Quelle ALR pour chirurgie de l'épaule ?

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RASA 24 & 25 juin 2017

ALR

ALR anesthésique ?

- Calcifications
- Acromioplastie
- Coiffe des rotateurs

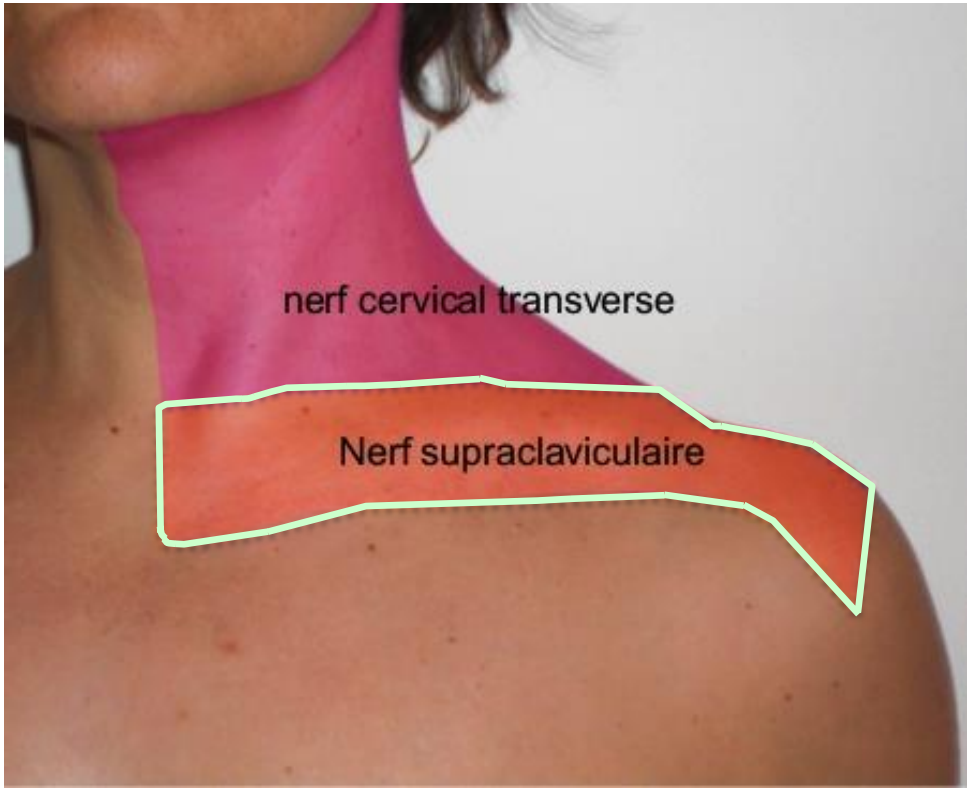
Bloc PB + Bloc PCS

ALR analgésique ?

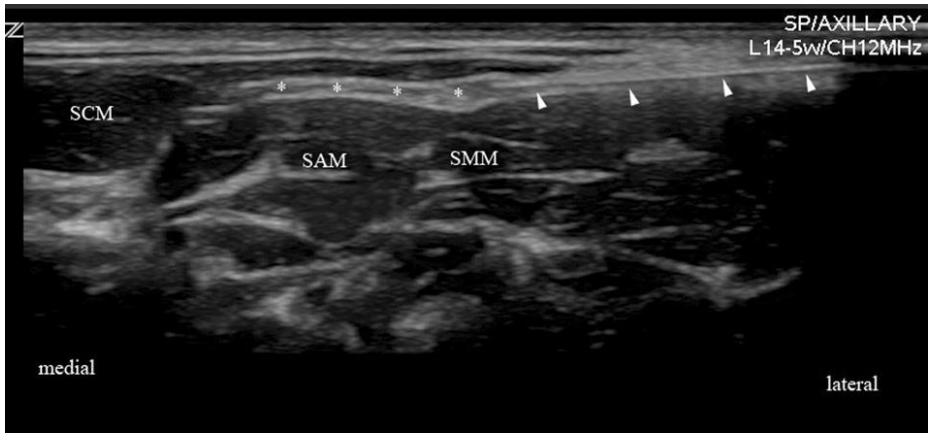
- Butée osseuse
- Prothèse épaule
- Traumatologie
- Calcifications
- Acromioplastie
- Coiffe des rotateurs

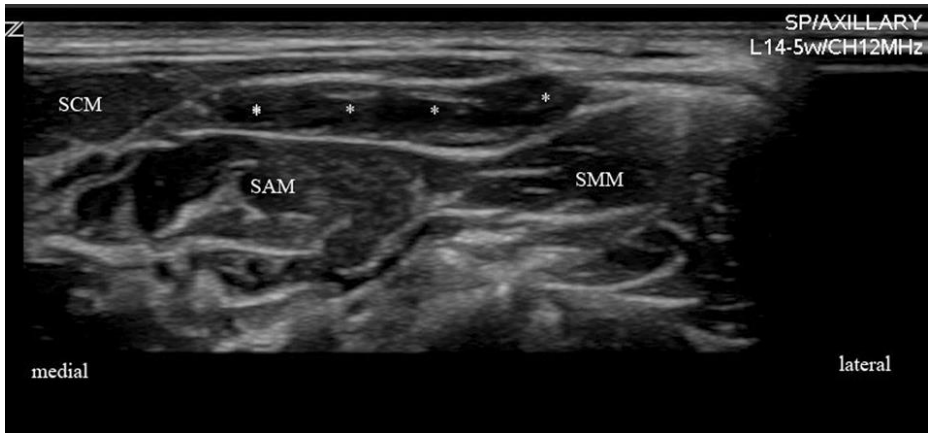
Bloc PB ou ?

