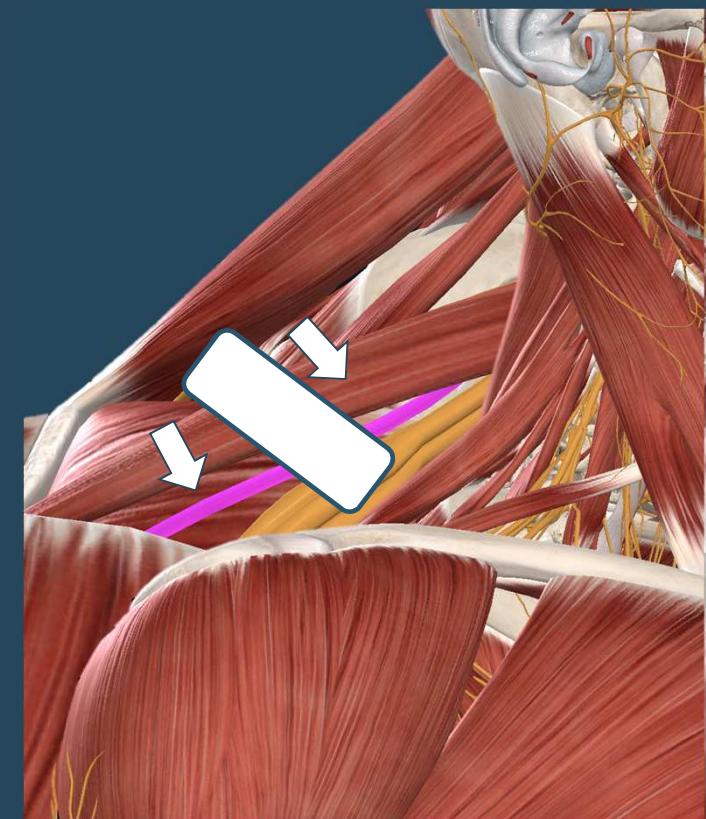
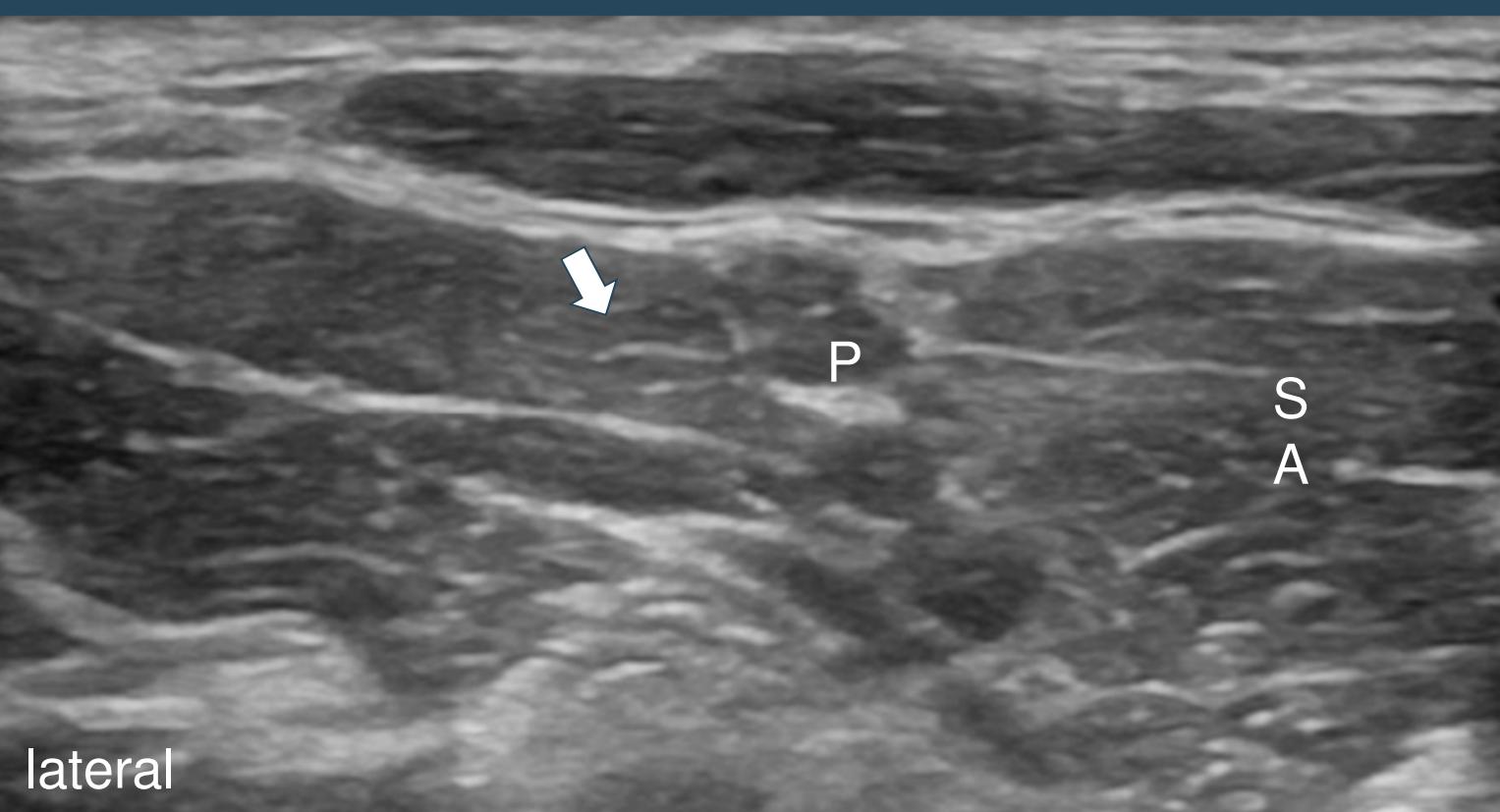


Nachher

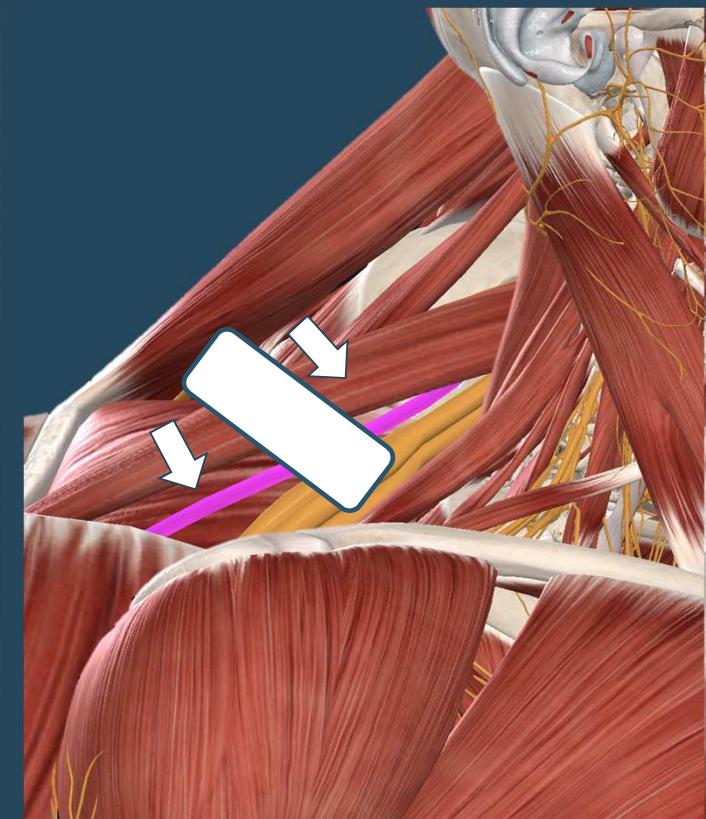
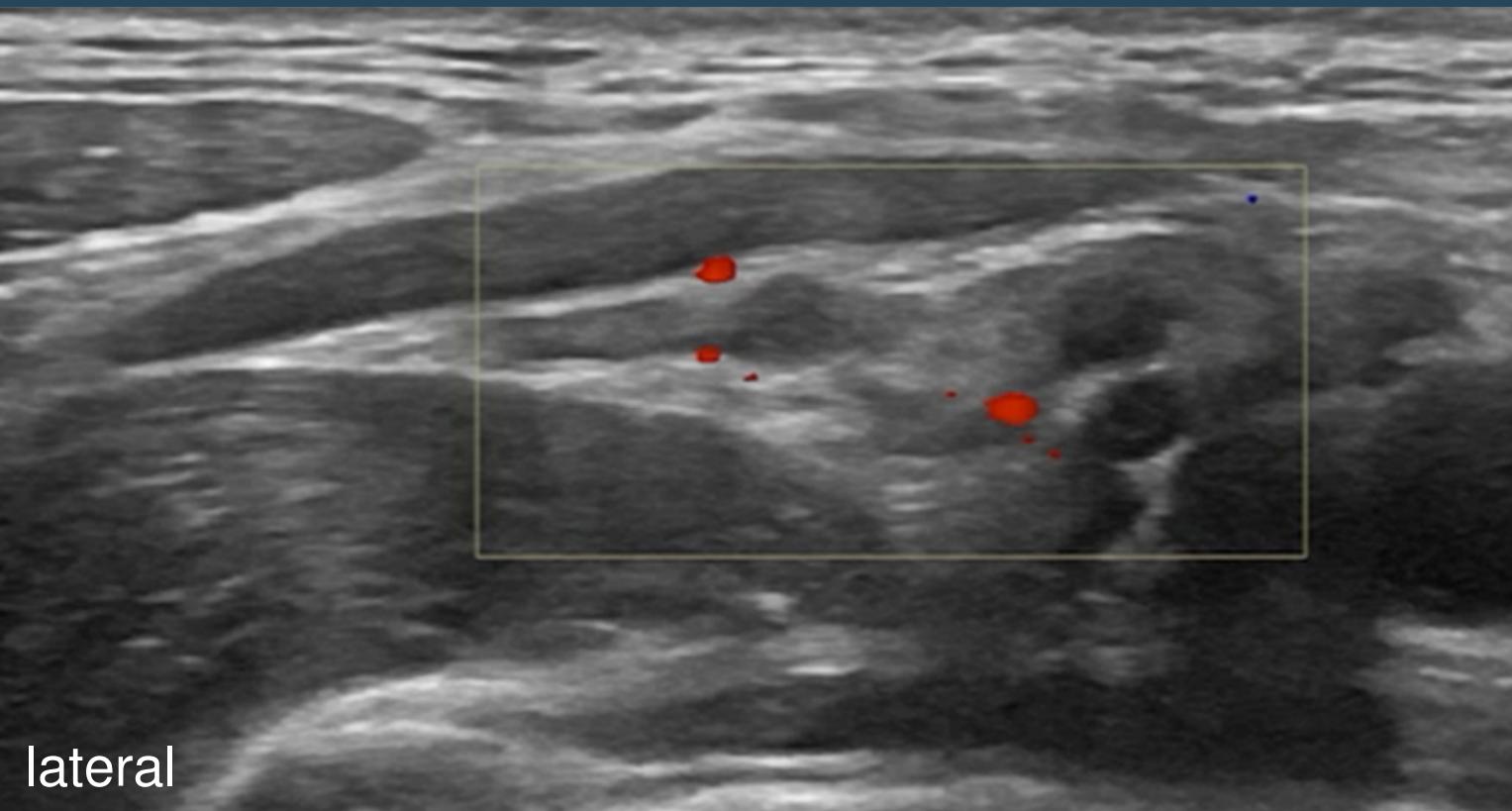


M. infraspinatus

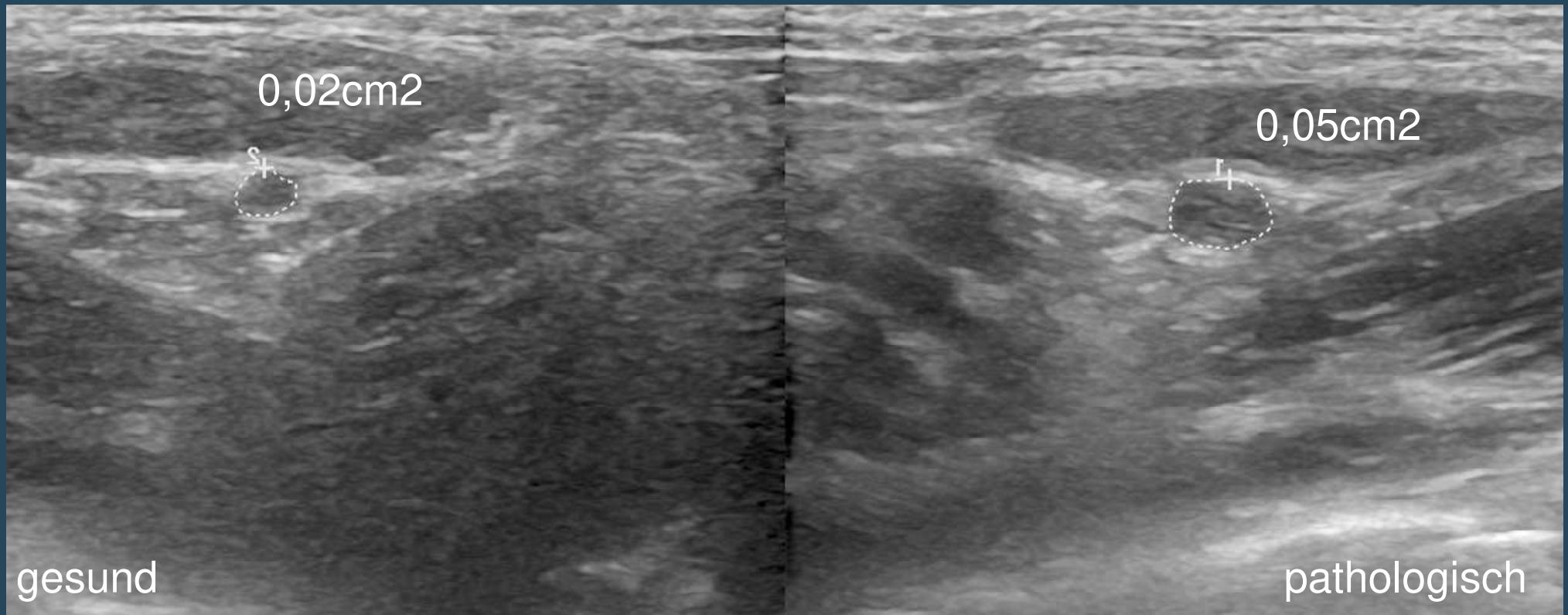




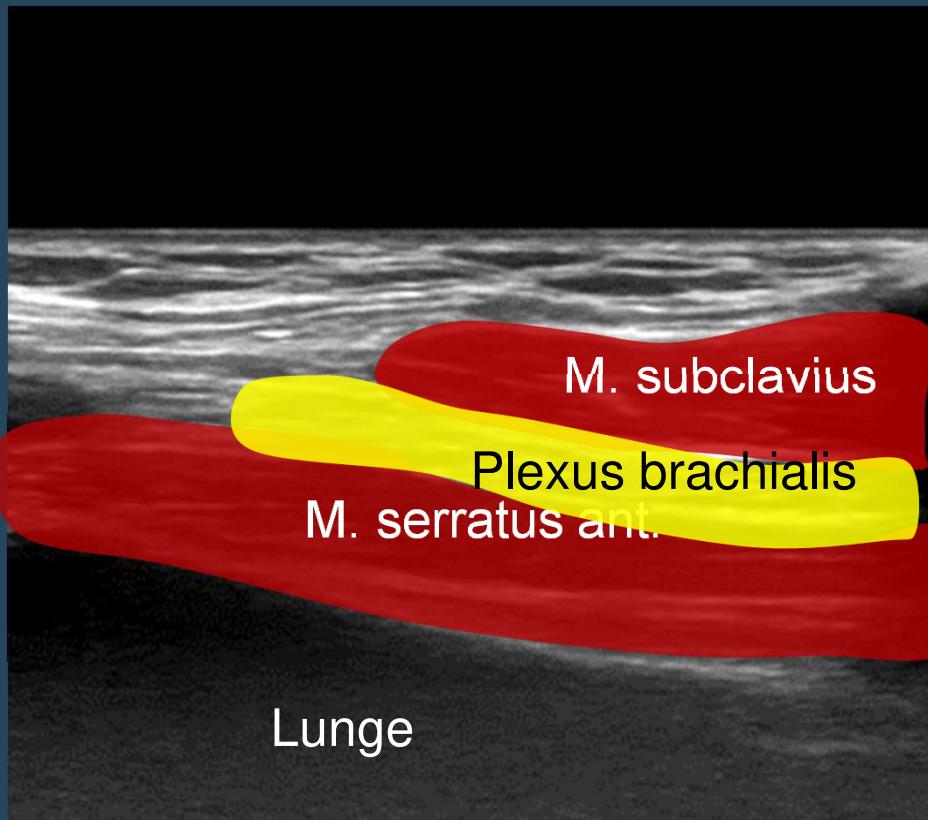
N. Suprascapularis „Neuritis“



Seitenvergleich!