Bloc PCS



Bloc PCS

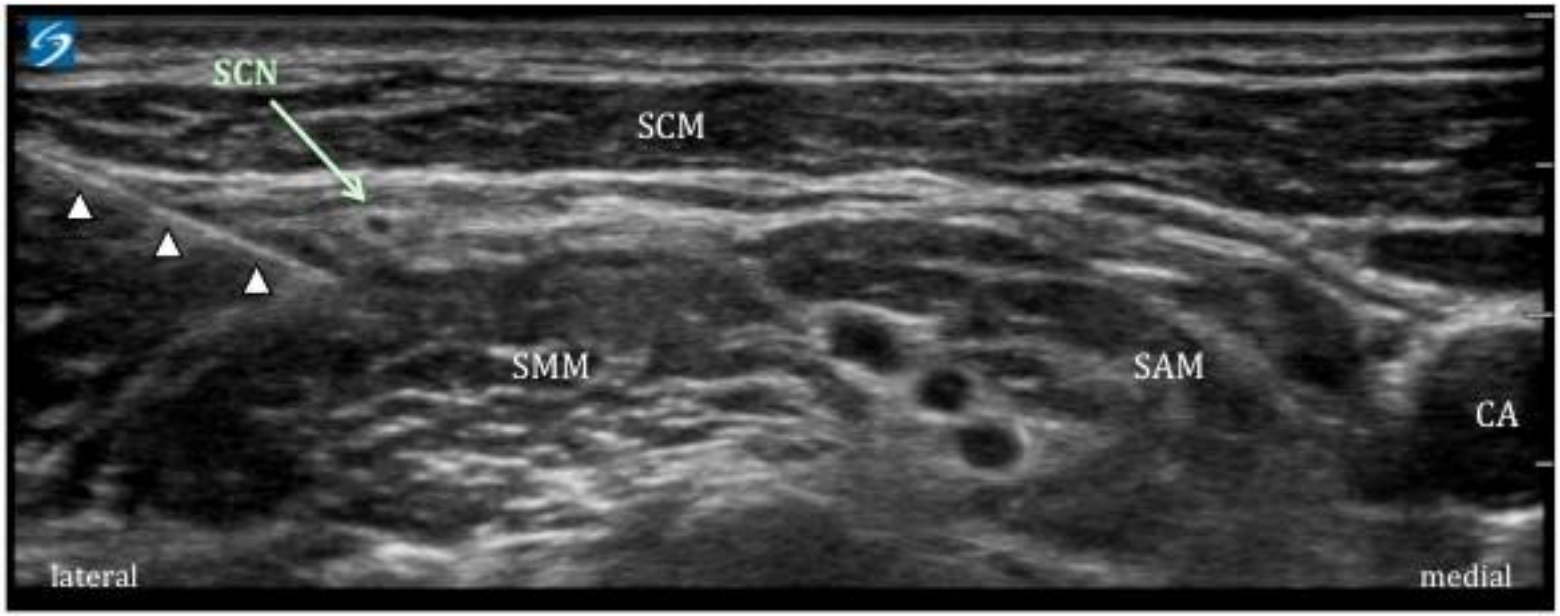




Plan intermusculaire SCM - Scalènes

De Q.H. Tran, Reg Anesth Pain Med 2010

Bloc PCS



Données personnelles

Épaule / Plexus Brachial

Face antérieure épaule:

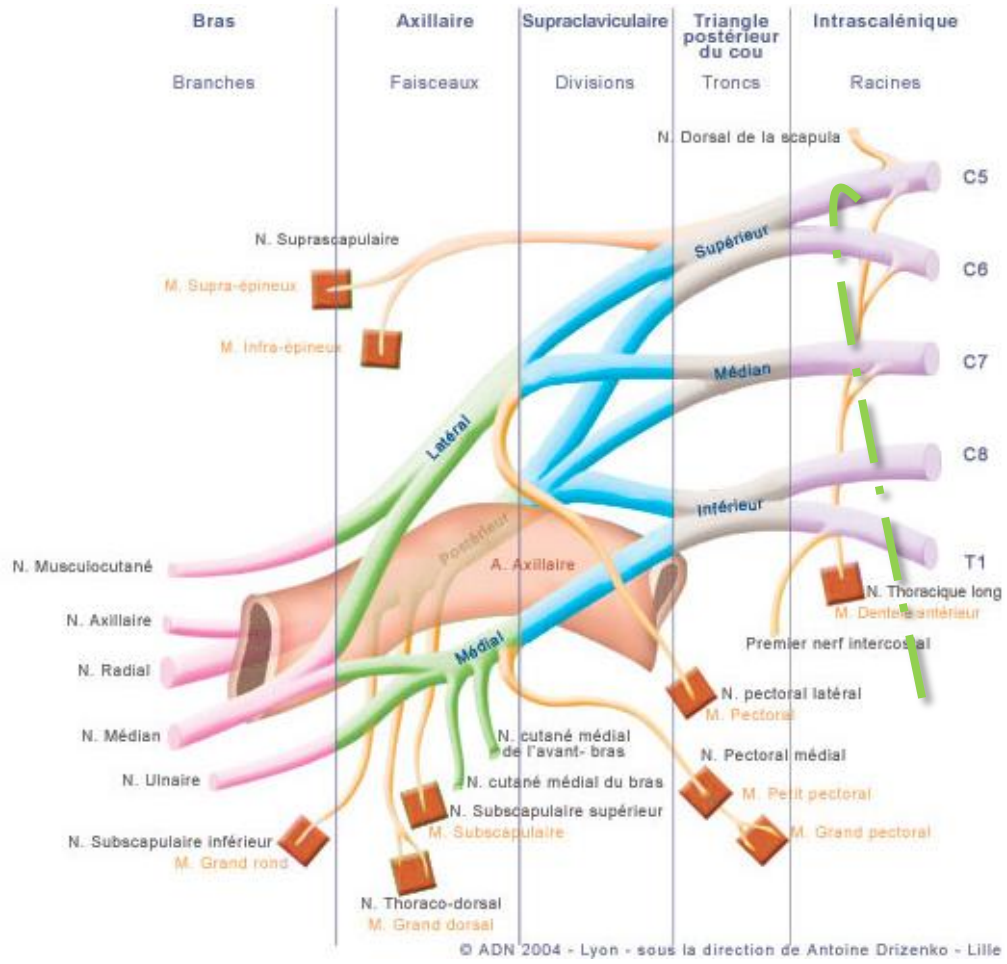
- *Nerf subscapulaire*
- *Nerf axillaire*

← **Fx Post**

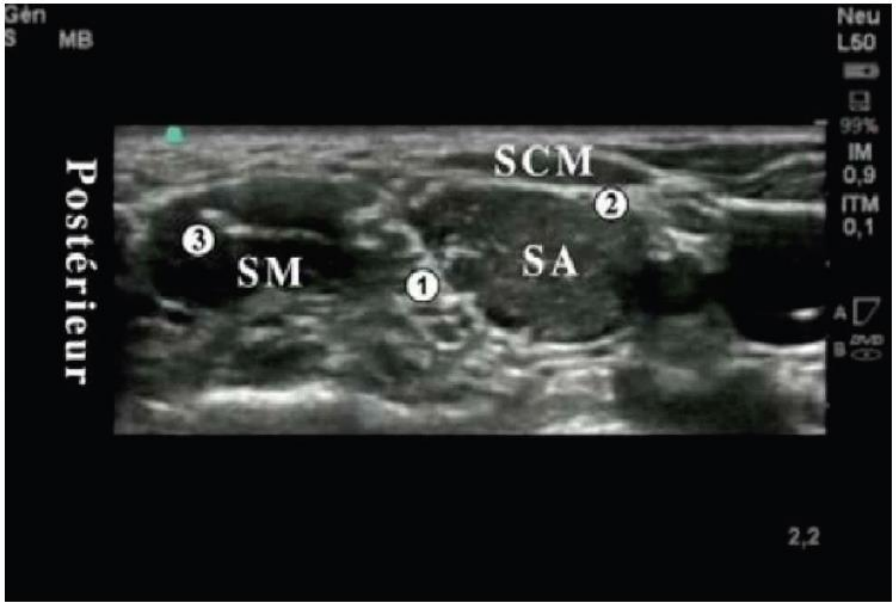
- *Nerf pectoral latéral* ← **Fx Lat**

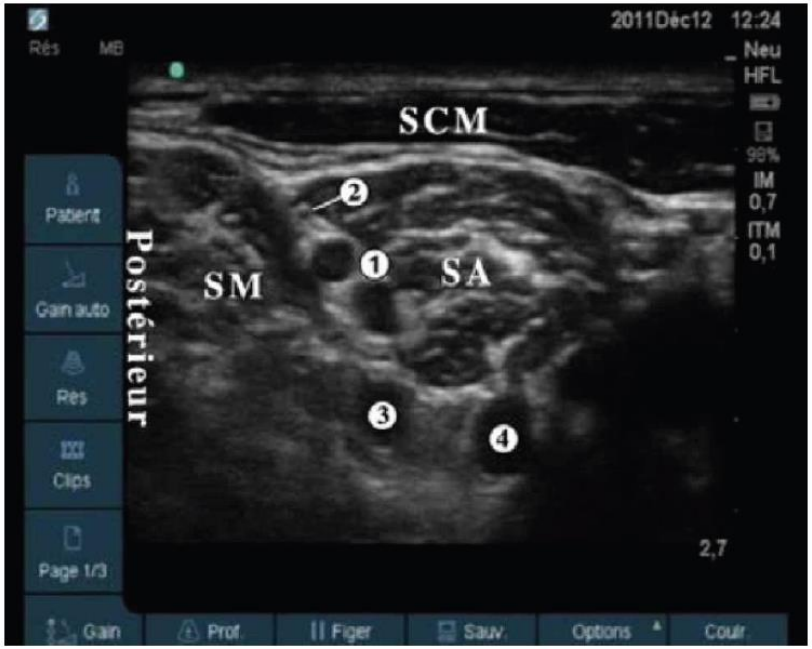
Face postérieure épaule:

- *Nerf suprascapulaire* ← **Tronc Sup**
- *Nerf axillaire* ← **Fx Post**



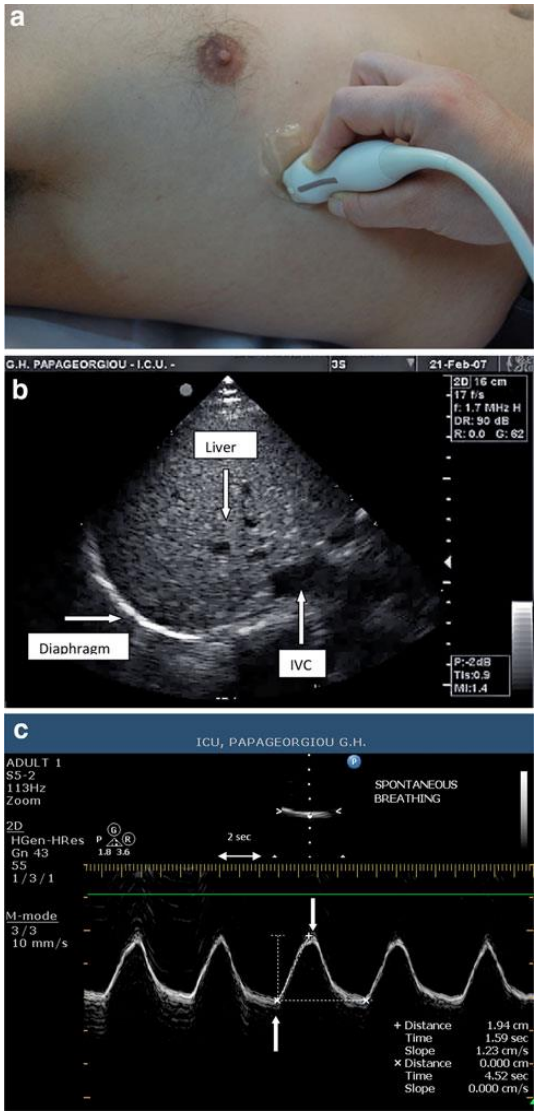
Paralysie hémidiaphragmatique (PhD)



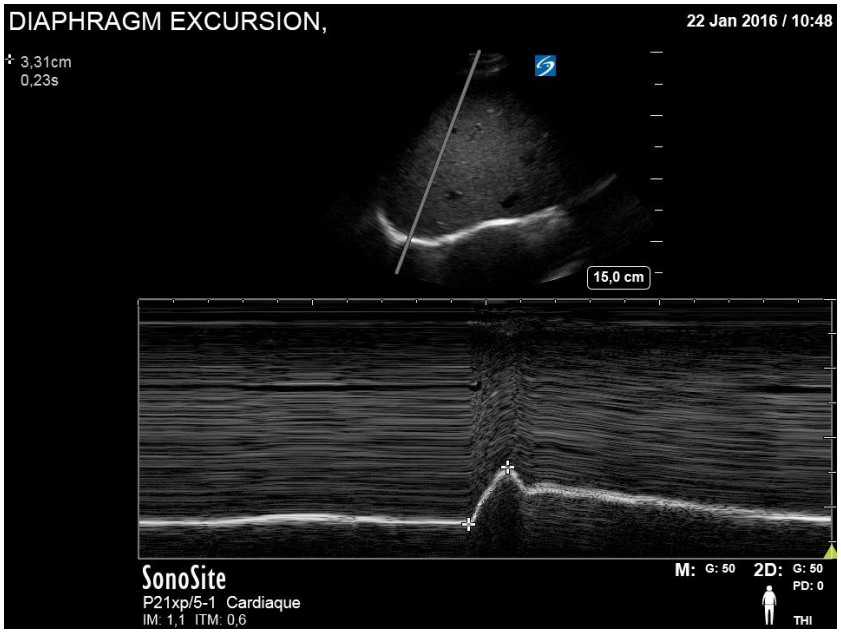


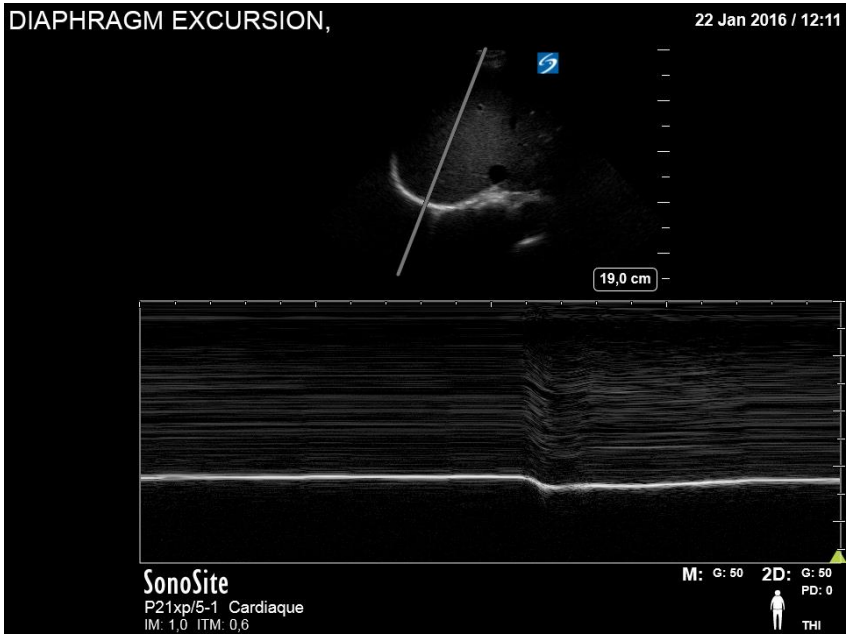
Echographie Diaphragmatique

- Décubitus dorsal strict
- Excursion diaphragme (ligne axillaire antérieure sous costale) en mode TM
- « sniff test »