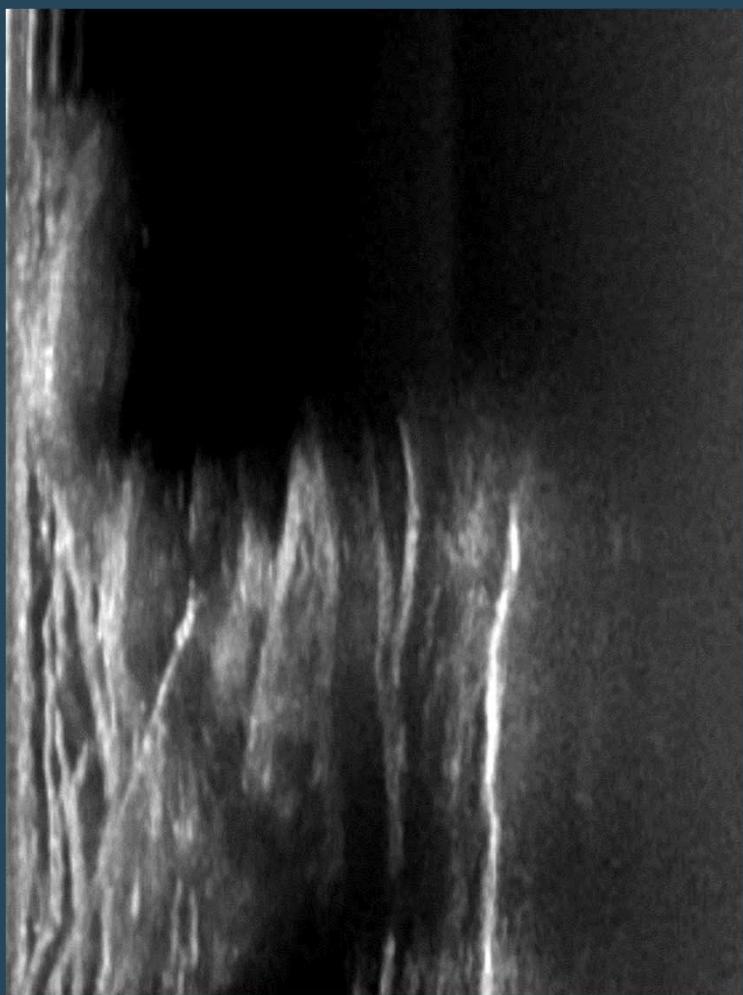
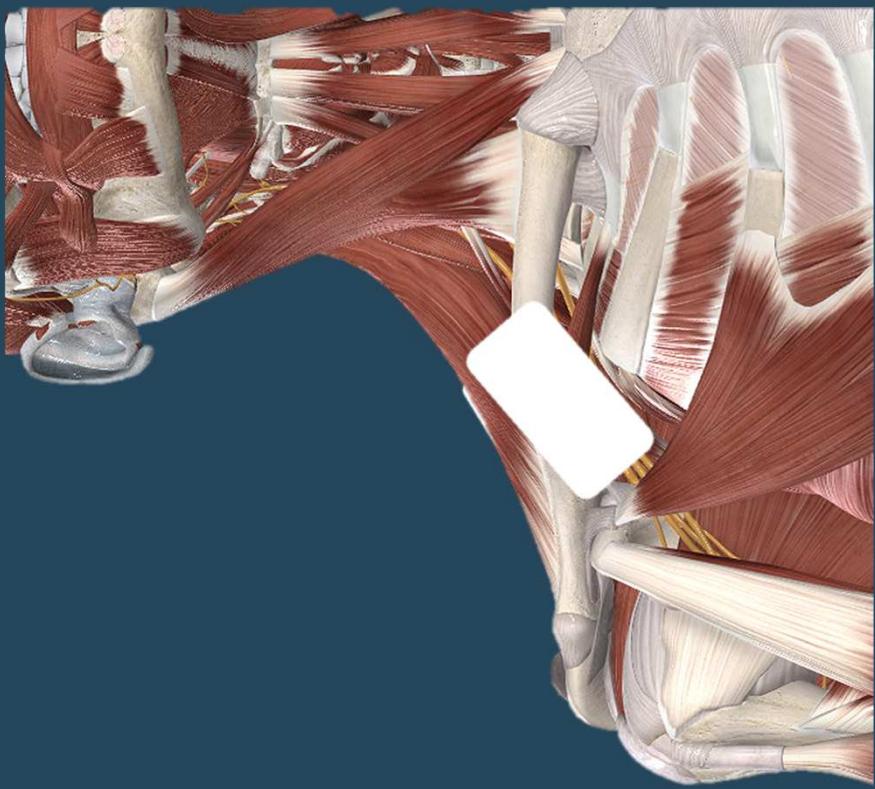


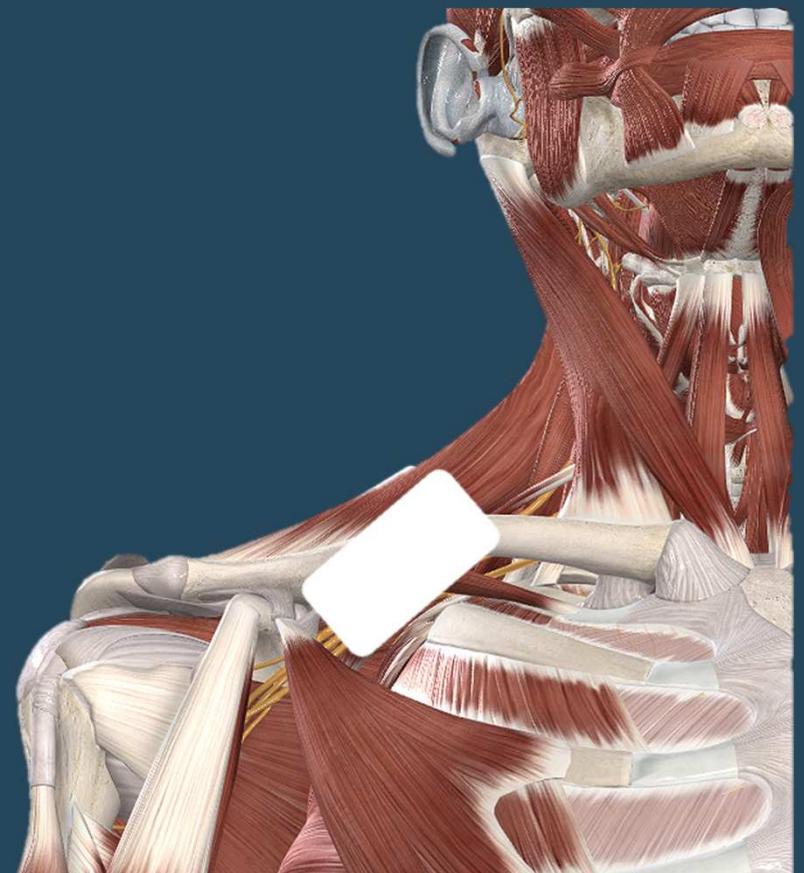
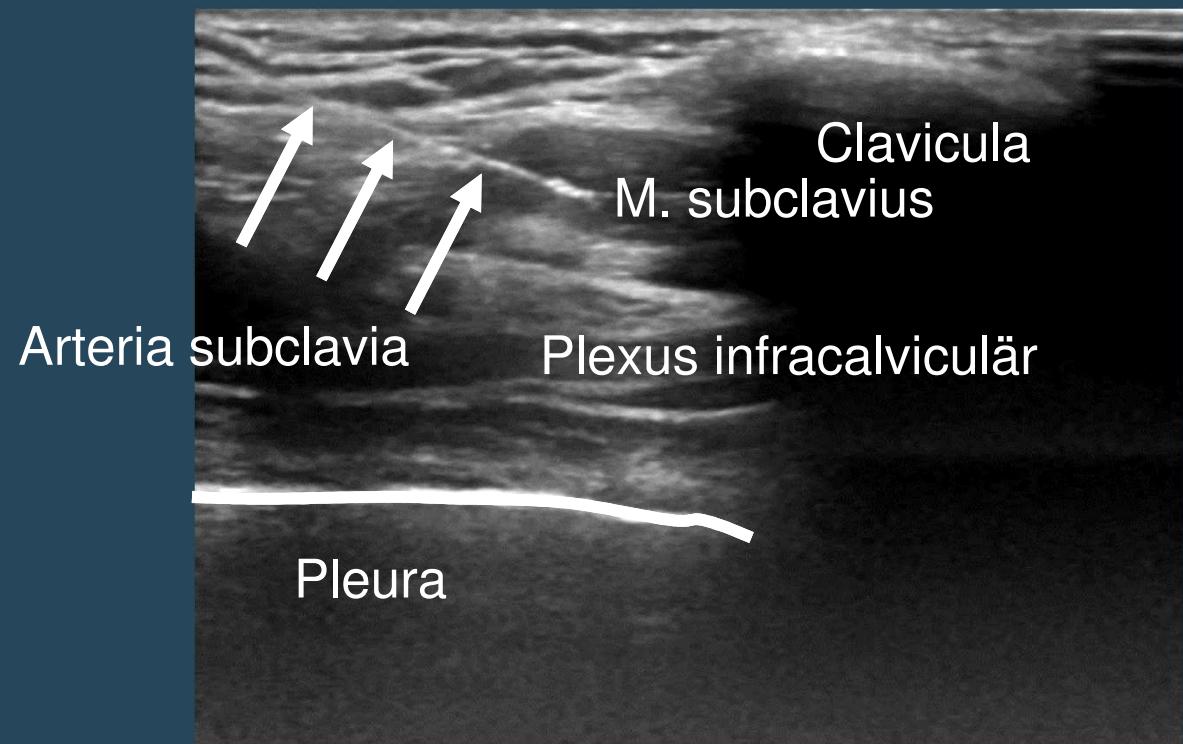
Costoclaviculärer Raum

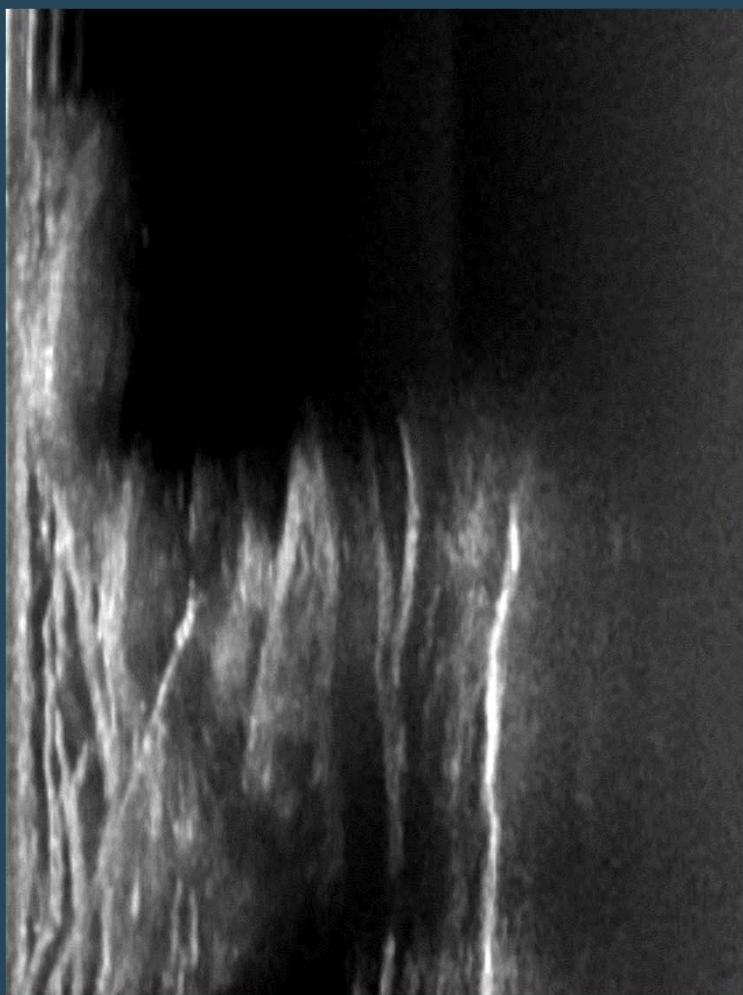
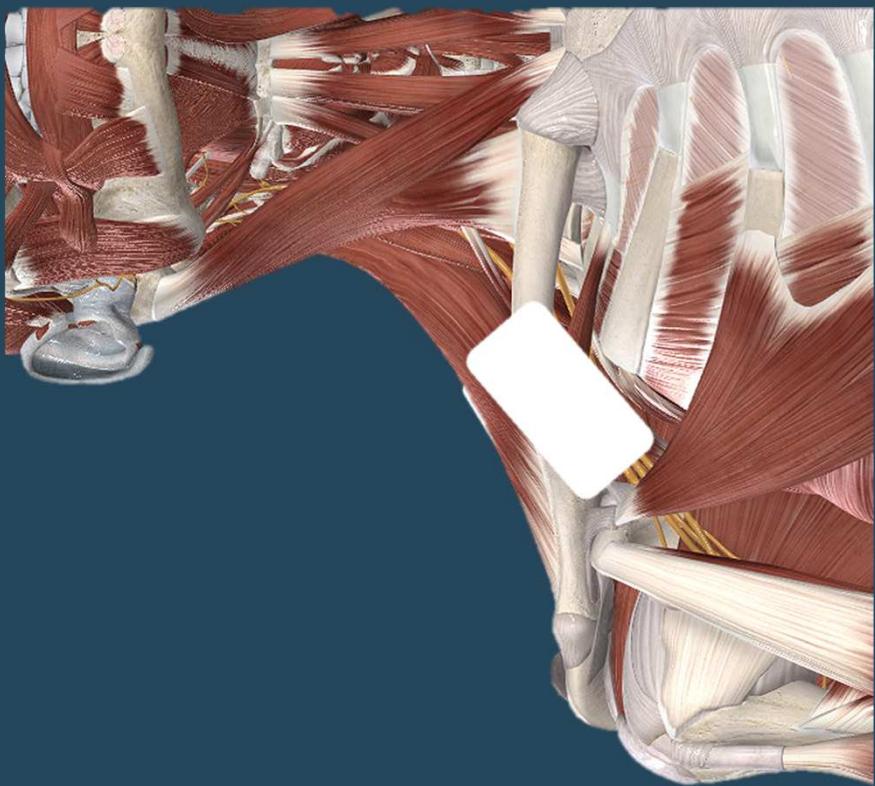


Clavica





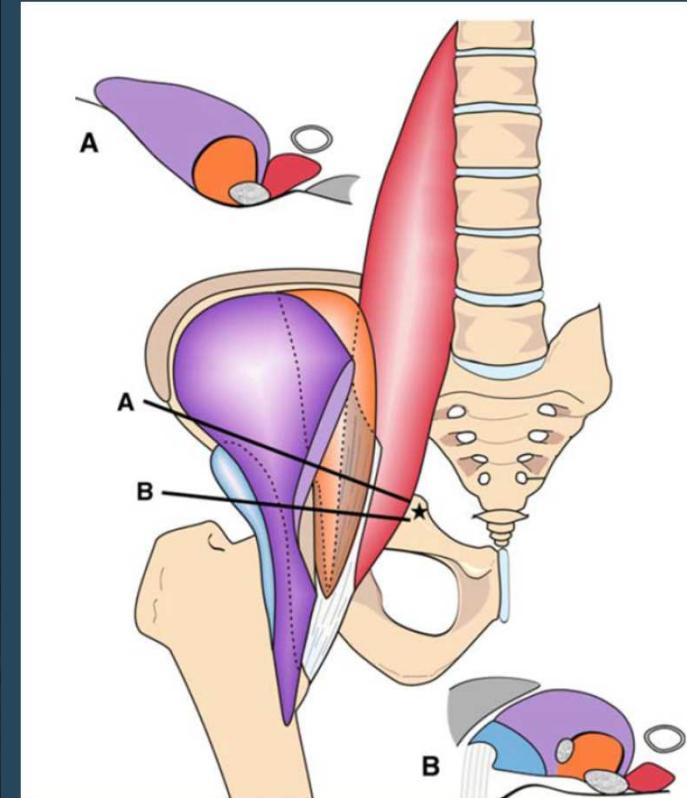
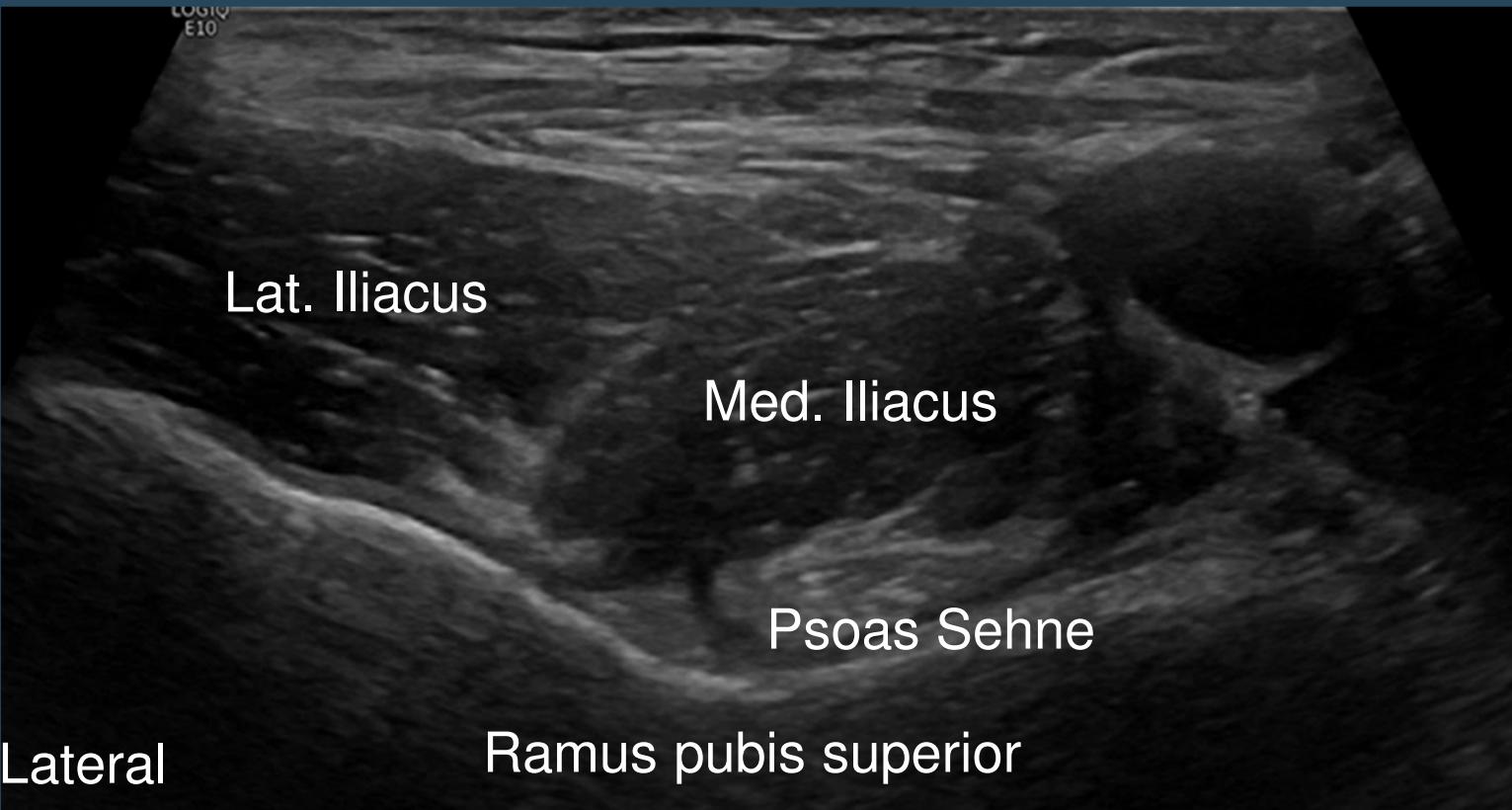