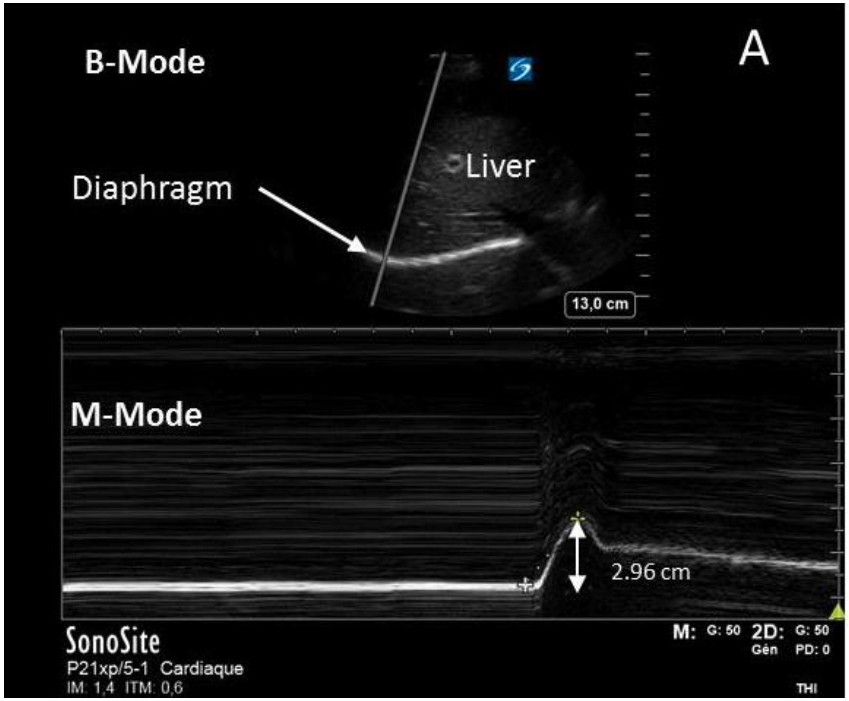
Matamis D, Intensive Care Med 2013

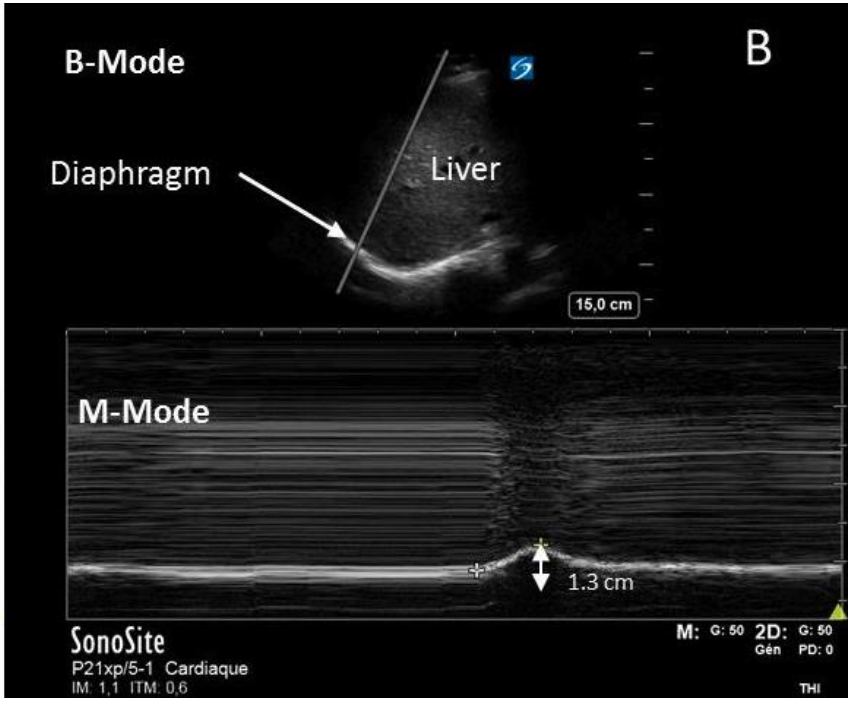




Paralysie diaphragmatique totale =
réduction excursion diaphragmatique ≥ 75%

Données personnelles



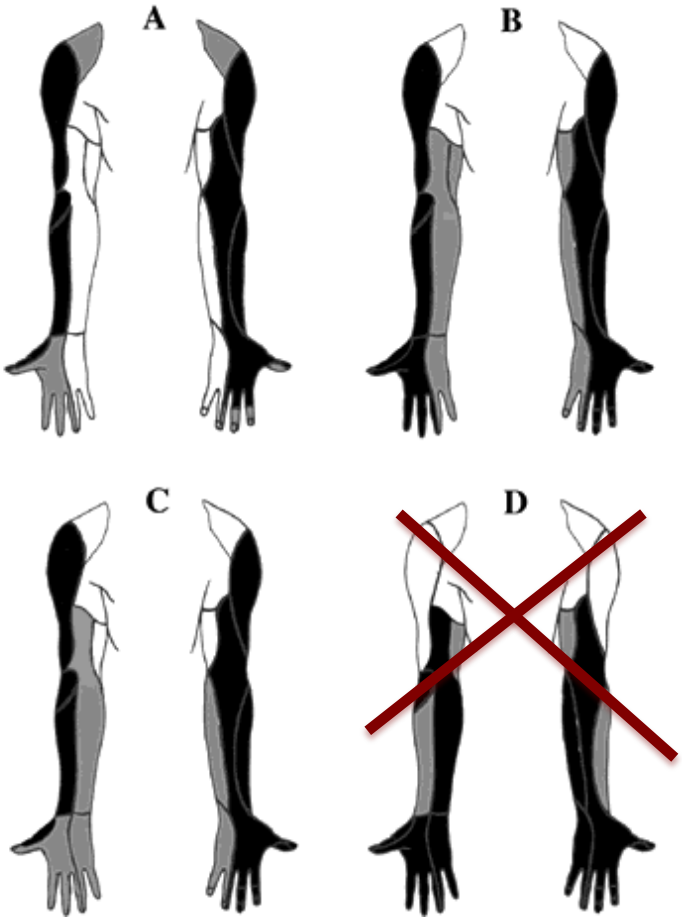


Paralysie diaphragmatique partielle =
réduction excursion diaphragmatique 25 - 75%

Données personnelles

Bloc PB

Bloc PB



BIS (A), **BSC** (B), **BIC** (C) et **BAX** (D)

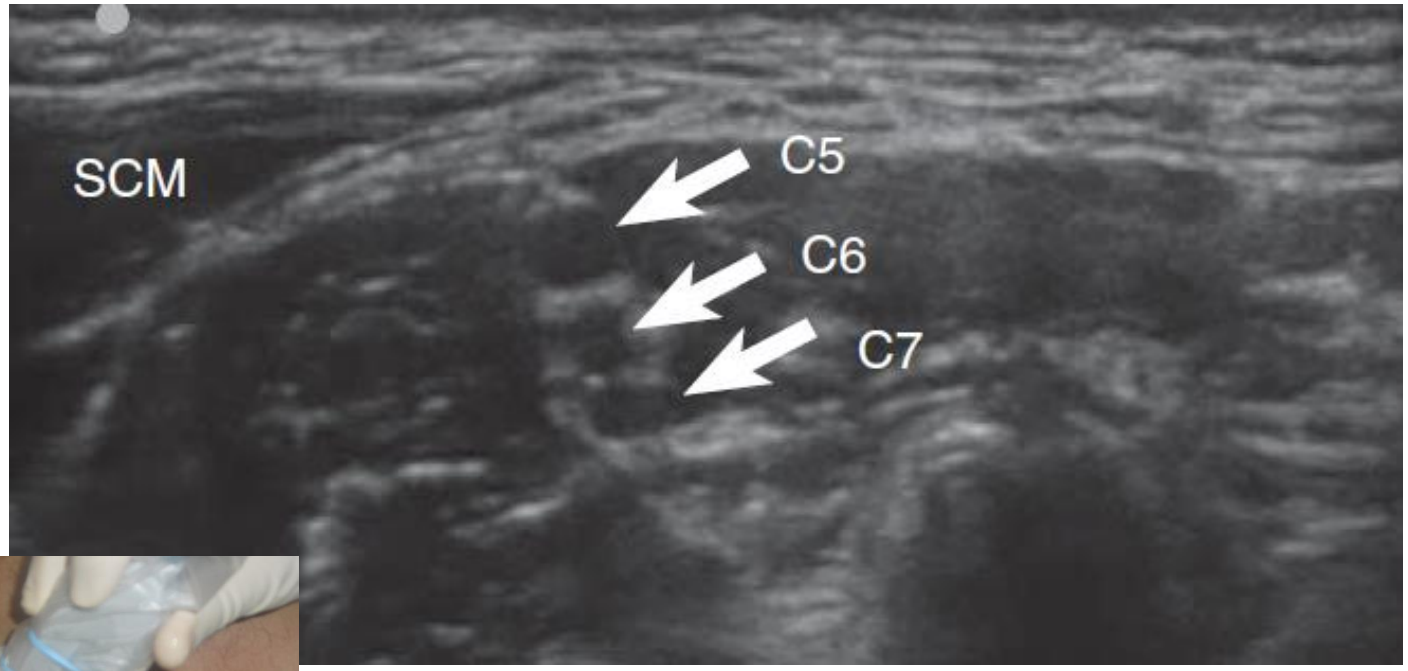
Extension de l'anesthésie:

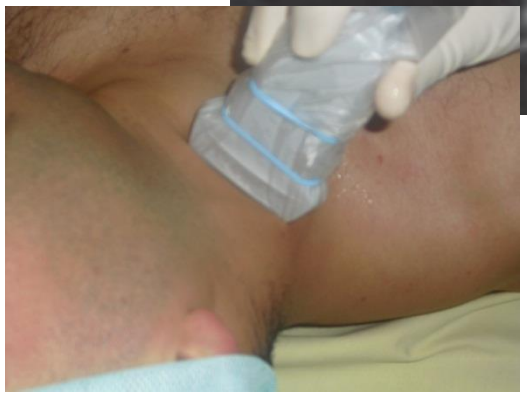
- Noir plus de 80 %
- Gris 60 à 80 %
- Blanc moins de 60 %

E. Lanz, Anesth Analg 1983

Conférence actualisation SFAR 2002

Bloc PB interscalénique





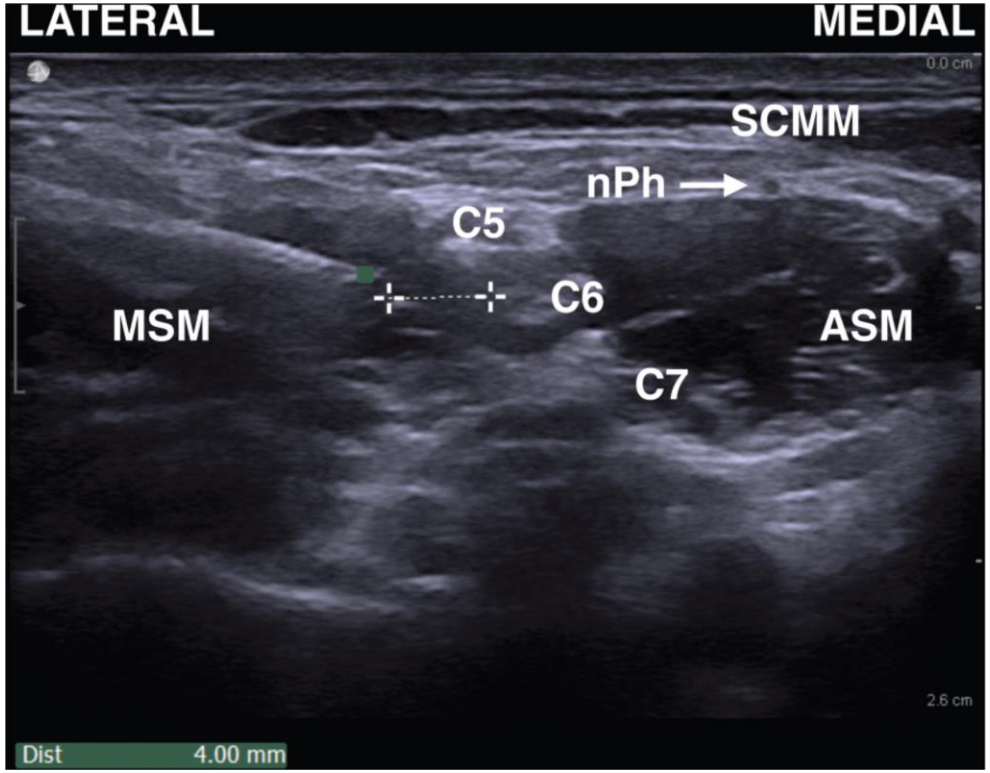
Marhofer P, Br J Anaesth 2010

BIS et paralysie hémidiaphragmatique (PhD)

Pour diminuer incidence PhD:

- Faible volume (5 mL) — O. Stundner, Br J Anaesth 2016
- Diluer concentration AL (Ropivacaïne 0,1%) — AK Wong, Pain Med 2016
- Injection extra fascia latérale (4 mm) — N. Palhais, Br J Anaesth 2016
- Bloc racine C7 — SH Renes, Reg Anesth Pain Med 2010