Iliopsoas Komplex

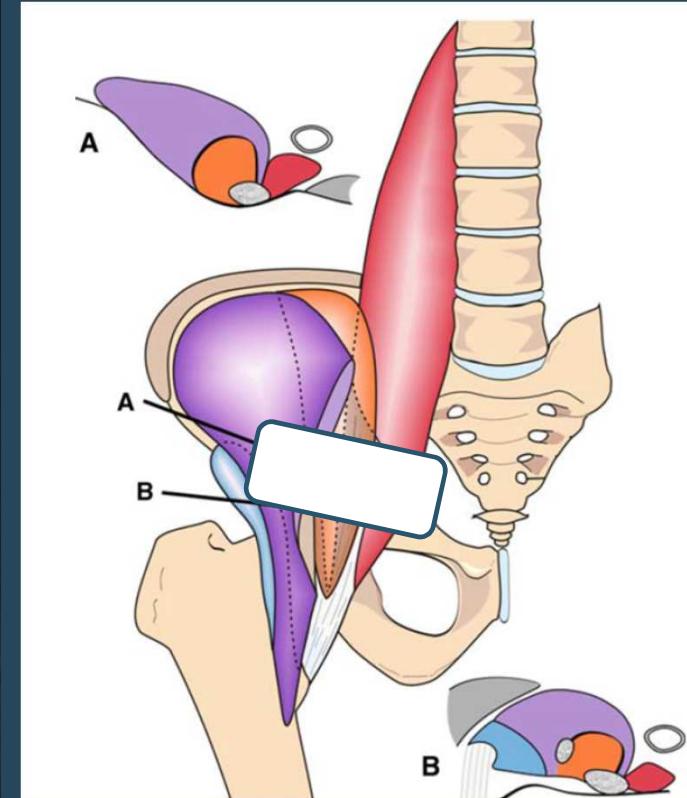
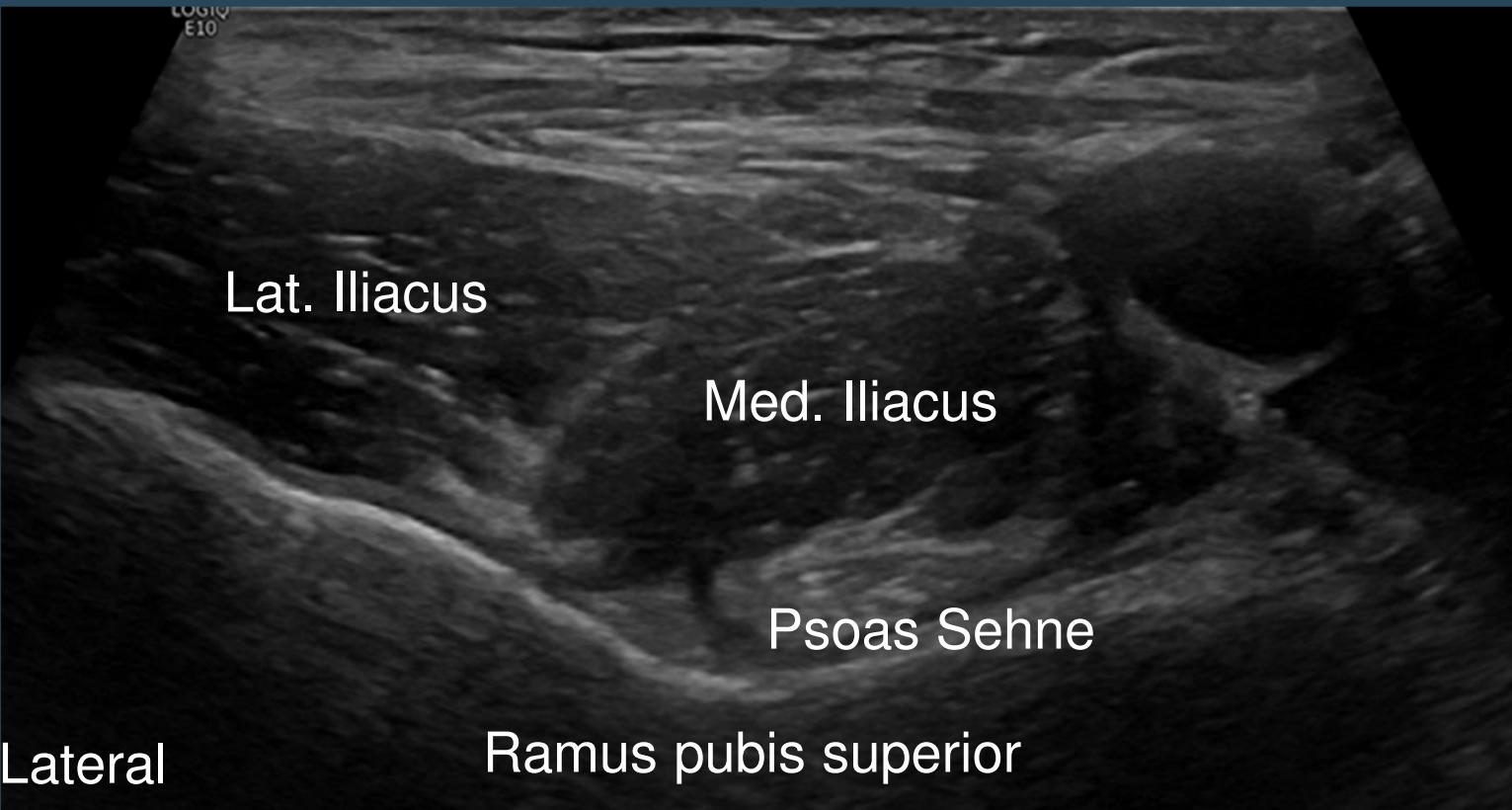
Sehne & Snapping

Iliopsoas Komplex



Guillin et al., Eur Rad (2009) 19: 995-1001

Iliopsoas Komplex



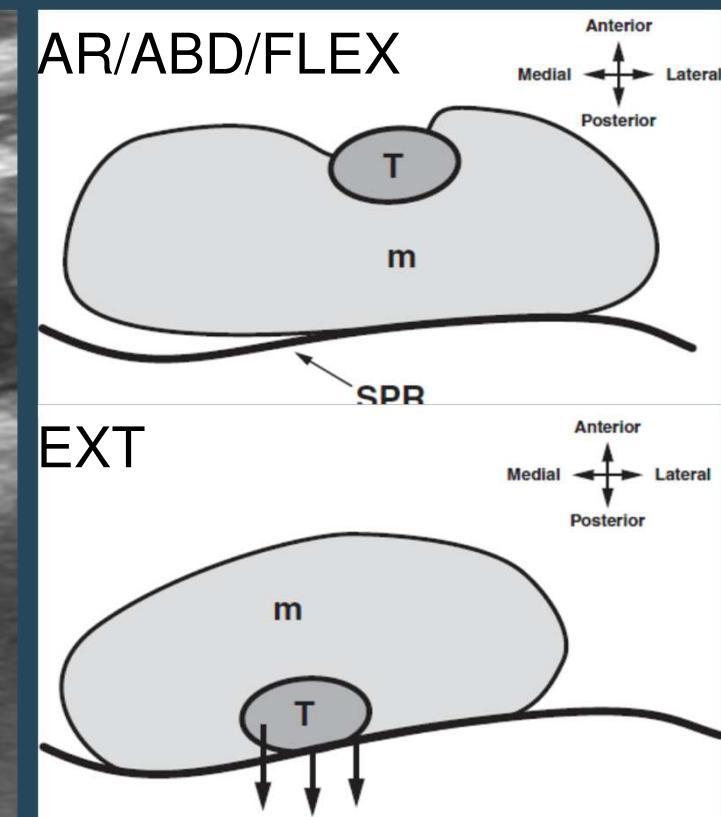
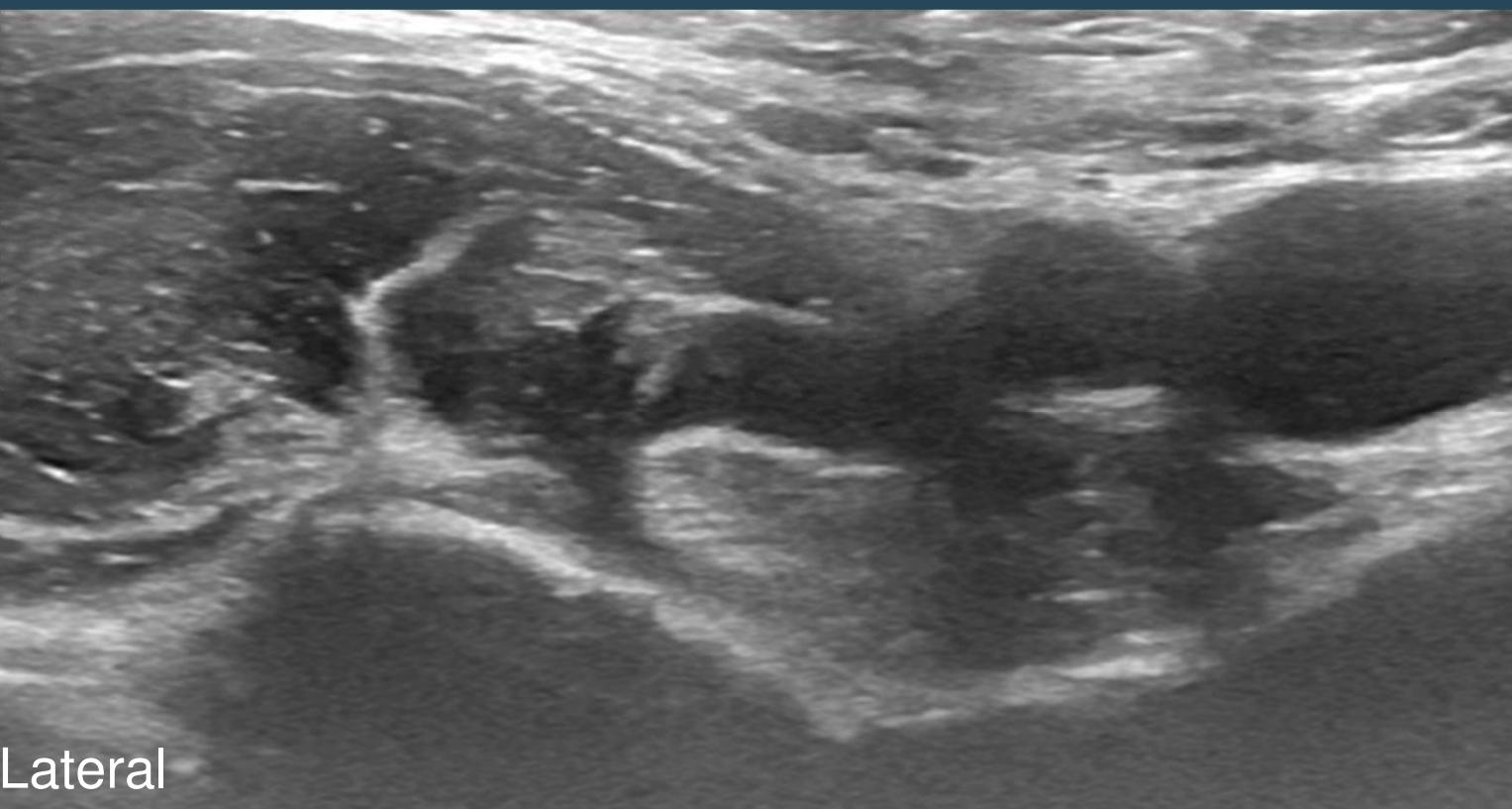
Guillin et al., Eur Rad (2009) 19: 995-1001

PUC

Pathologie

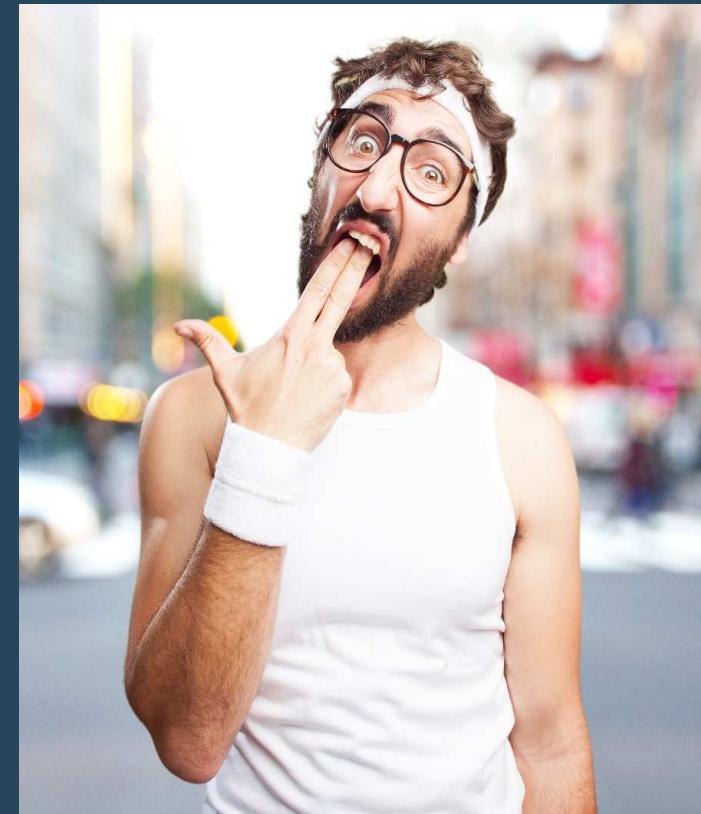
Snapping Psoas

Snapping Psoas



Sportler –Hernie

- Nicht – anatomisch , Nicht – diagnostischer Begriff für Leistenschmerz
 - Risse/Schwäche Inguinaler Strukturen (Z.B. Hernien)
 - Posteriore Inguinal Wand Schwäche
 - N. obturatorius Kompression
 - Häufig: Aponeurosen Pathologie
 - Rectus abdominis & Adductor longus
 - + Symphysen Instabilitäten etc.
 - etc.



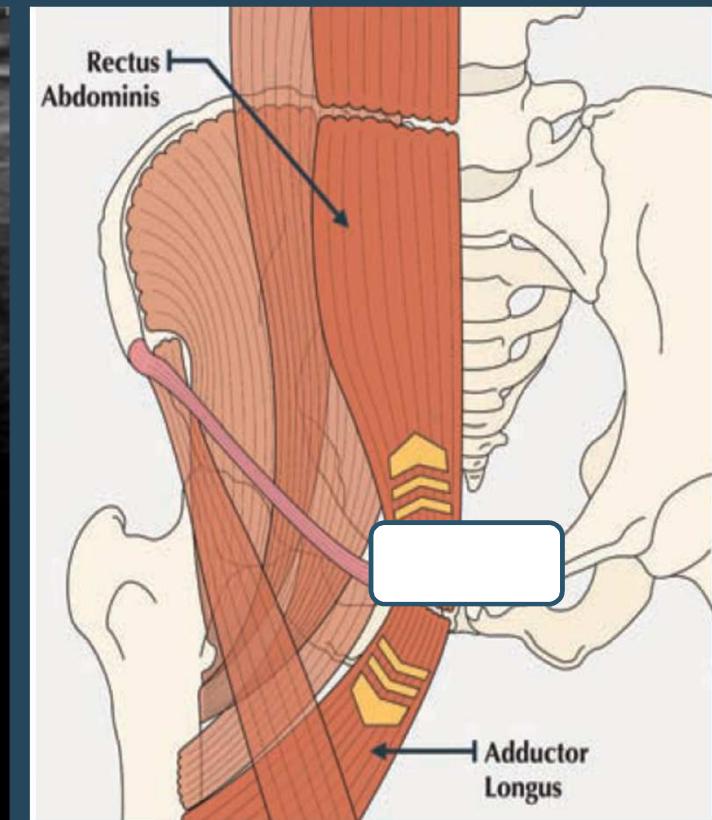
Omar et al., RadioGraphics 2008; 28:1415–1438; Sportsmedicineimaging.com

Symphyse

Aponeurose

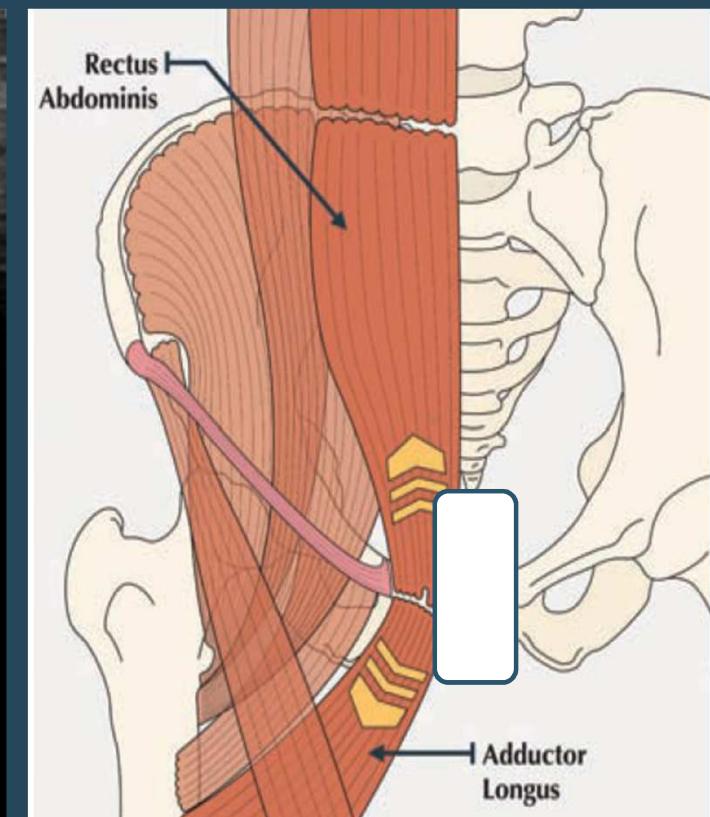
M. Rectus abdominis & M. adductor
longus