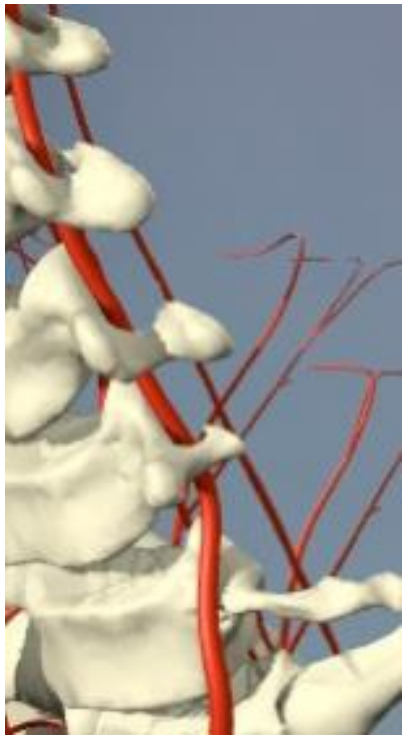
Injection Extra fascia latérale

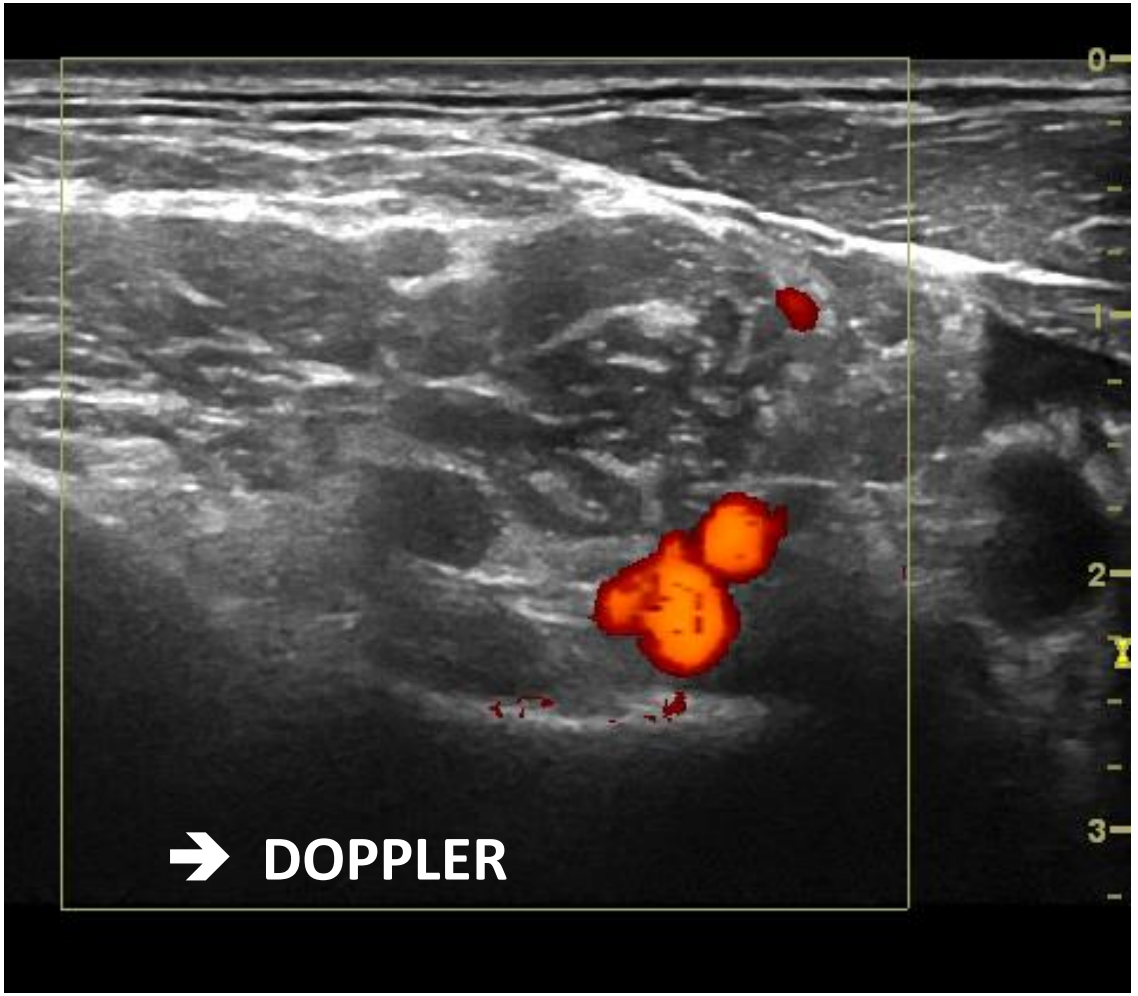


- Intra fascia (C5-C6) *vs* Extra fascia (latéral 4 mm)
- Incidence PhD US: 90% *vs* 21%