Aponeurose - transversal



Omar et al., RadioGraphics 2008; 28:1415–1438

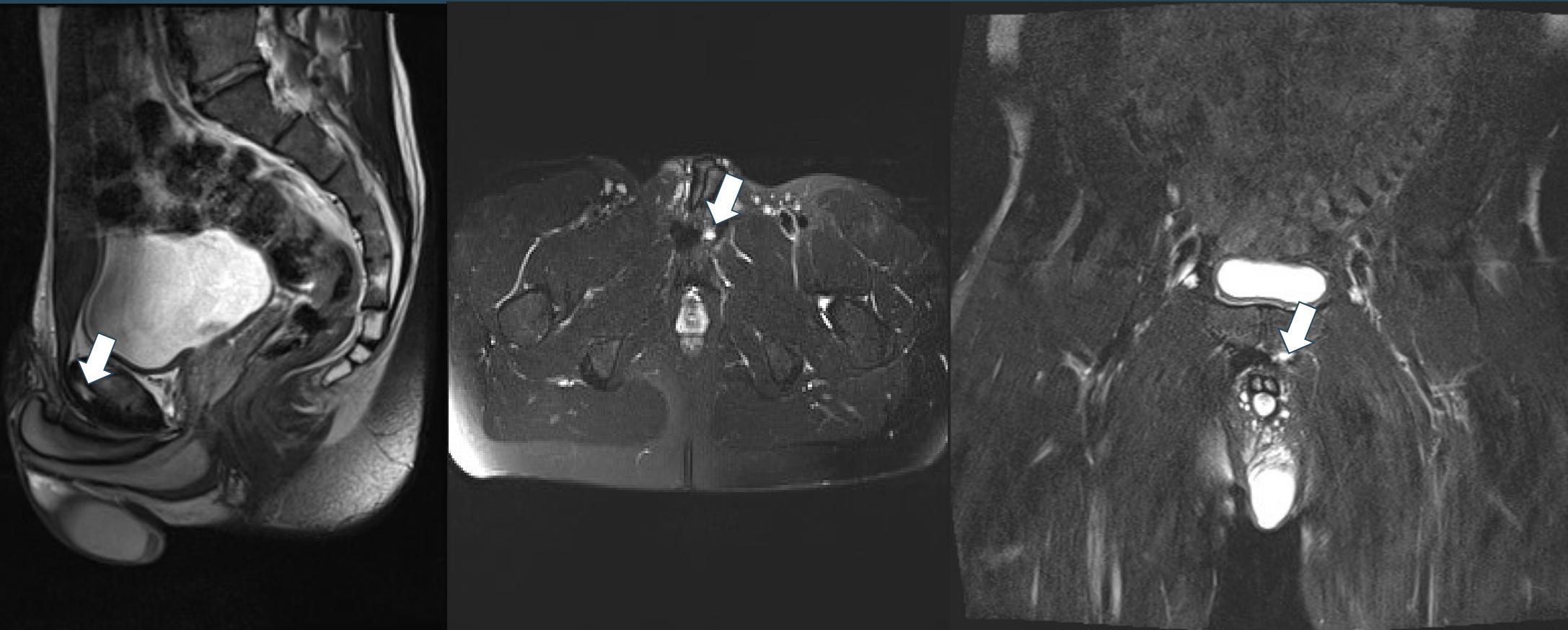
Aponeurose - longitudinal



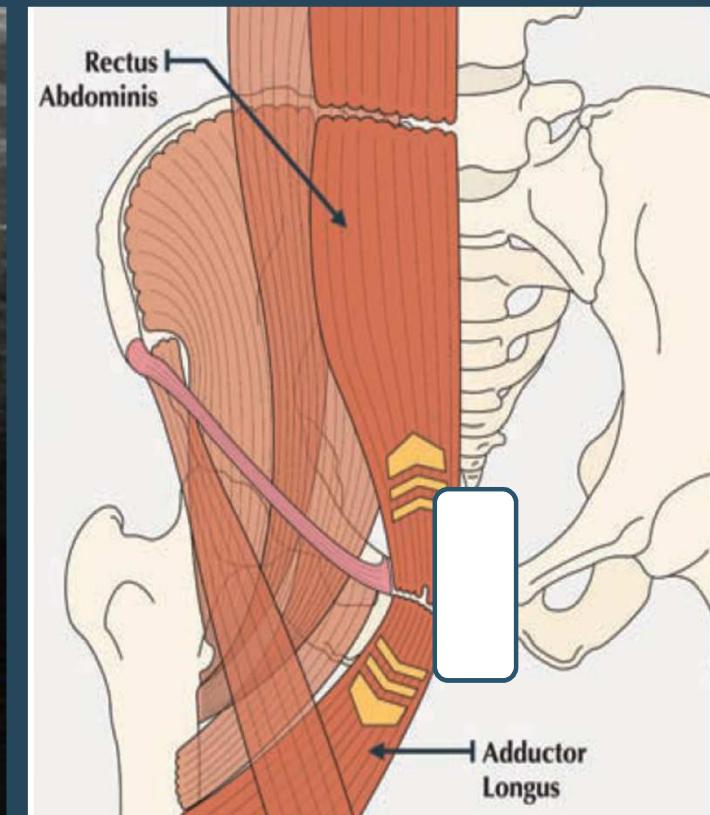
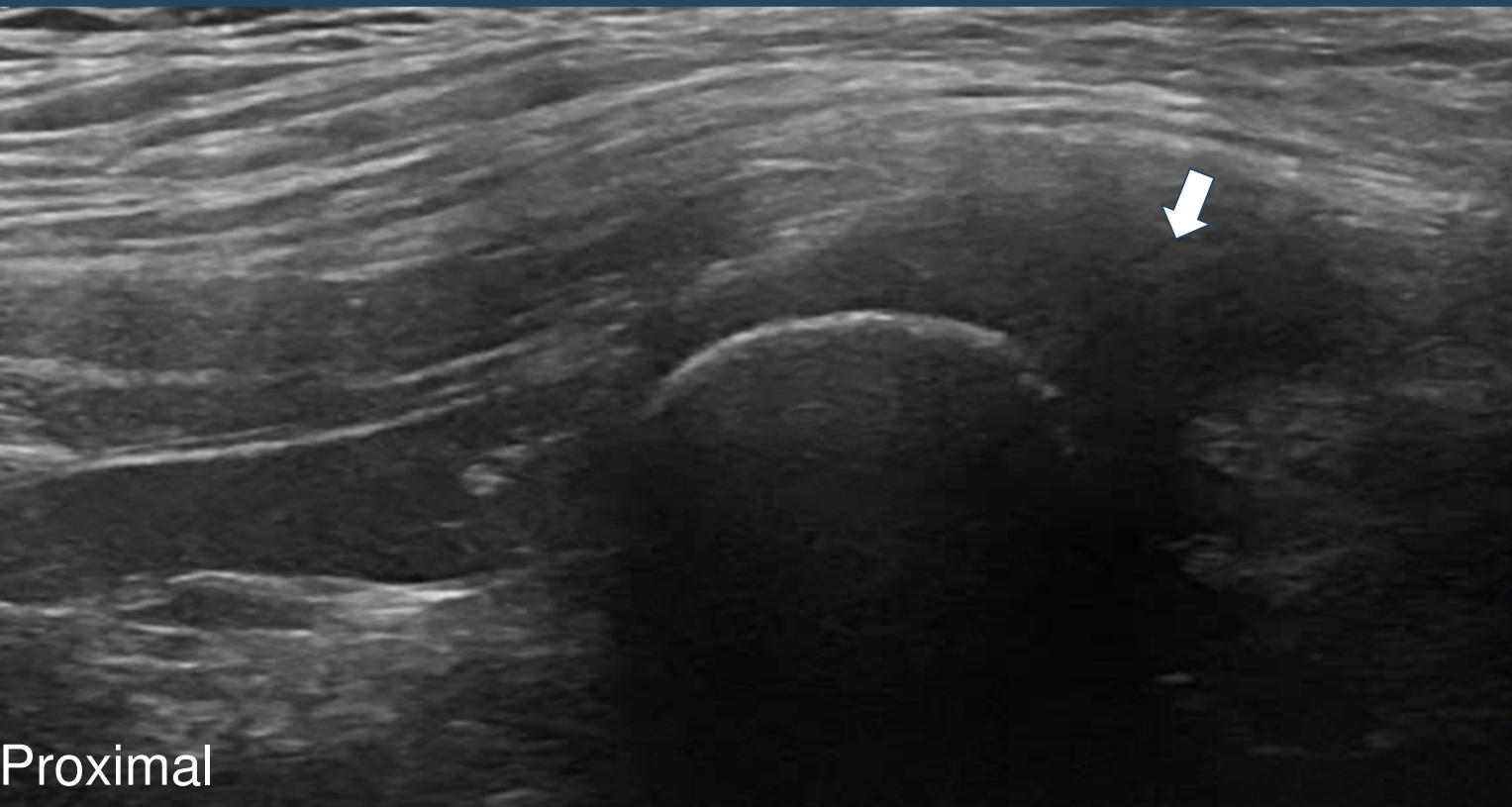
Pathologie

Aponeurosen Partialruptur

Secondary cleft – Einriss Aponeurose



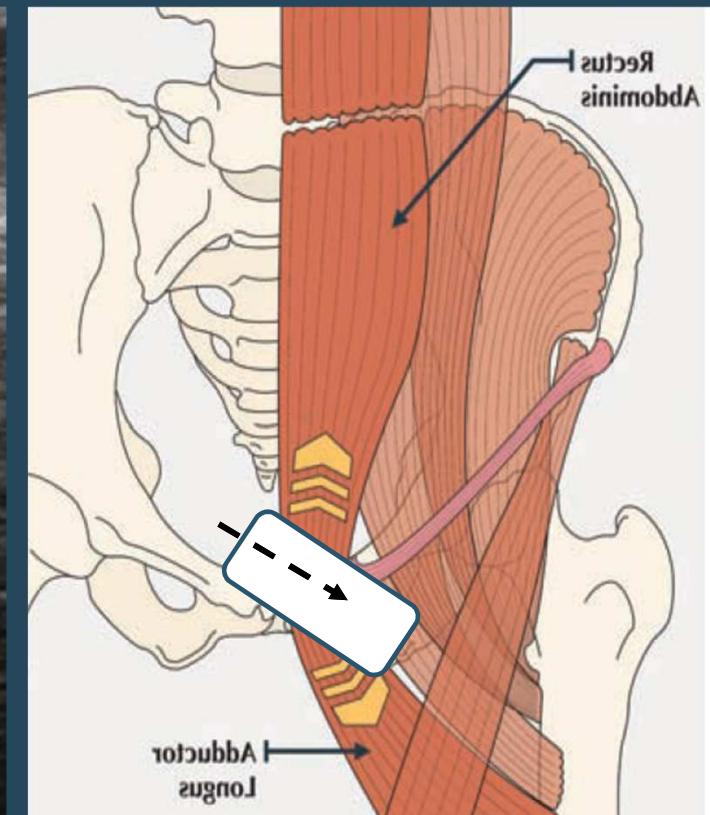
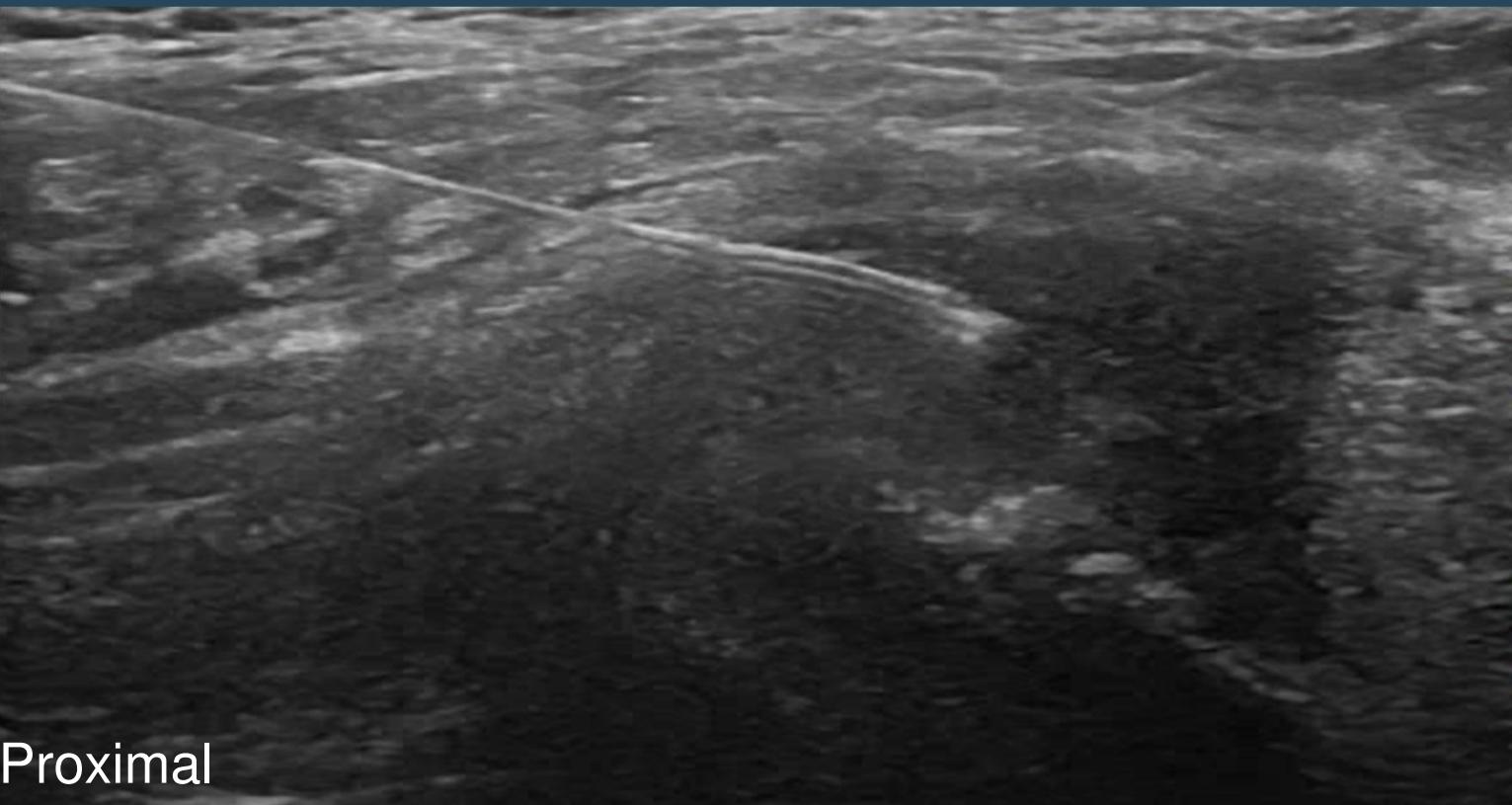
Secondary cleft – Einriss Aponeurose



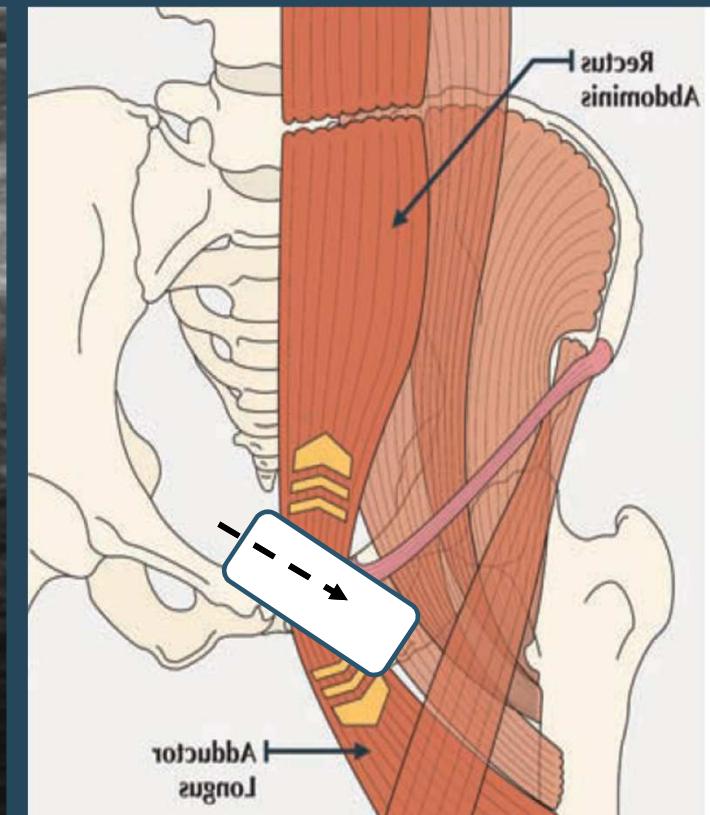
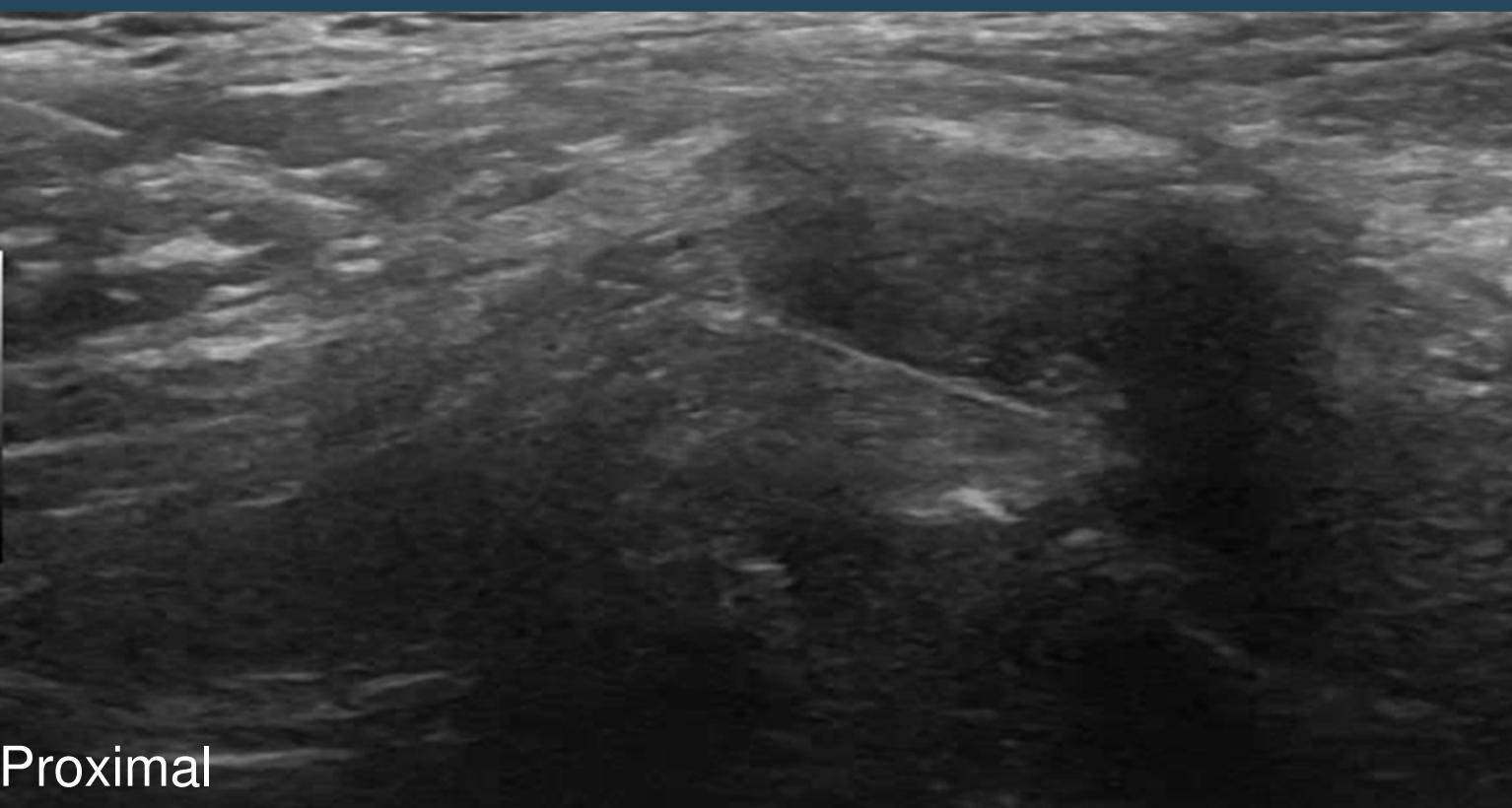
Pathologie - Therapie

Dry needling

Dry Needling - Aponeurose



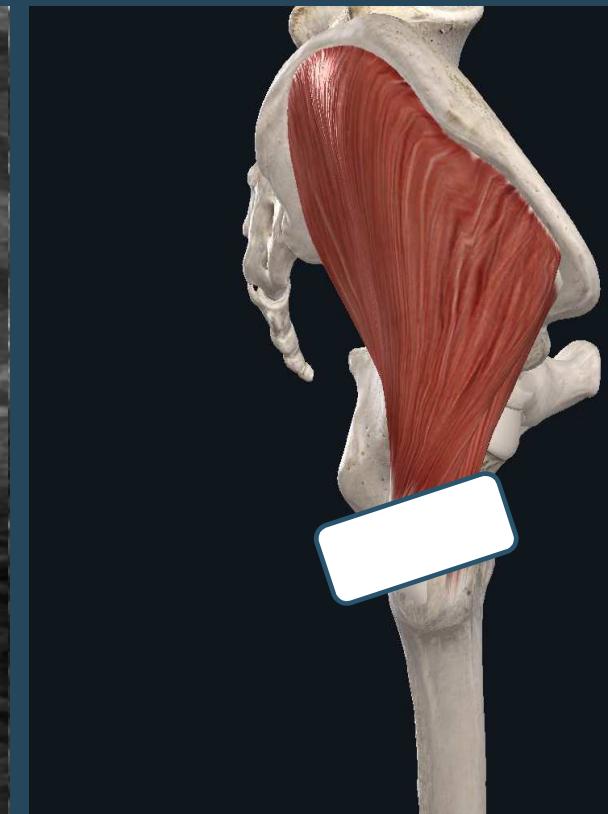
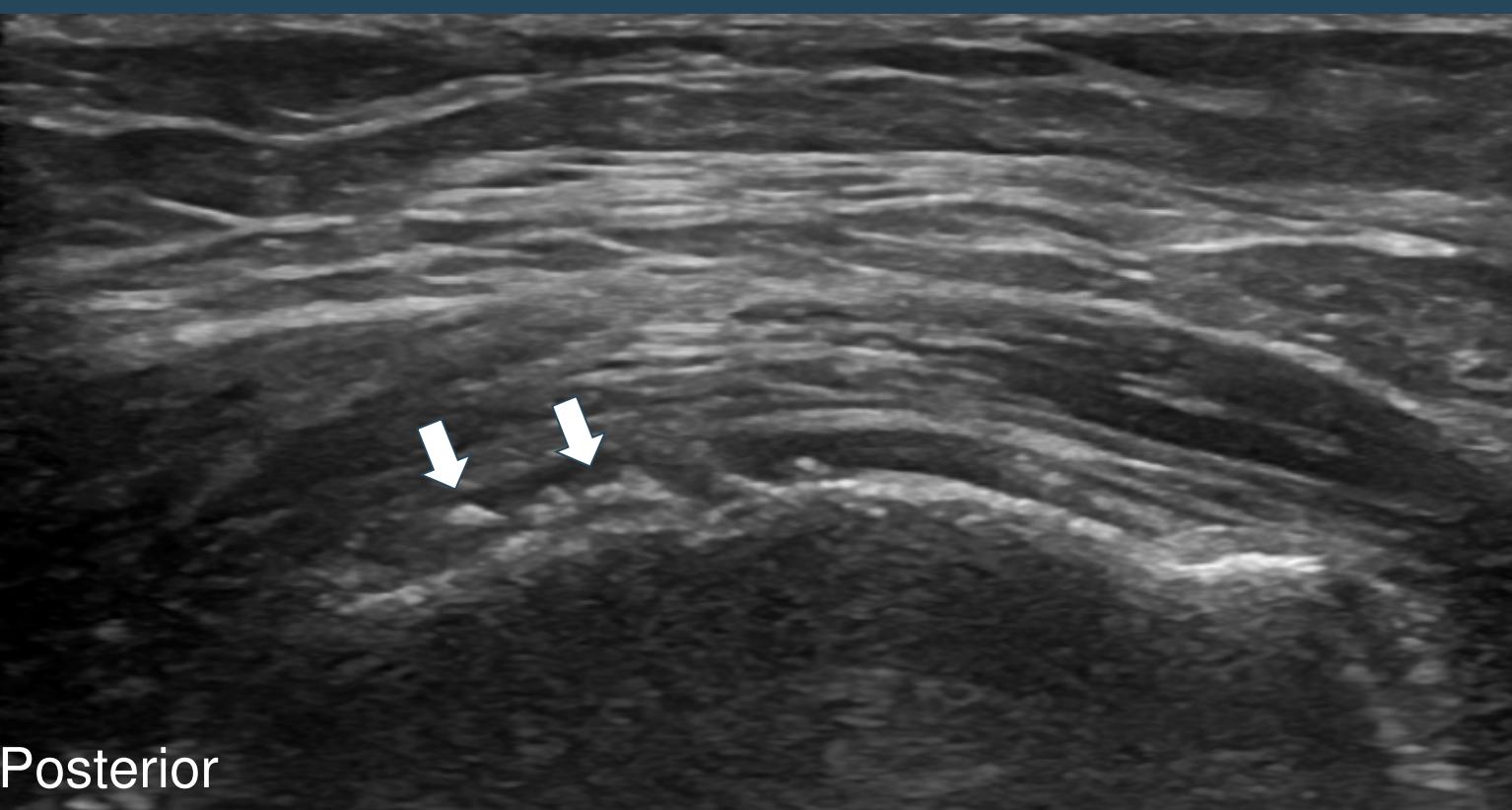
Dry Needling - Aponeurose



Pathologie

Tendinosis calcarea ant. Band

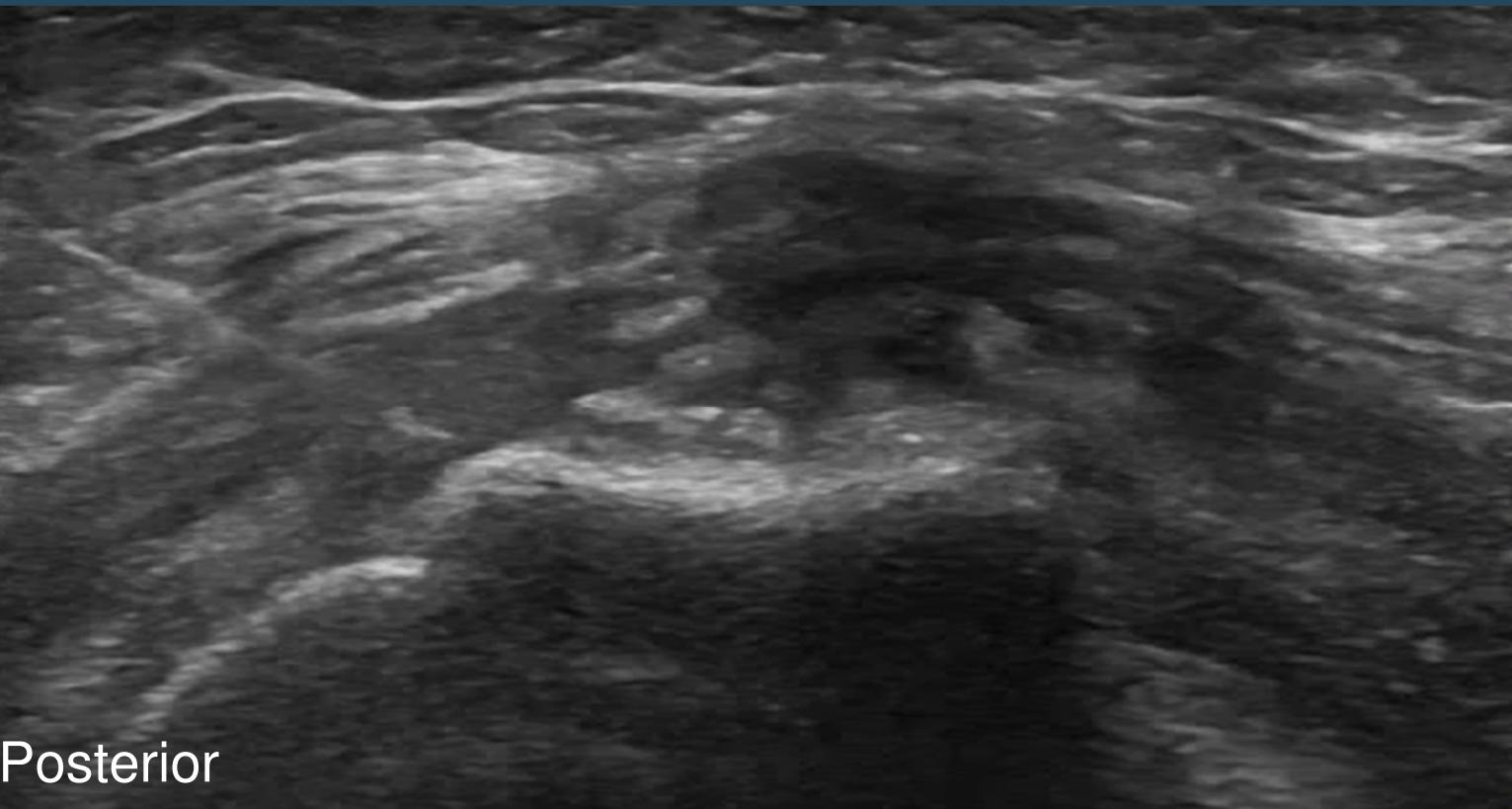
Tendinosis calcarea



Pathologie - Therapie

Needling Gluteus medius anterior

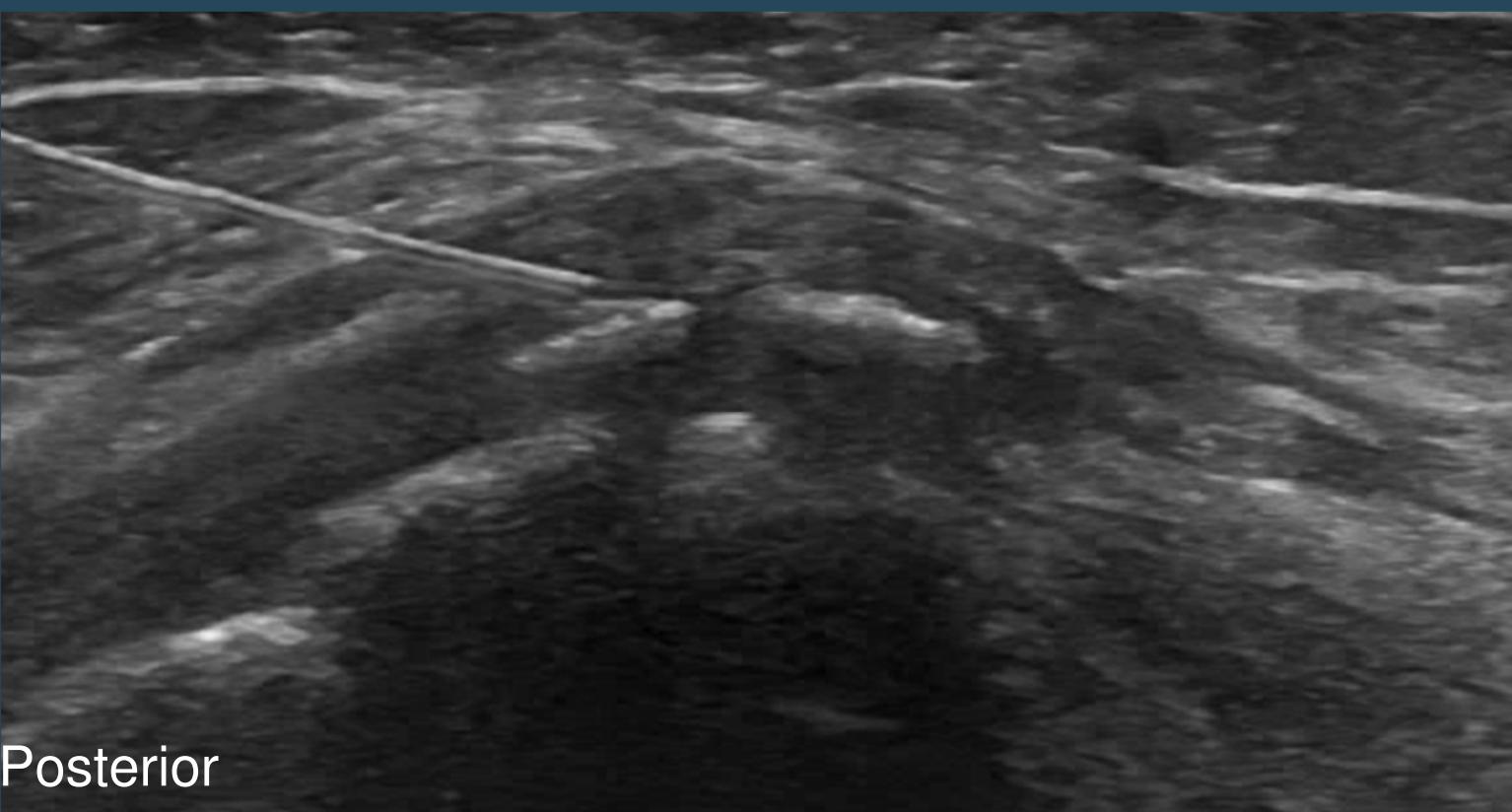
Gluteus medius – Needling



Posterior



Needling - Kalzifikationen



Bursa trochanterica superficialis



Pathologie

Bursitis trochanterica superficialis

Posterior



Tractus iliotibialis

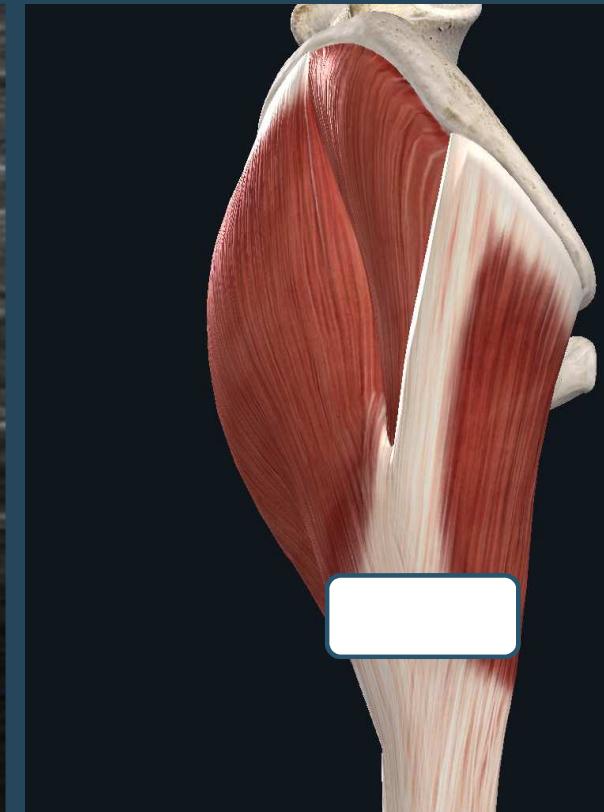
Pathologie

Tractus Reiben - Trochanter

Tractus Irritation - Trochanter

Aussenrotation - Innenrotation

Posterior



Pathologie

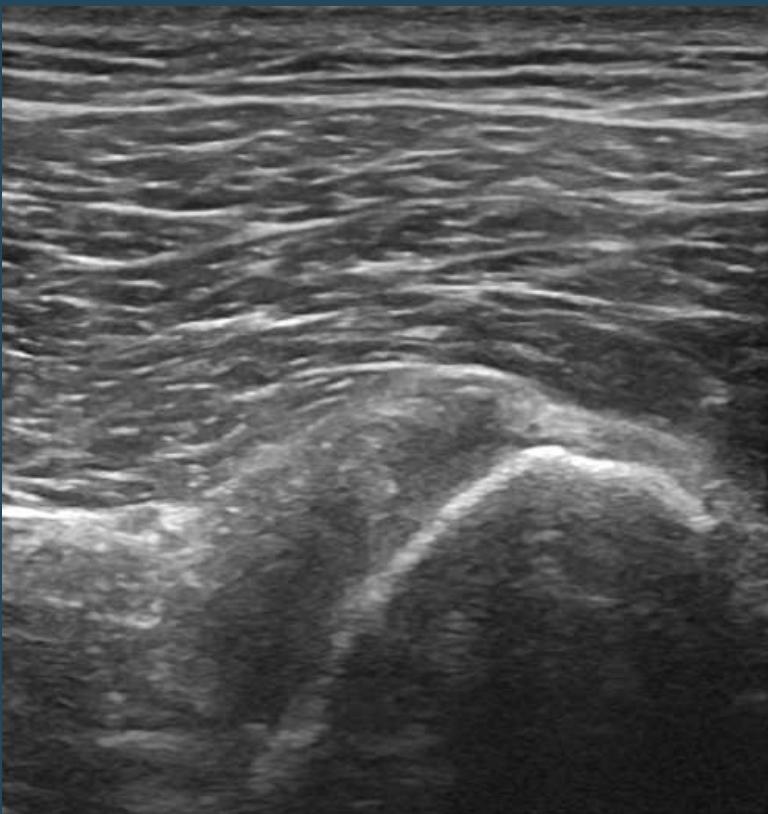
Semimembranosus
Partielle knöcherne Avulsion