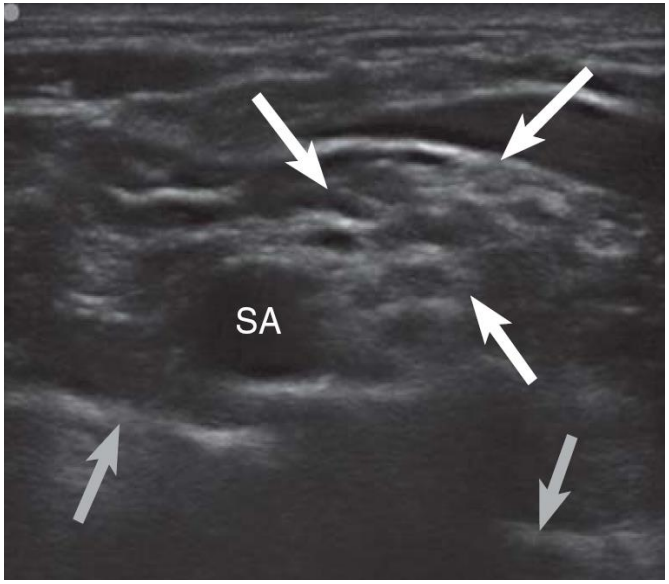
N. Palhais, Br J Anaesth 2016

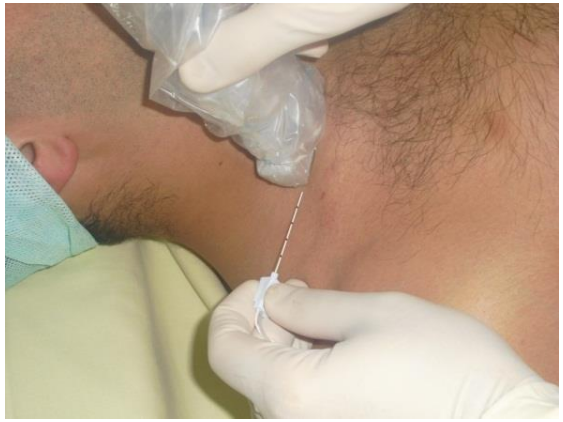
C7 - Artère Vertébrale

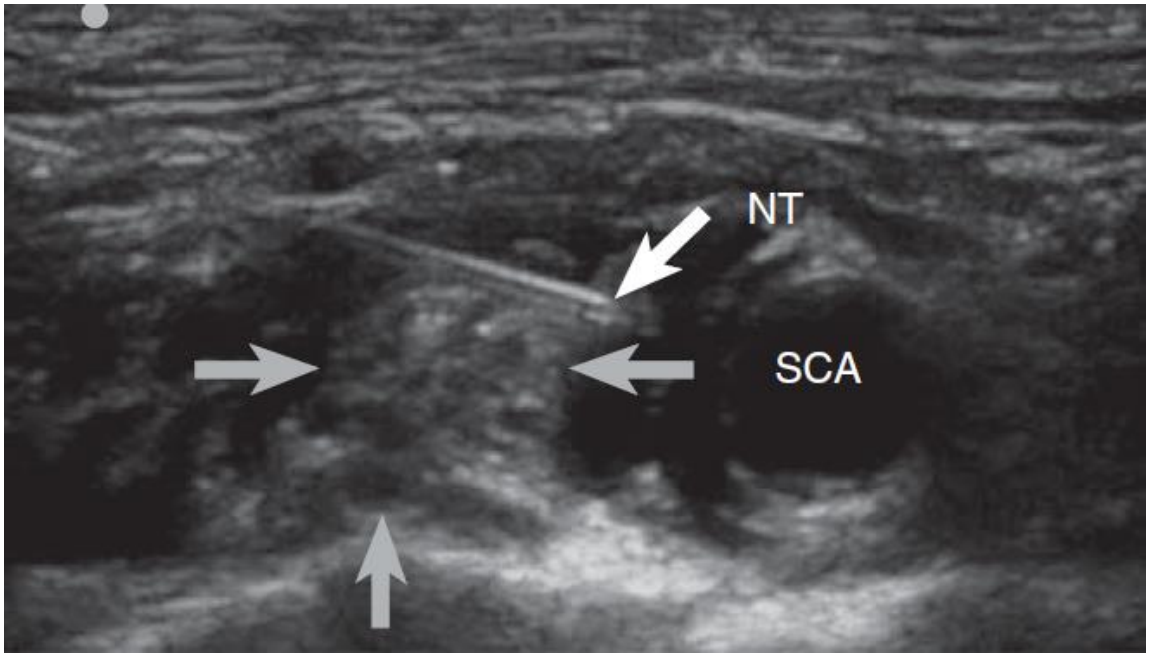




Bloc PB SupraClaviculaire

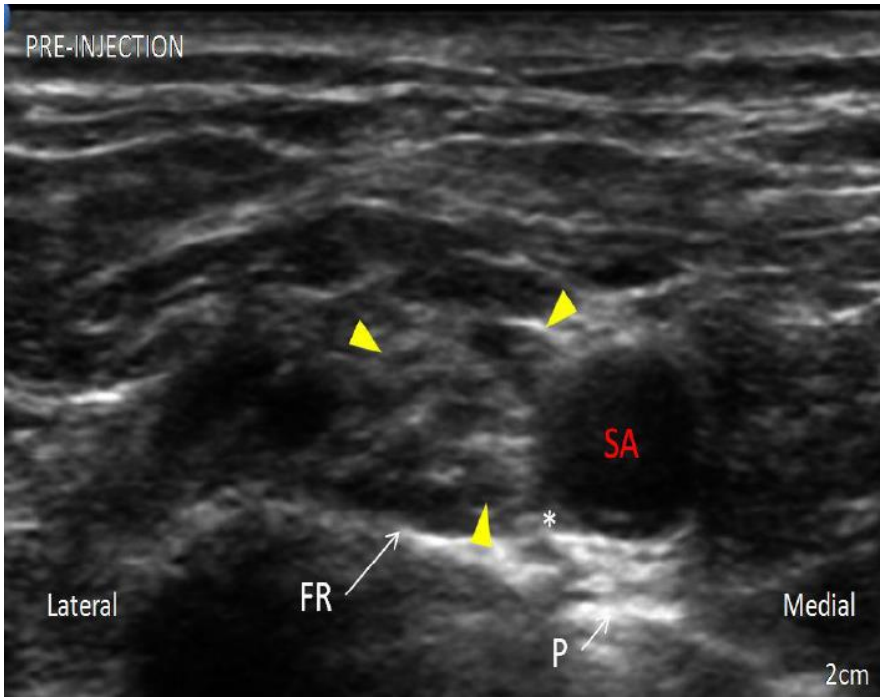


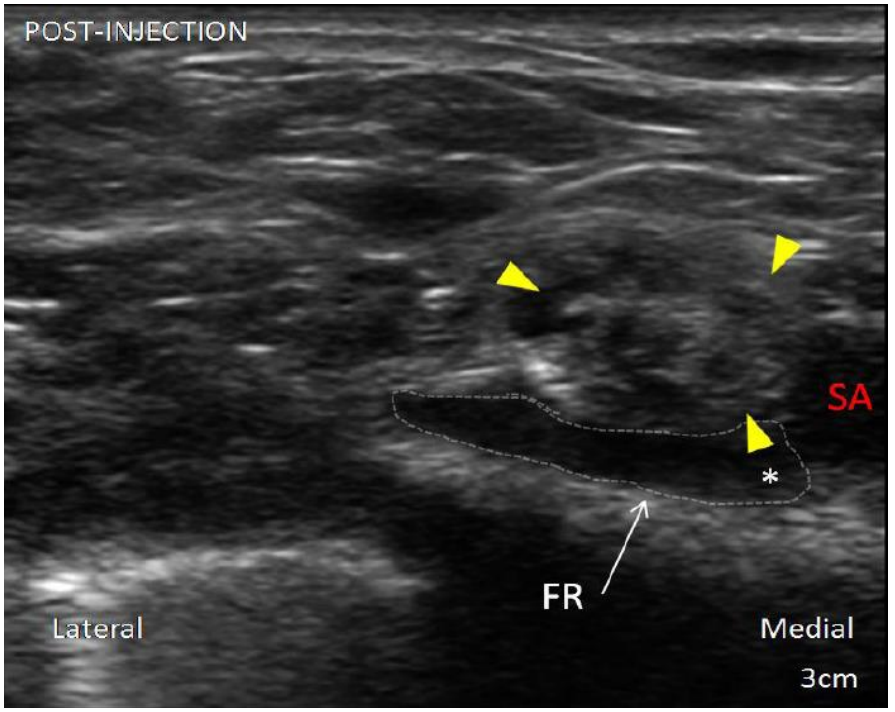




Marhofer P, Br J Anaesth 2010

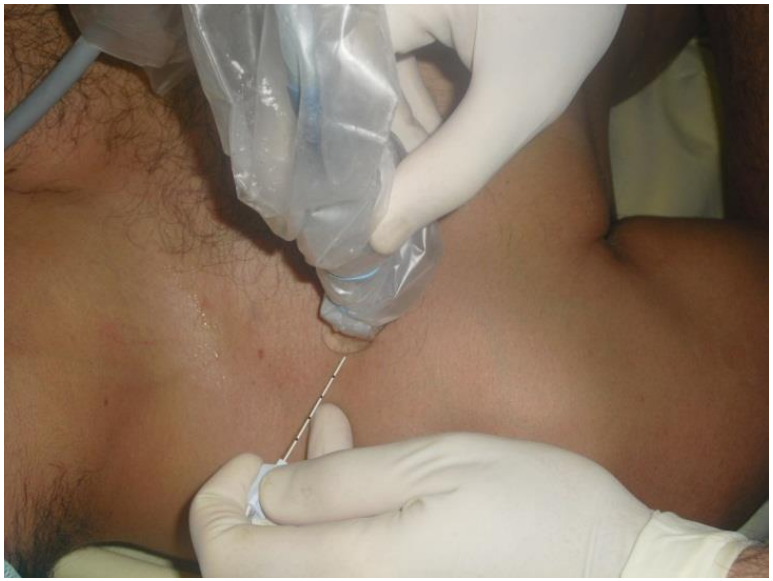
"Corner pocket"