Semimembranosus - Partialruptur

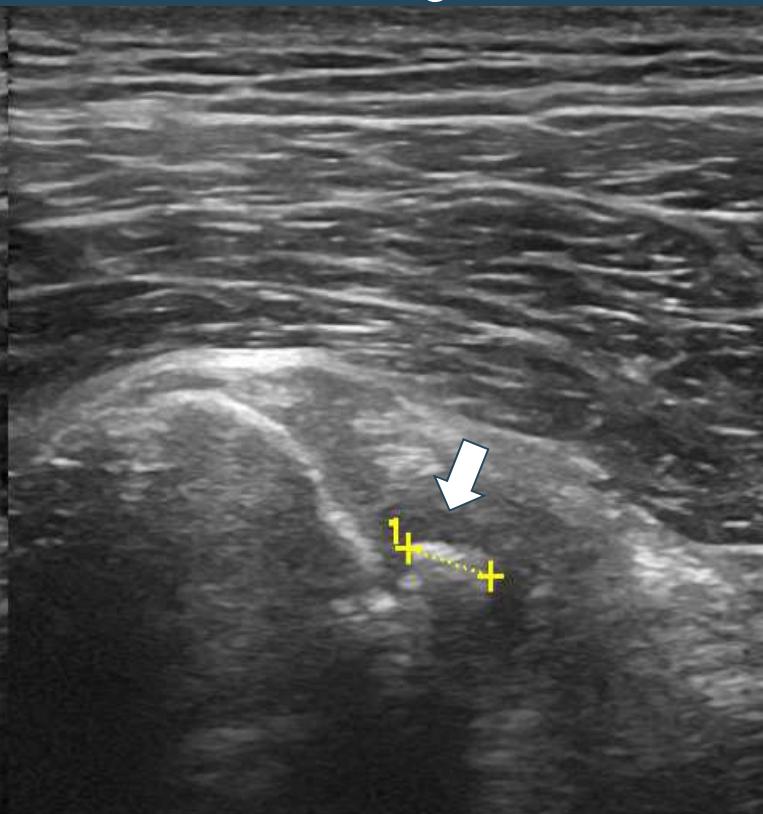


Semimembranosus - Partialruptur

Gesund



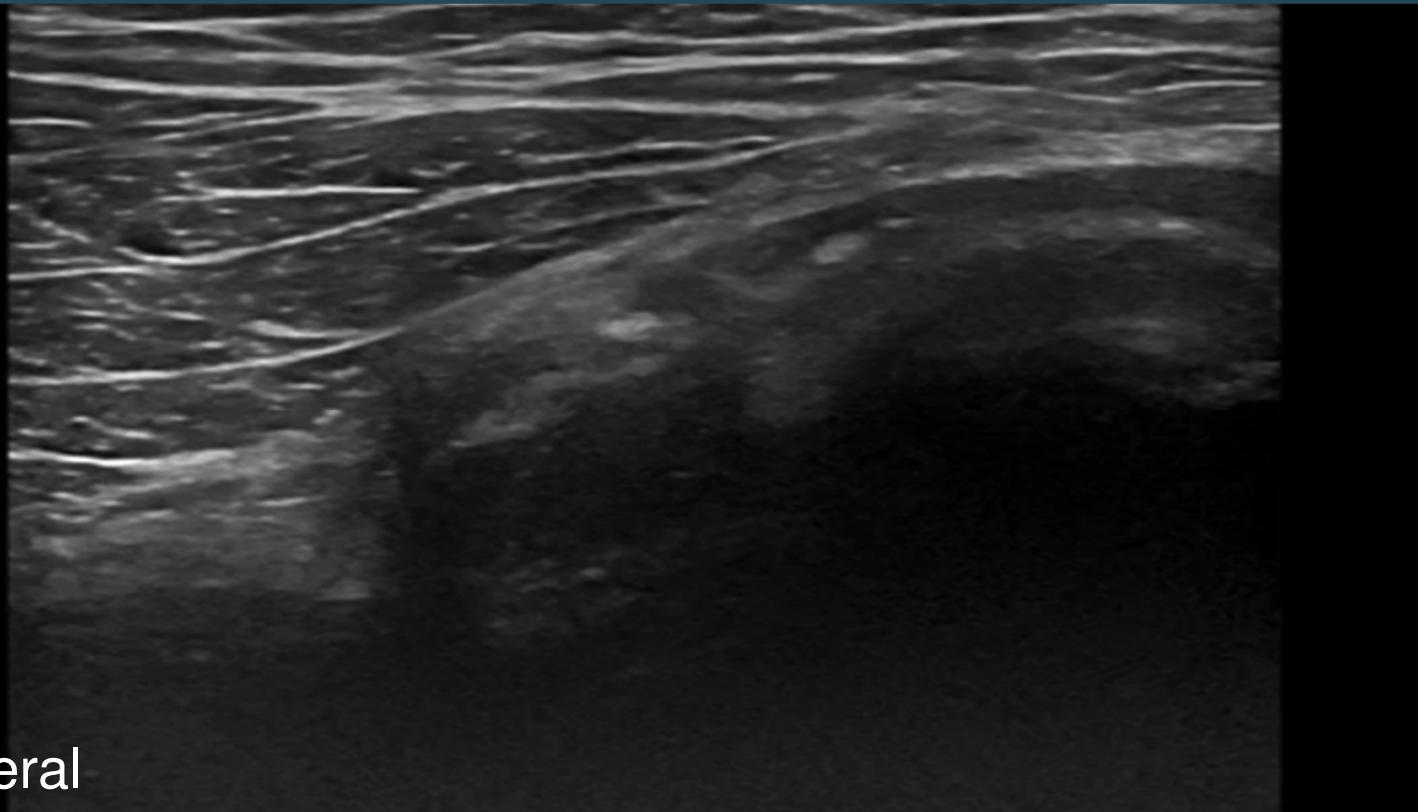
Knöchernes Fragment



Pathologie

Myotendinöse Ruptur
Semimembranosus Sehne

Semimembranosus -Ruptur



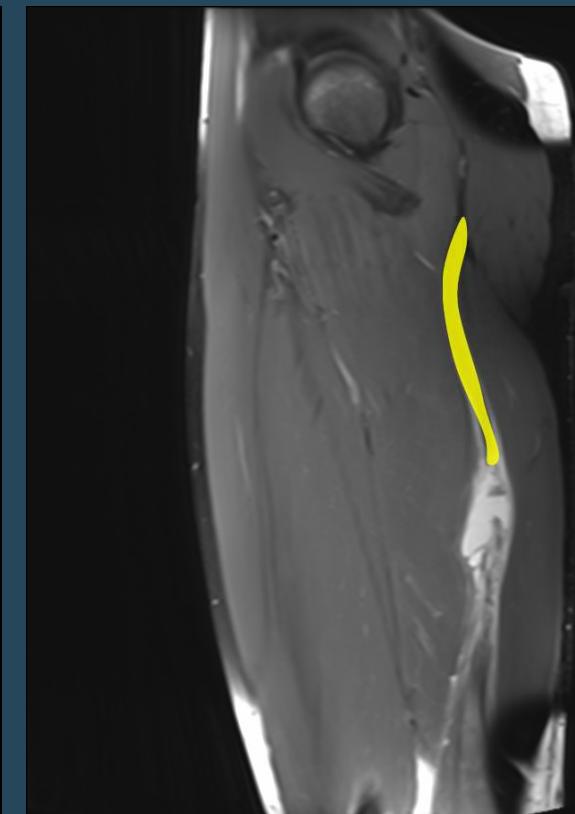
Lateral



Semimembranosus - Stumpf



Proximal



N. ischiadicus

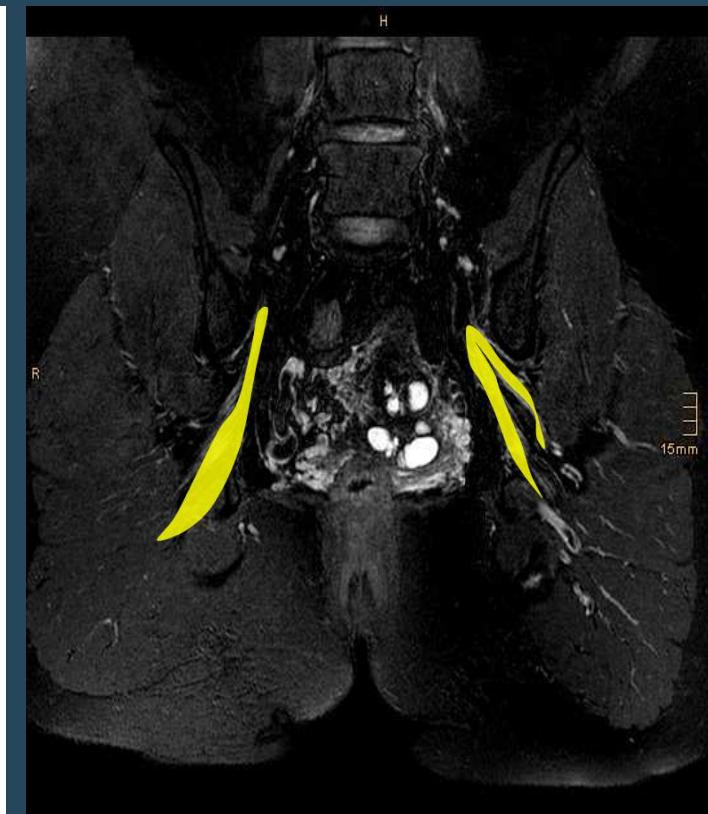
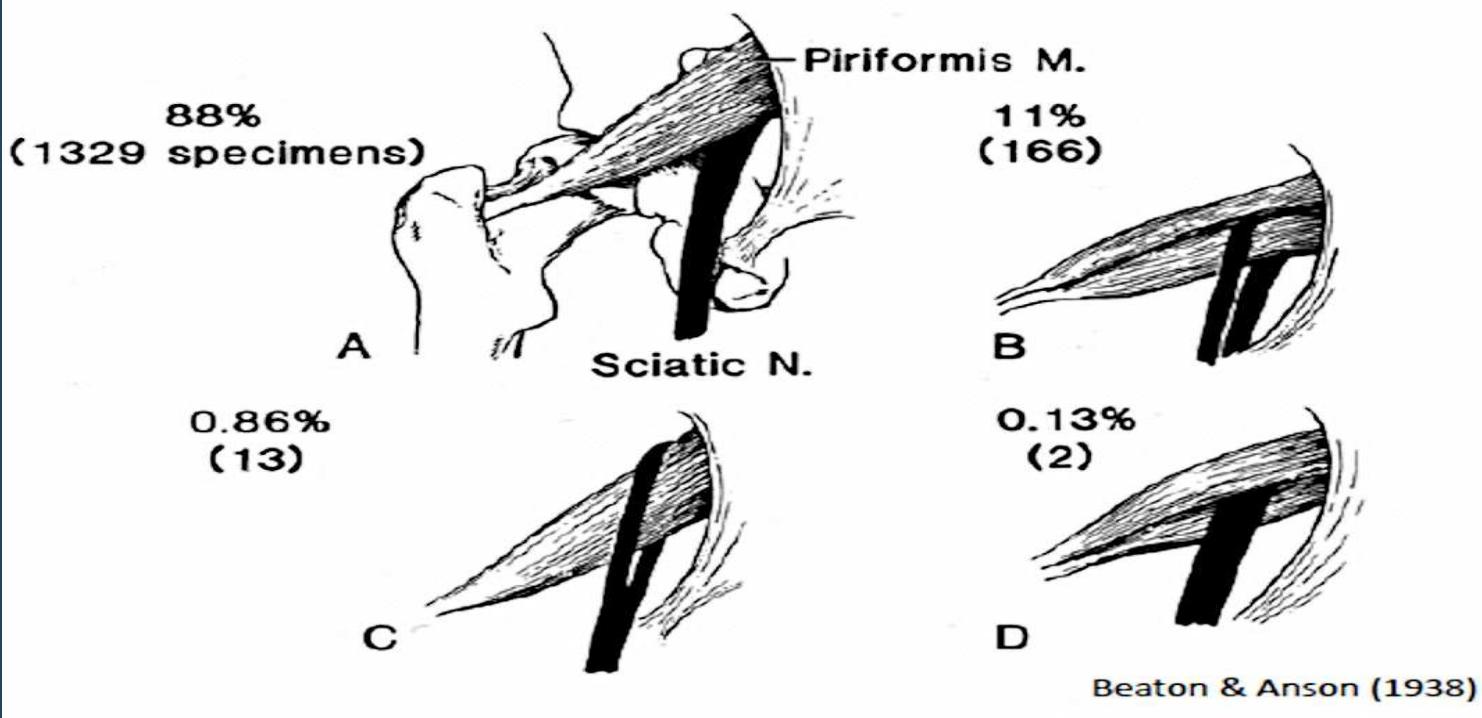


Anatomische Variante

Split ischiadicus
„Piriformis Syndrom“

Split ischiadicus

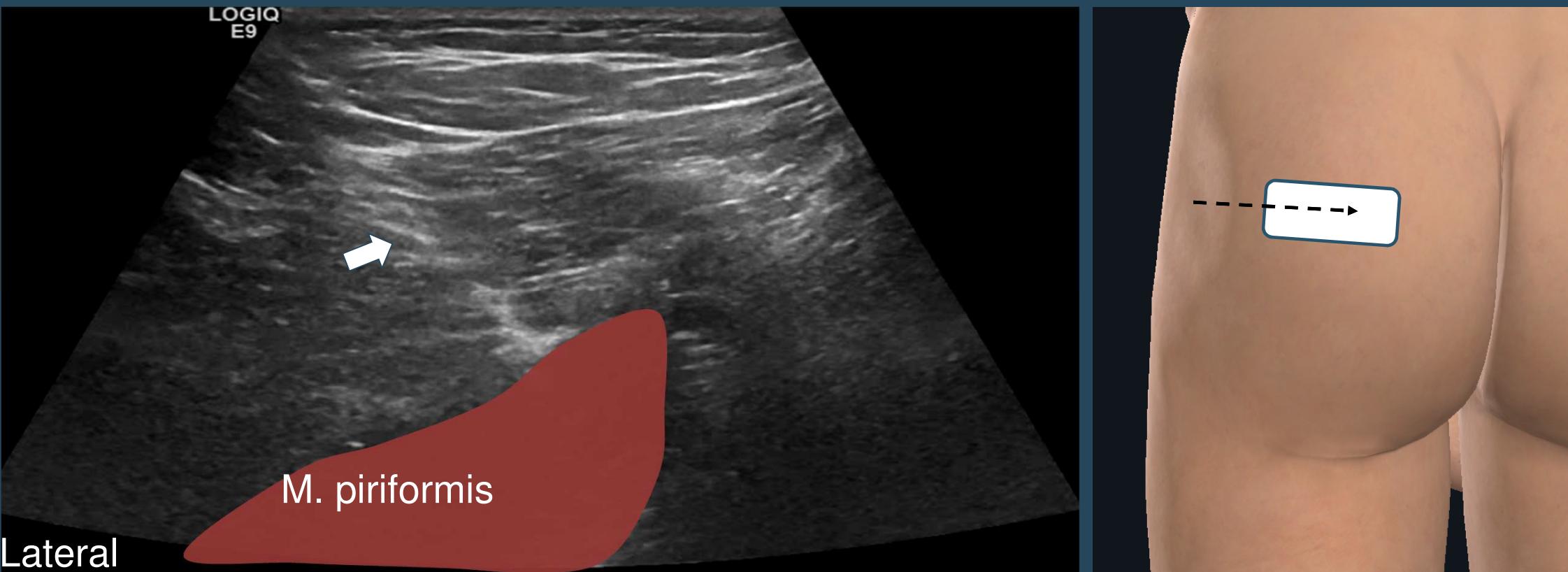
N. ischiadicus – M. piriformis



Therapie

Botox-Injektion M. piriformis

M. Piriformis – Botox Injektion



44 j, m

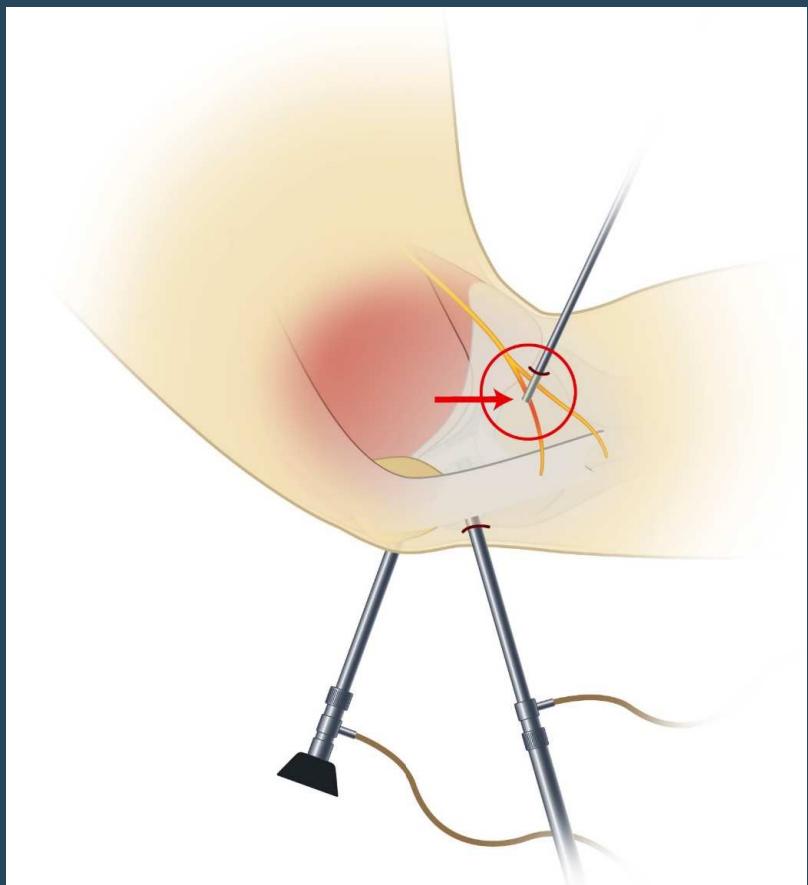
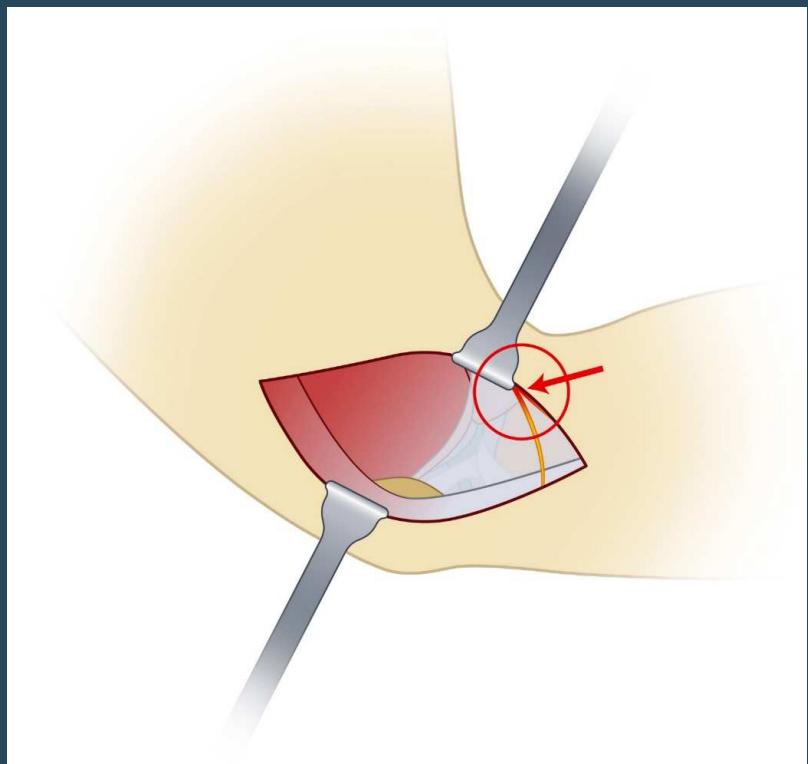
Neuropathischer Schmerz

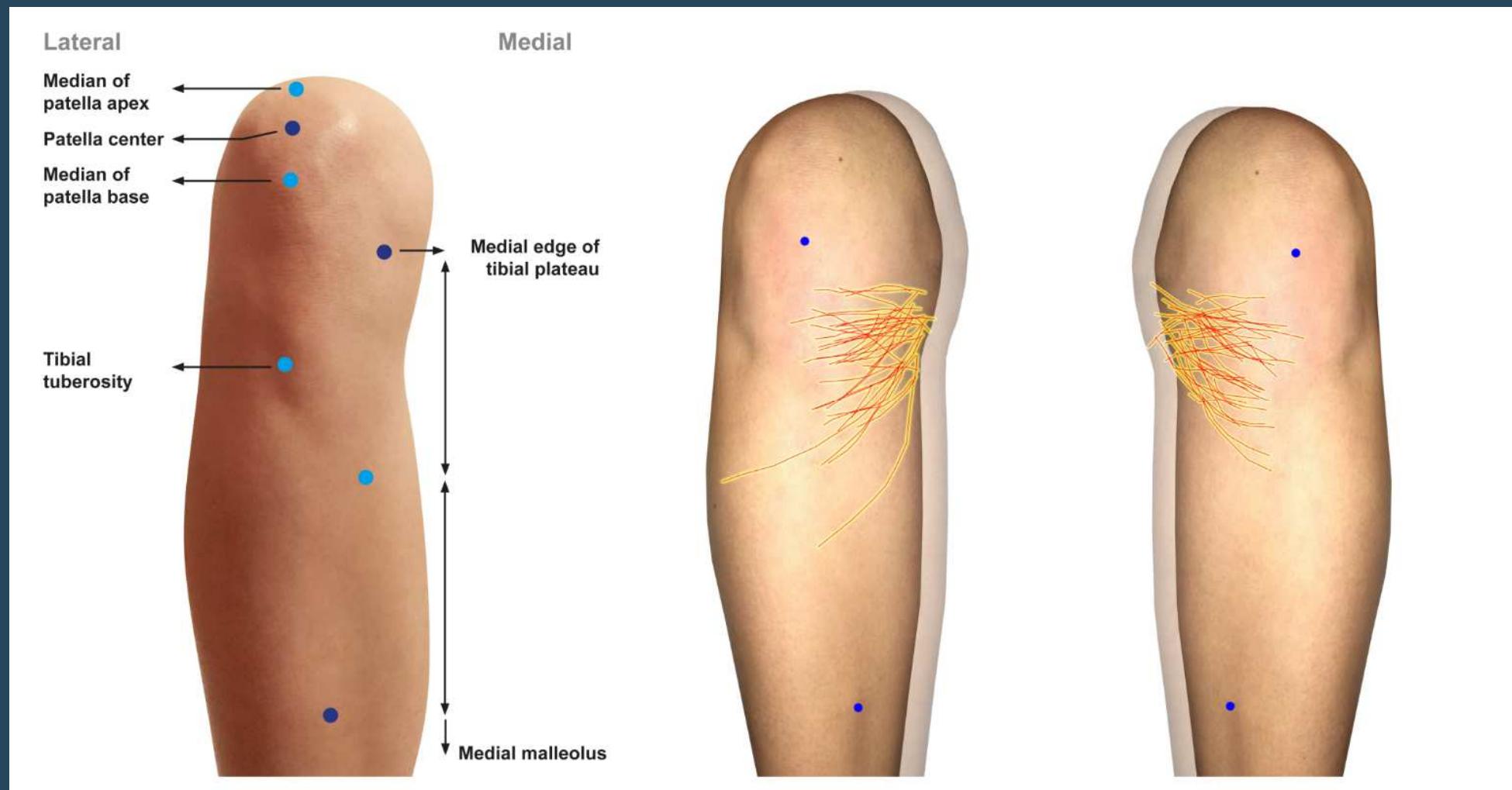
St.p. VKB-Plastik

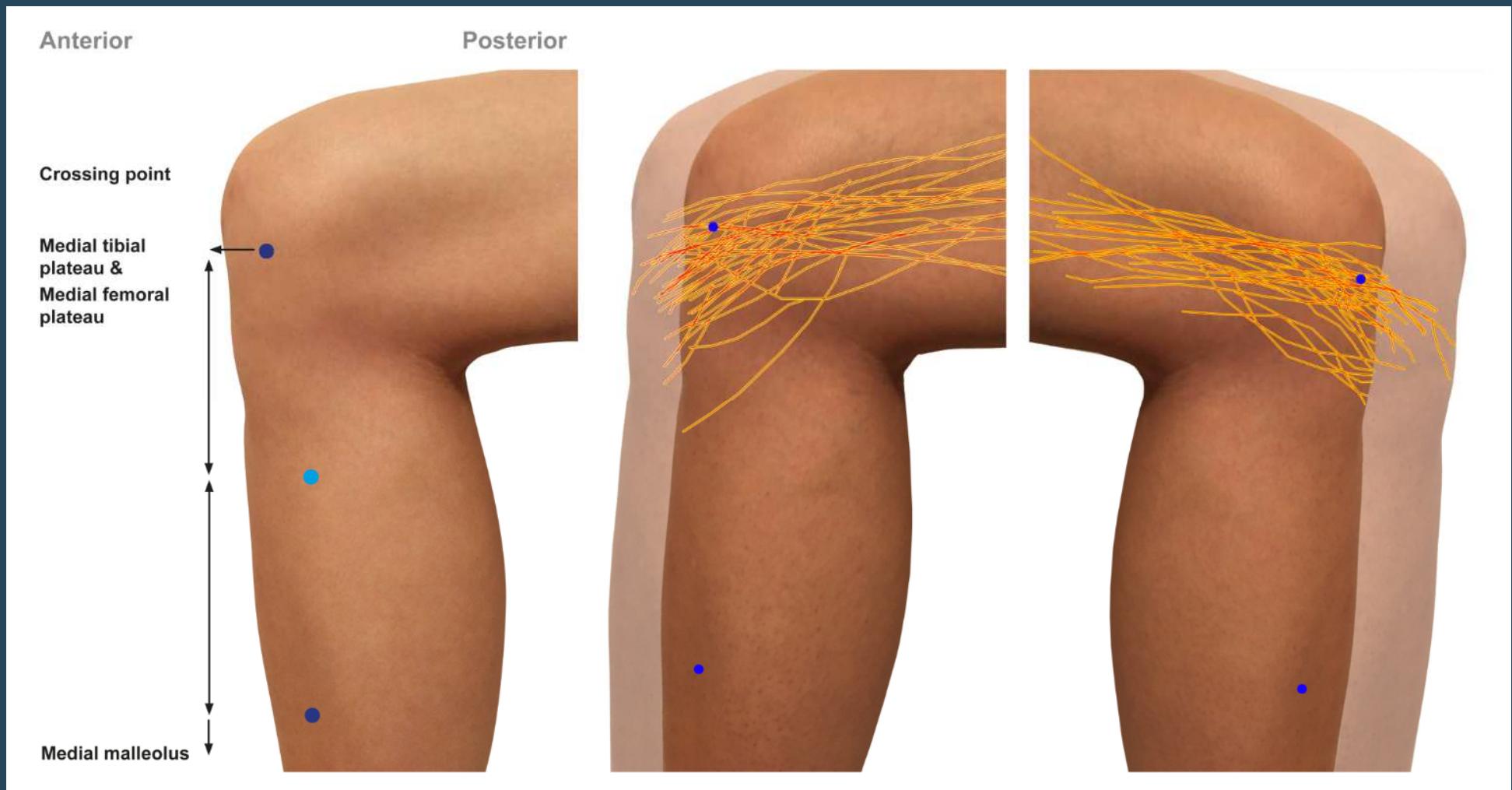


5-10%

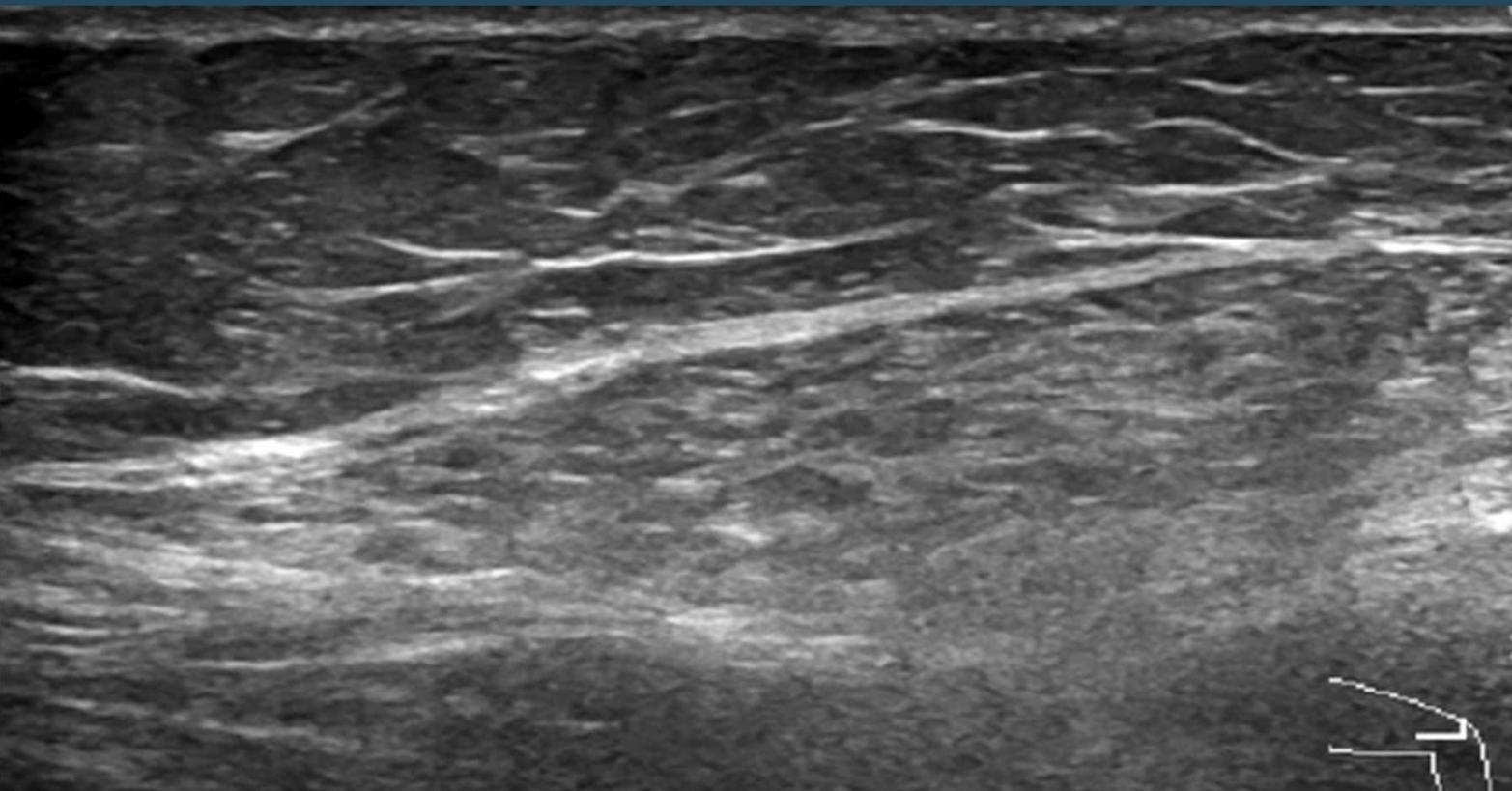
1. Kehlet H. et al., Lancet 2006;367:1618–25.
2. Buvanendran A et al., Anesth Analg 2010;110:199–207.
3. Lundblad H et al., J Bone Joint Surg Br 2008;90:166–71.
4. Bourne RB et al., Clin Orthop Relat Res 468:57–63
5. GD Rajitha Gunaratne et al., PII: S0883-5403(17)30619-8



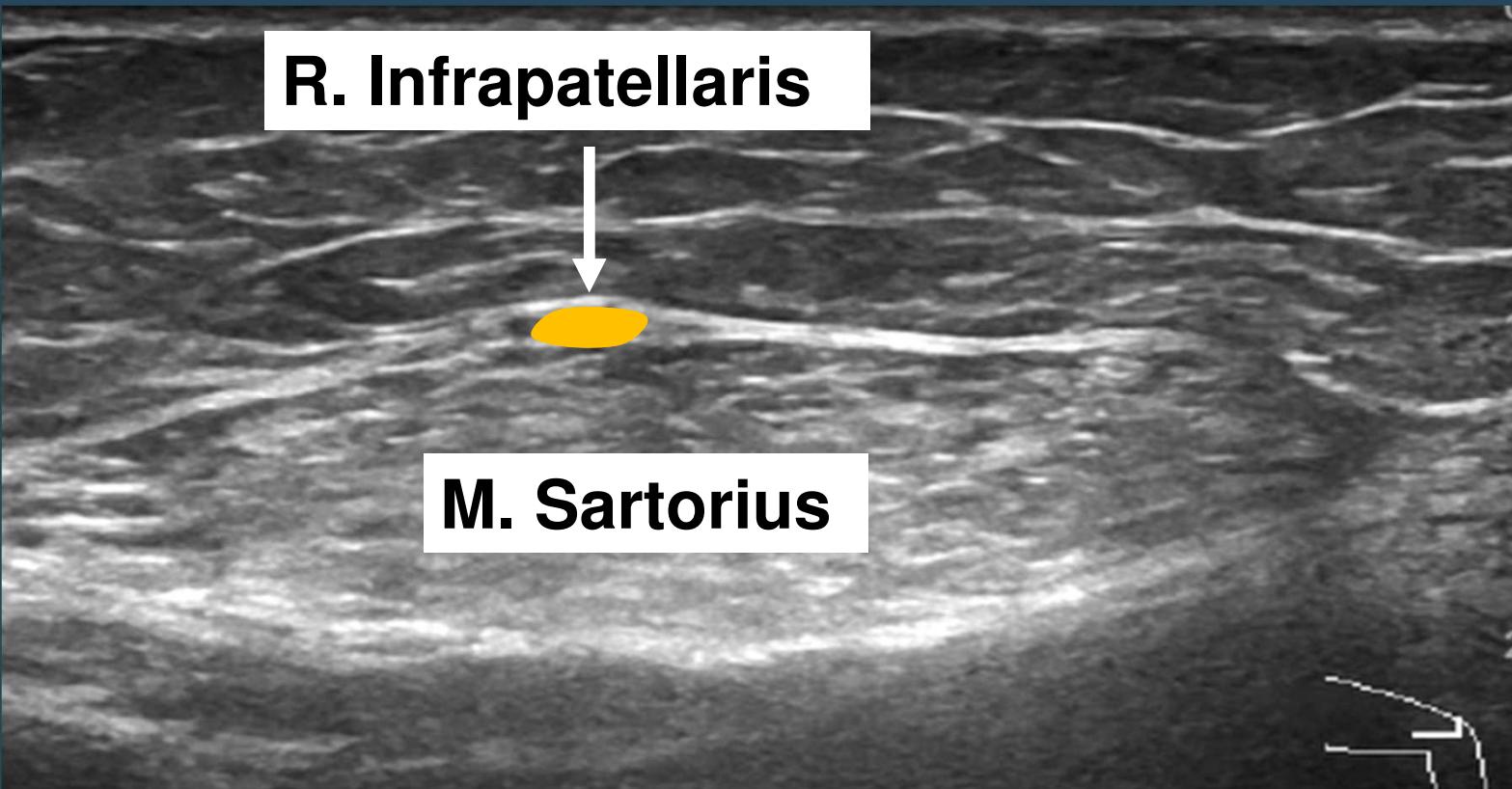




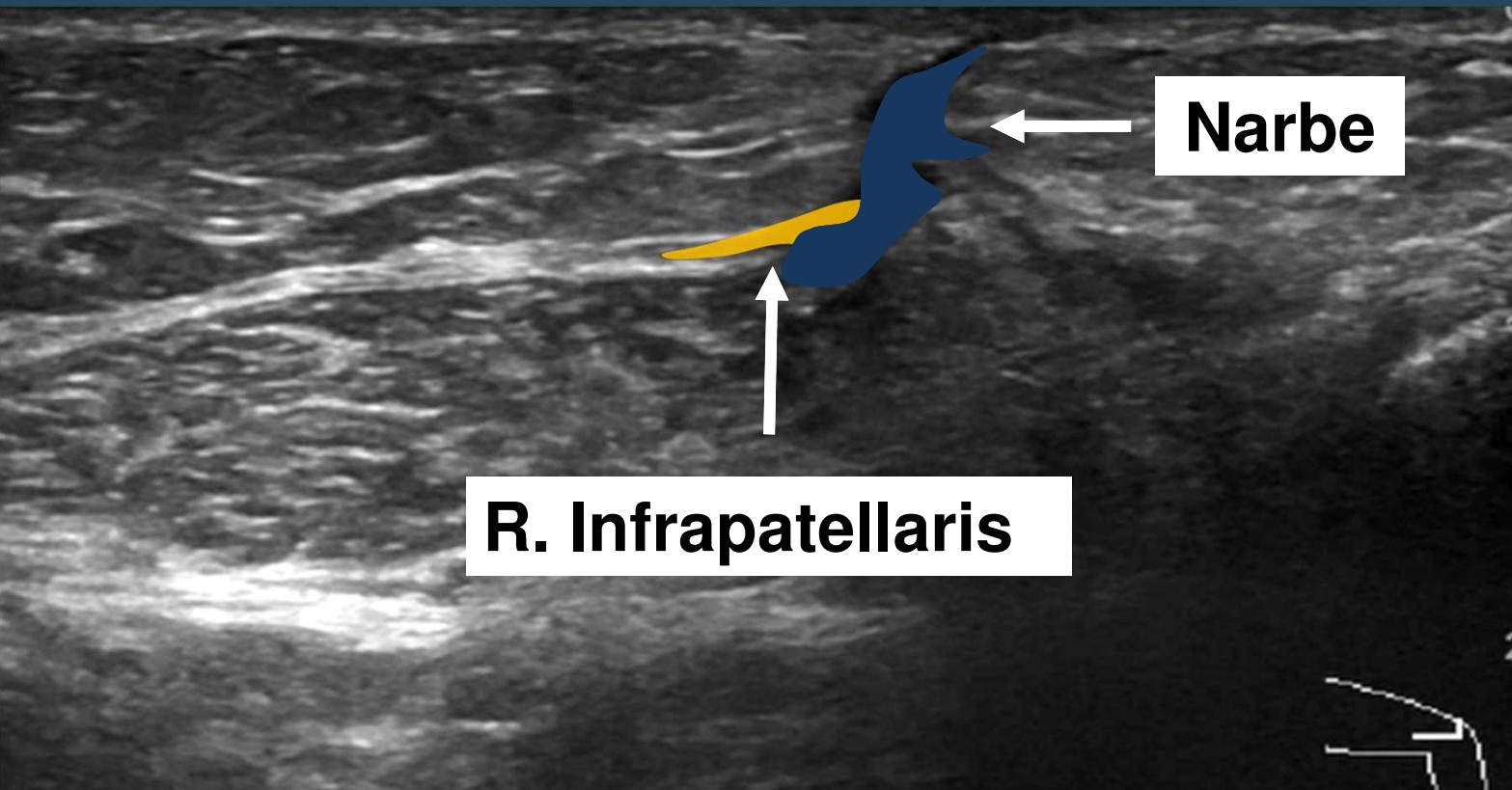
Diagnose – Morphologie



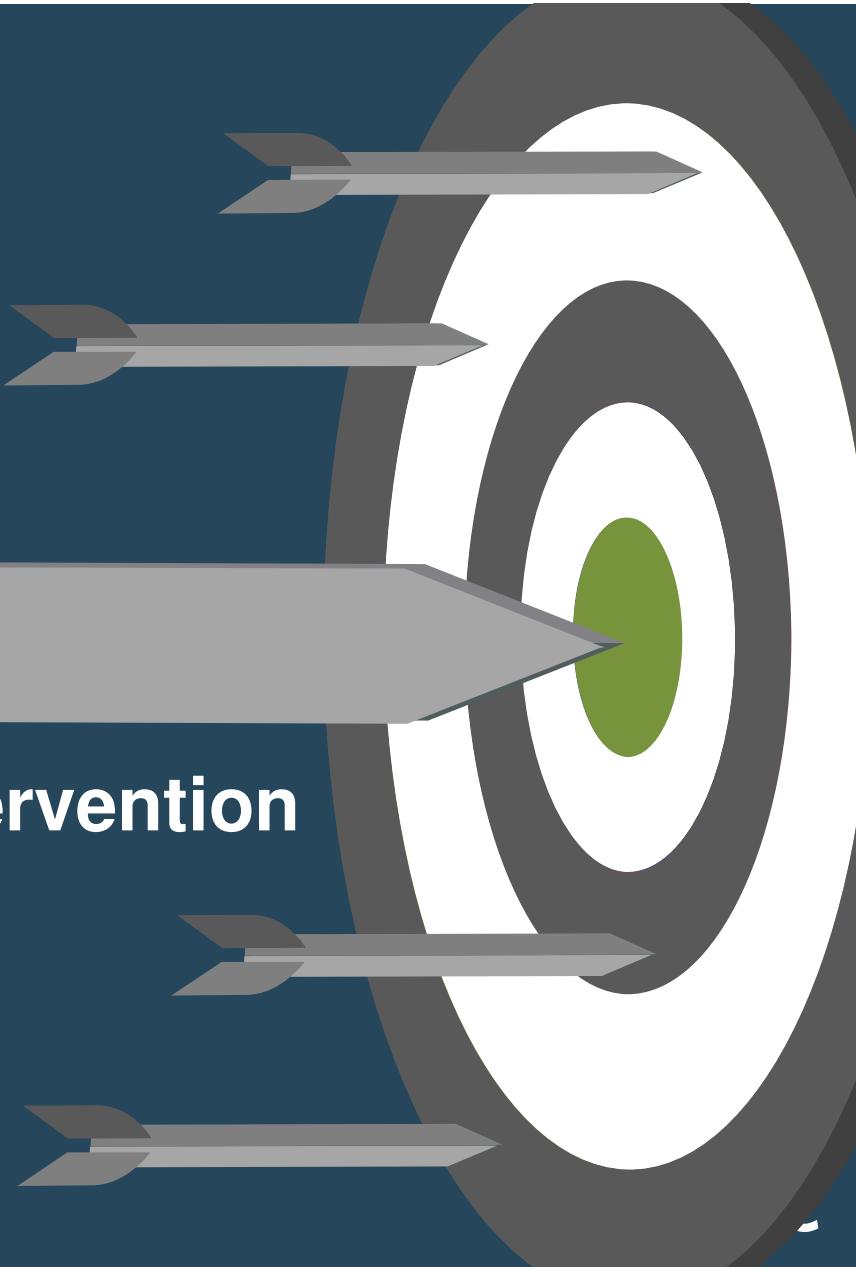
Diagnose – Morphologie

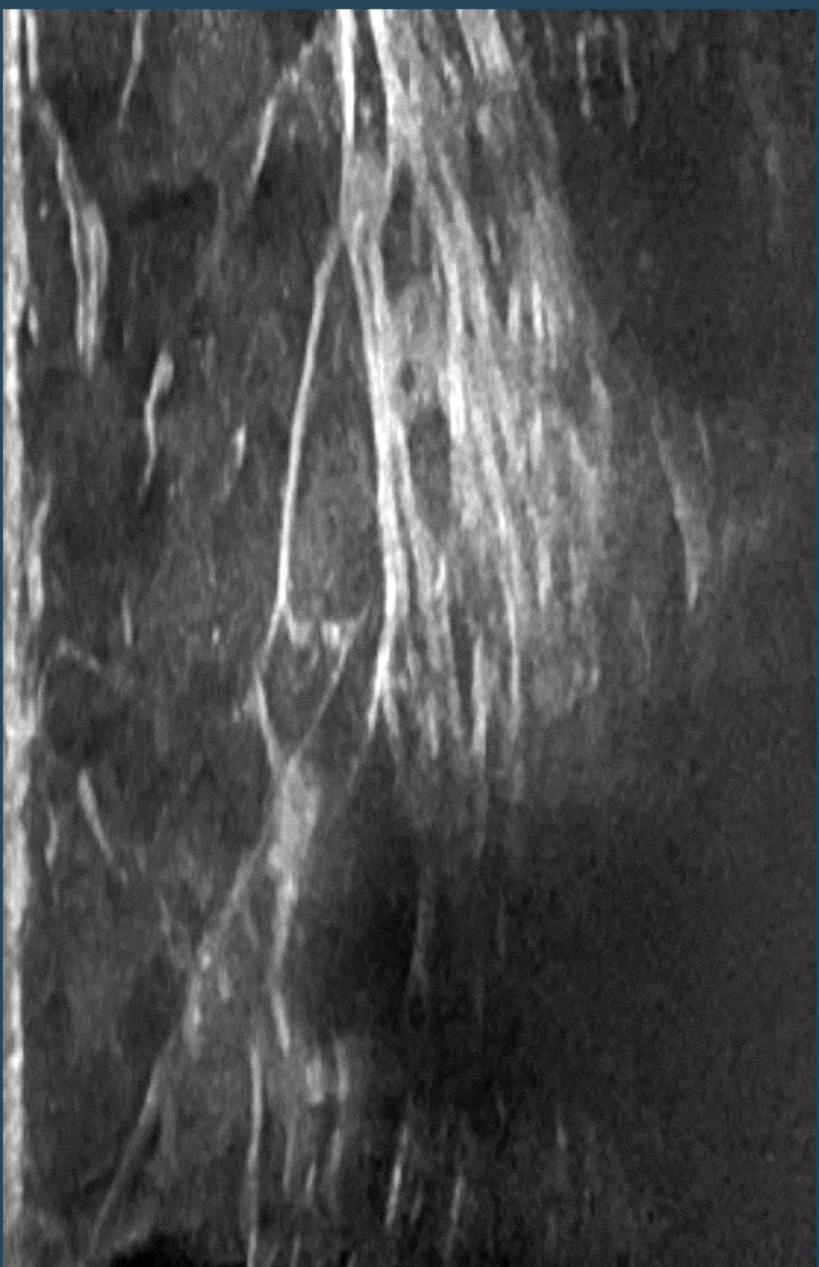
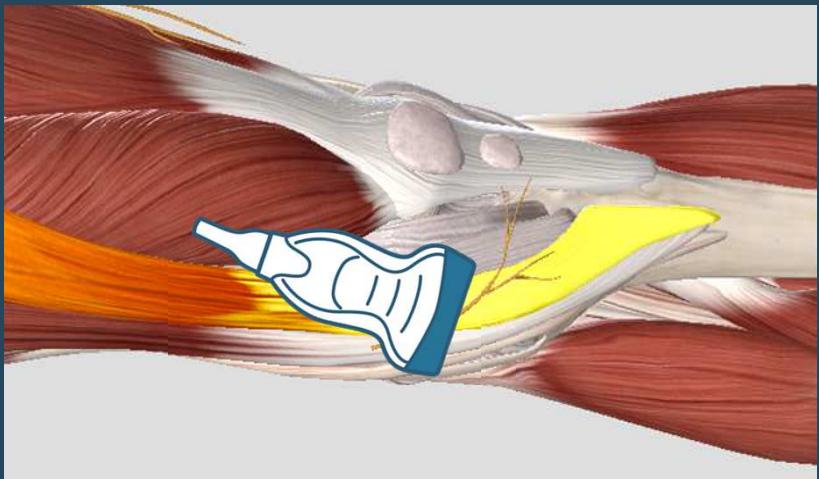


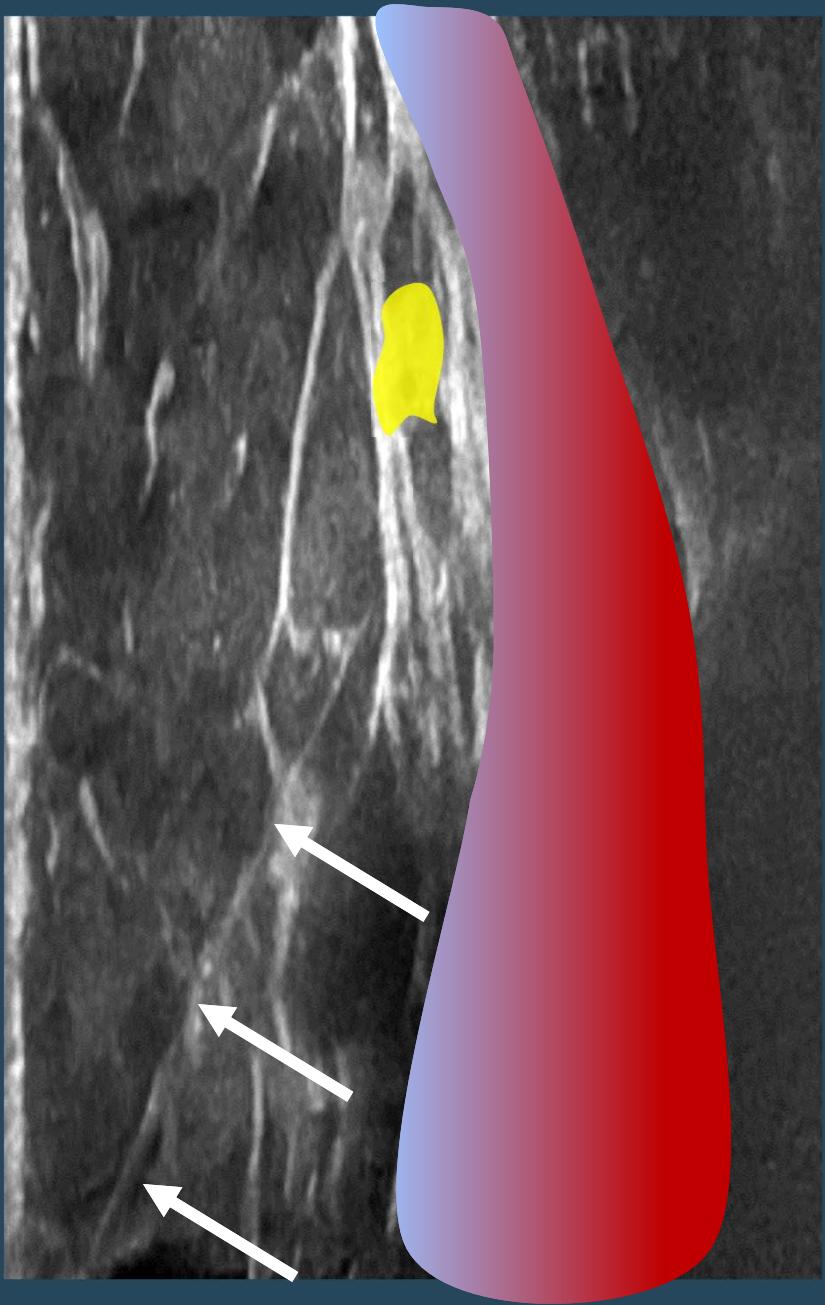
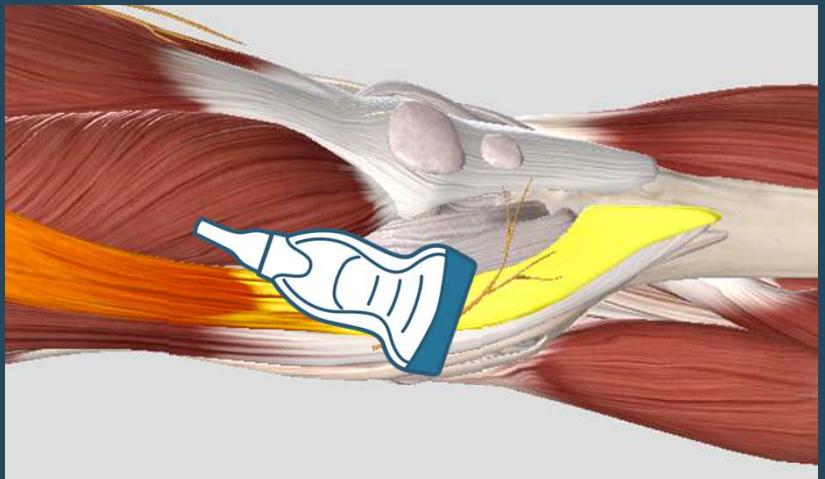
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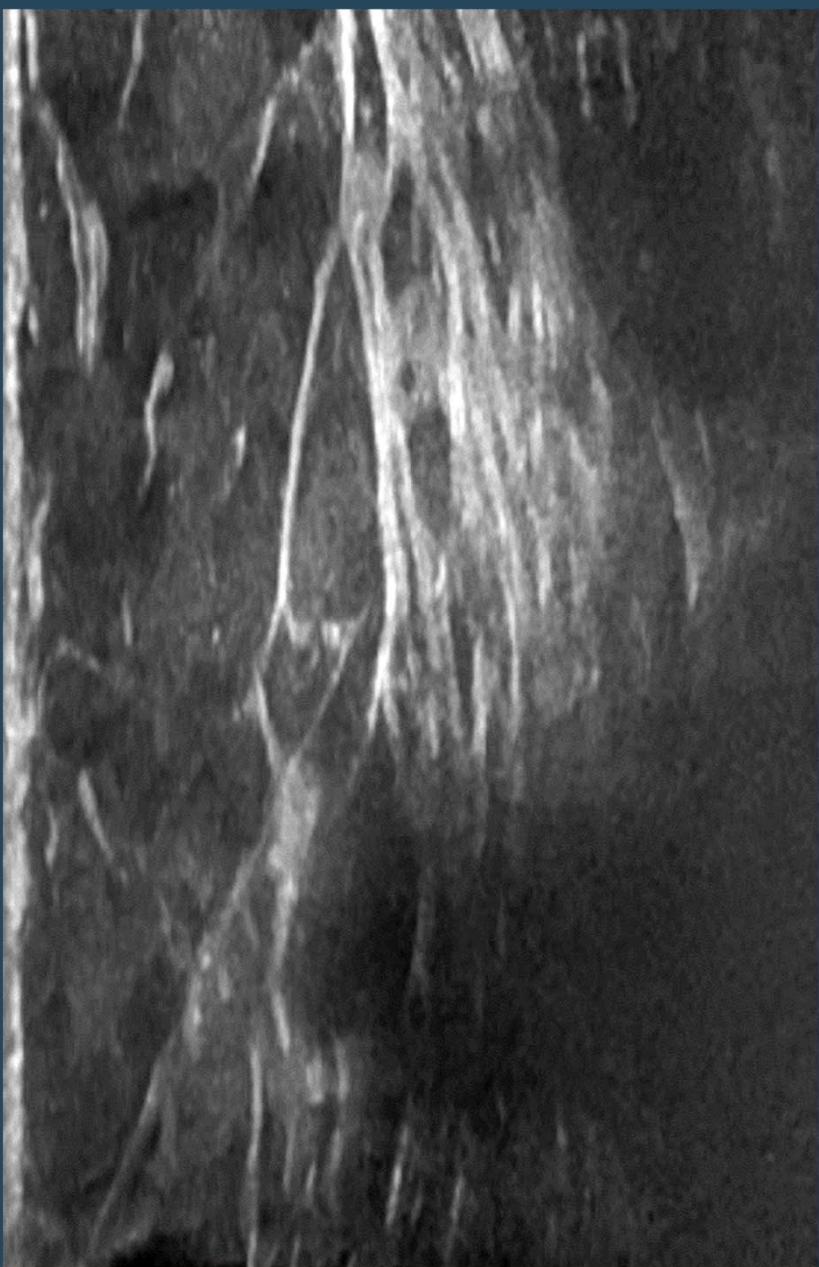
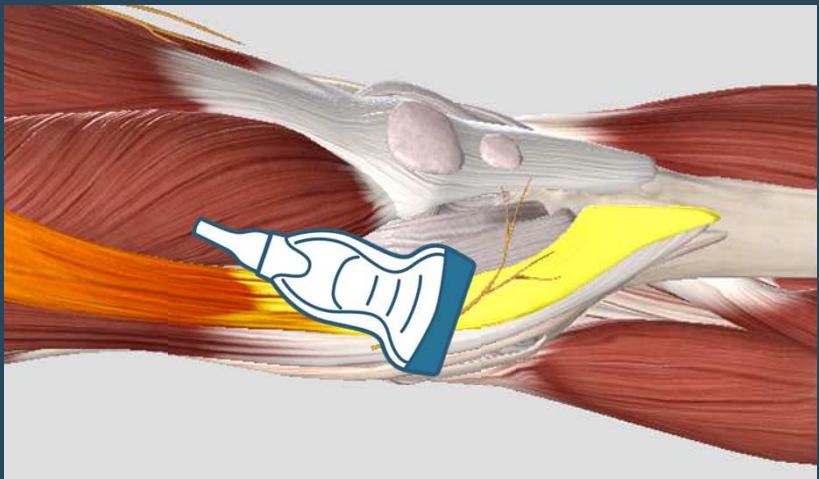


Ultraschall-gezielte Intervention





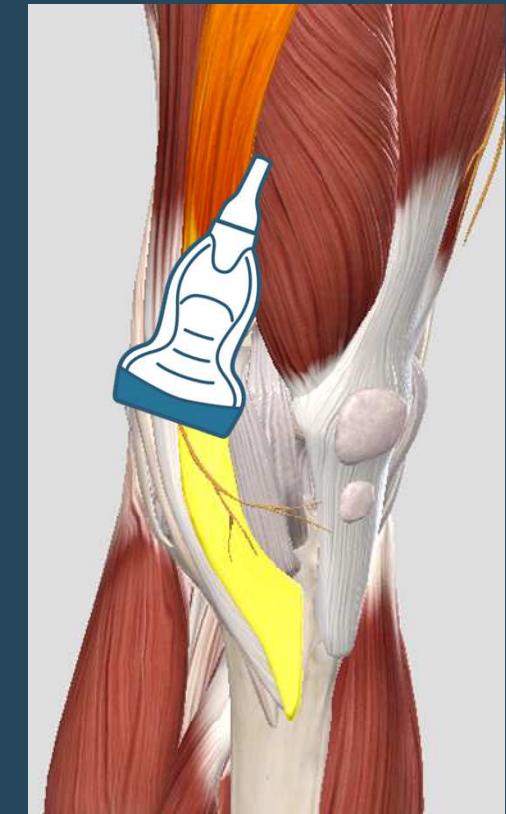
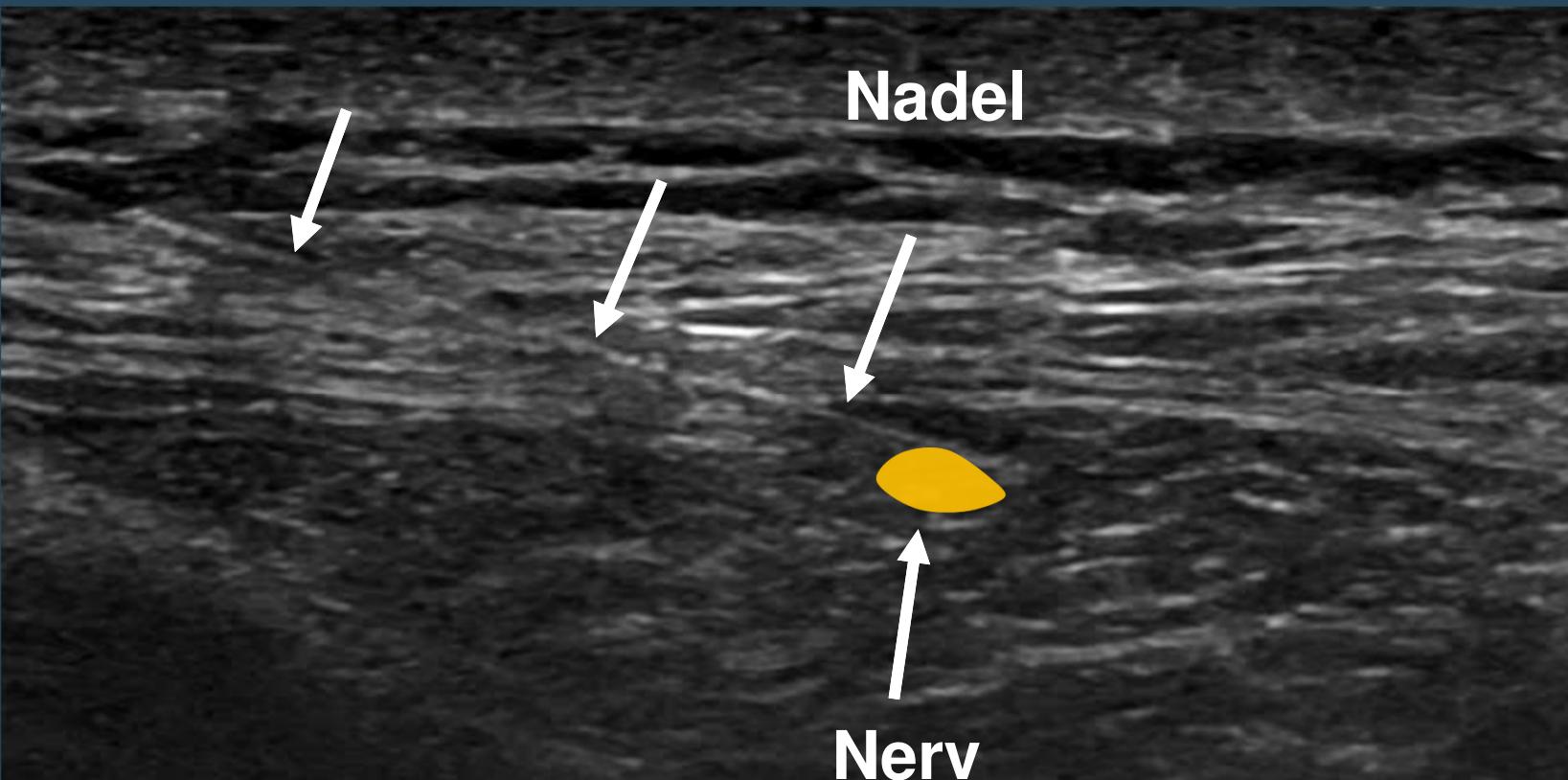




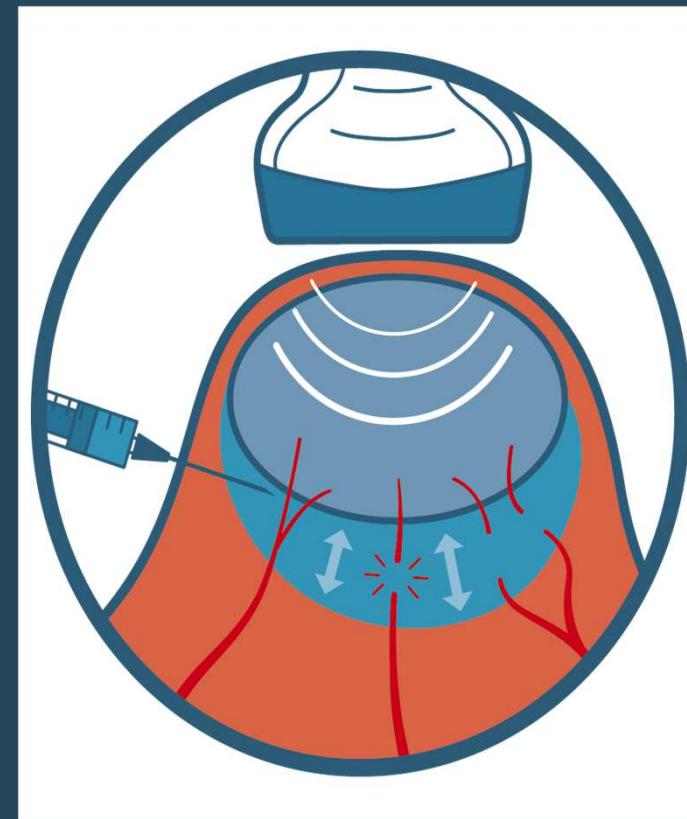
Therapie?



Radiofrequenz - Ablation



Achillessehen - Hydrodissektion





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Consensus statement

Imaging with ultrasound in physical therapy: What is the PT's scope of practice? A competency-based educational model and training recommendations

Jackie L Whittaker,^① Richard Ellis,² Paul William Hodges,^{②③} Cliona OSullivan,⁴ Julie Hides,⁵ Samuel Fernandez-Carnero,⁶ Jose Luis Arias-Buria,⁷ Deydre S Teyhen,⁸ Maria J Stokes⁹

+92%

2017: 101000 MRT (Wien)

2018: 193000 MRT (Wien)

Folgen früher Bildgebung (MRT <30 Tage nach Beschwerdebeginn) in 3264 Rückenschmerz- Fällen

Nach zwei Jahren: Frühes MRT vs kein MRT

Arbeits-
unfähigkeit:
134 vs 23 Tage

Operationen:
22,0% VS 0,8%

Schmerz-
medikation:
528 vs 341 mg

Länge der Arbeitsunfähigkeit/Invalidität: x 3.0



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