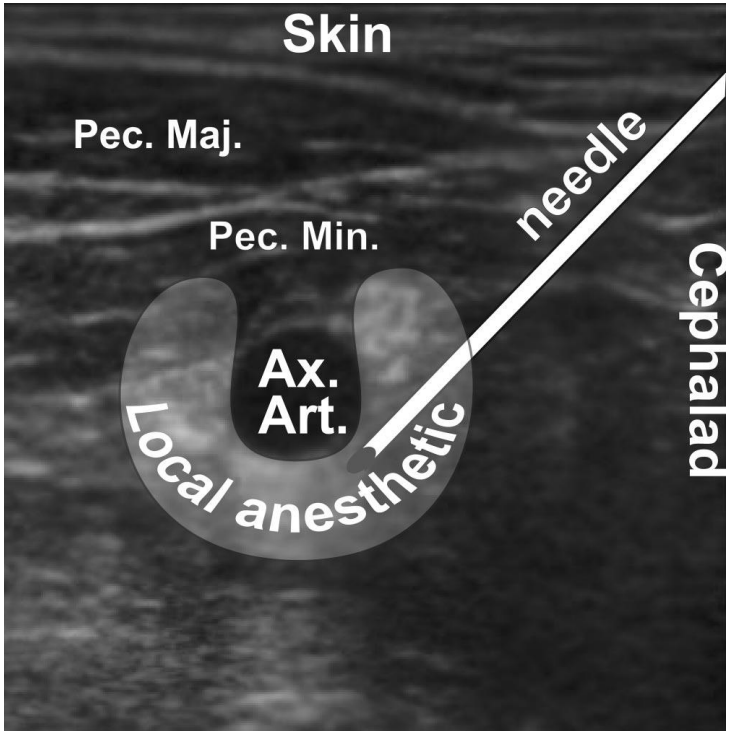




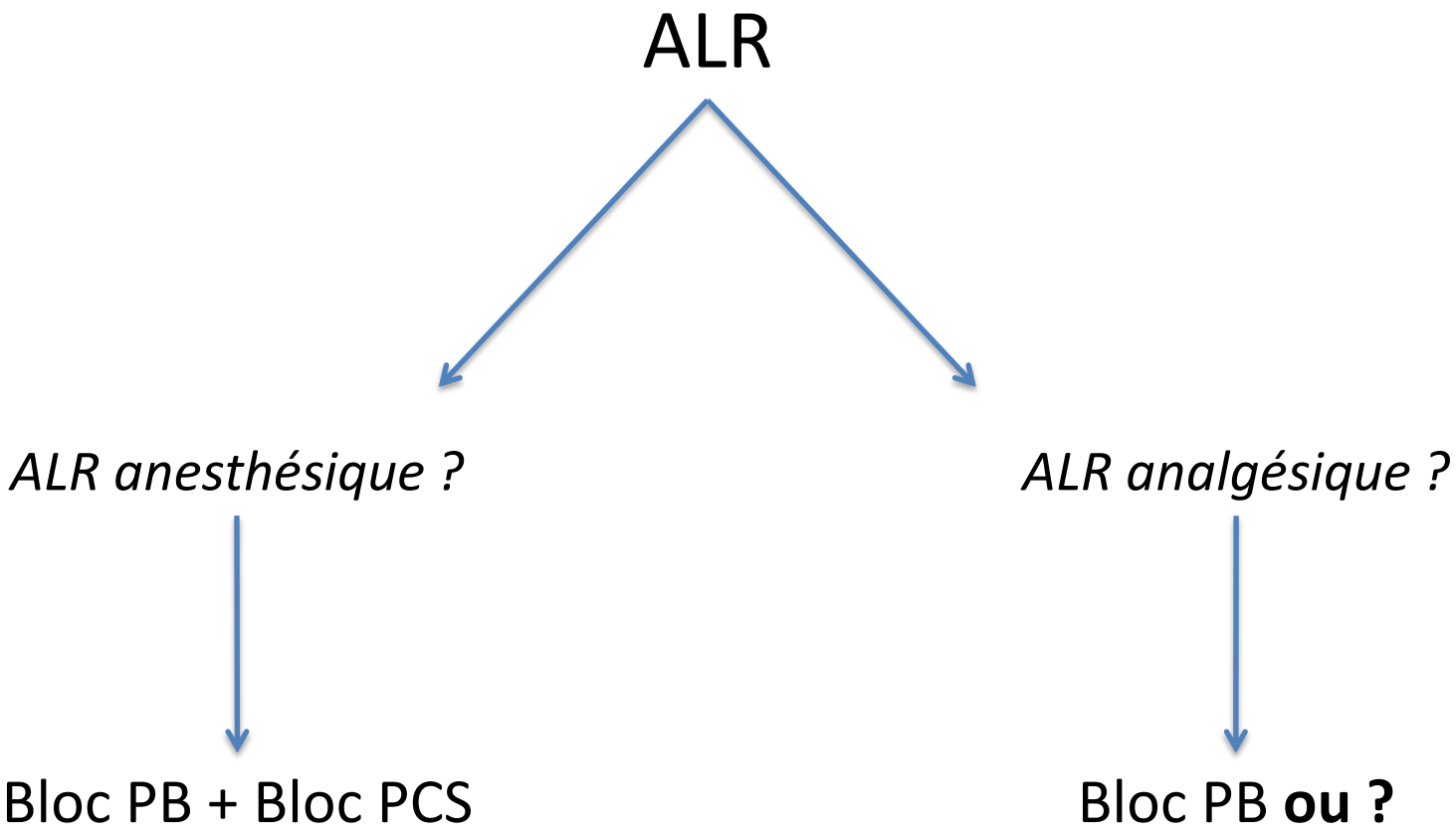
SH Renes, Reg Anesth Pain Med 2009
MacFarlane A, NYSORA 2009

Bloc PB InfraClaviculaire





E Dingemans , Anesth Analg 2007


ALR
ALR anesthésique ?
ALR analgésique ?
Bloc PB + Bloc PCS
Bloc PB **ou ?**

Épaule / Plexus Brachial

Face antérieure épaule:

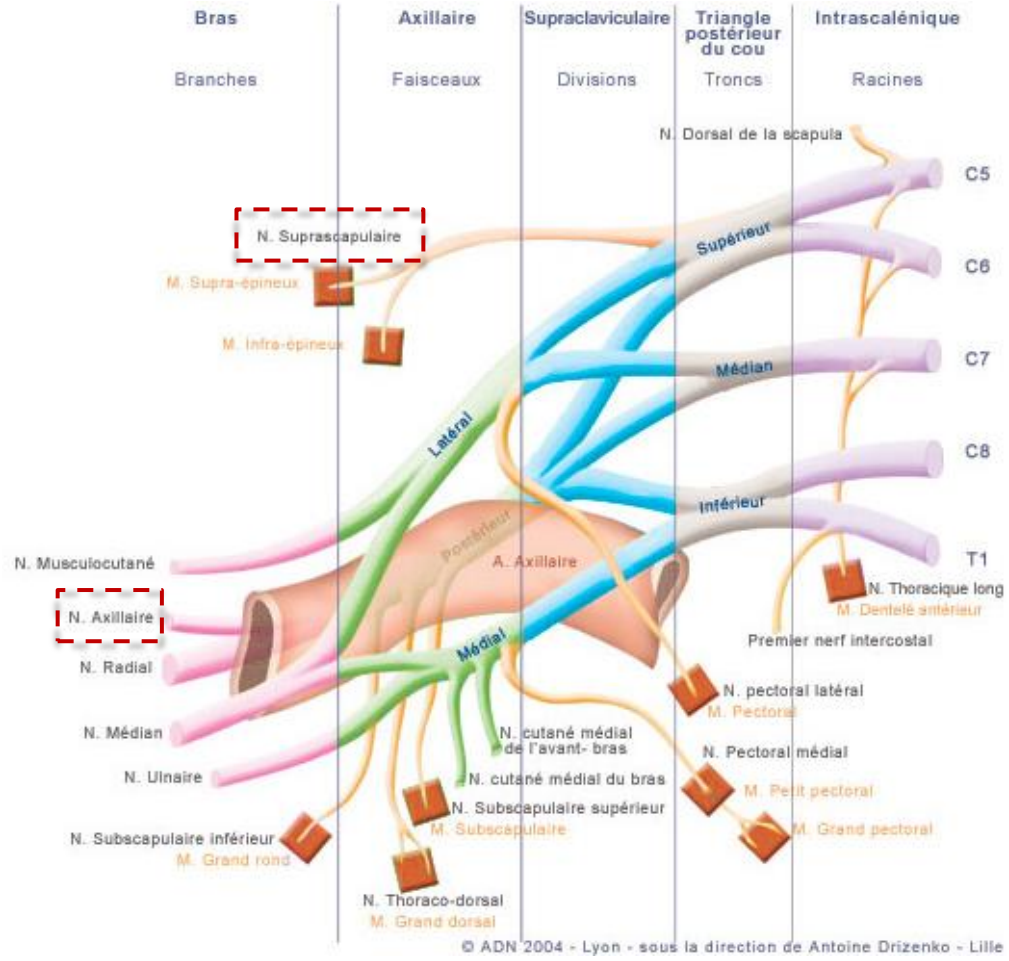
- *Nerf subscapulaire*
- *Nerf axillaire*

← **Fx Post**

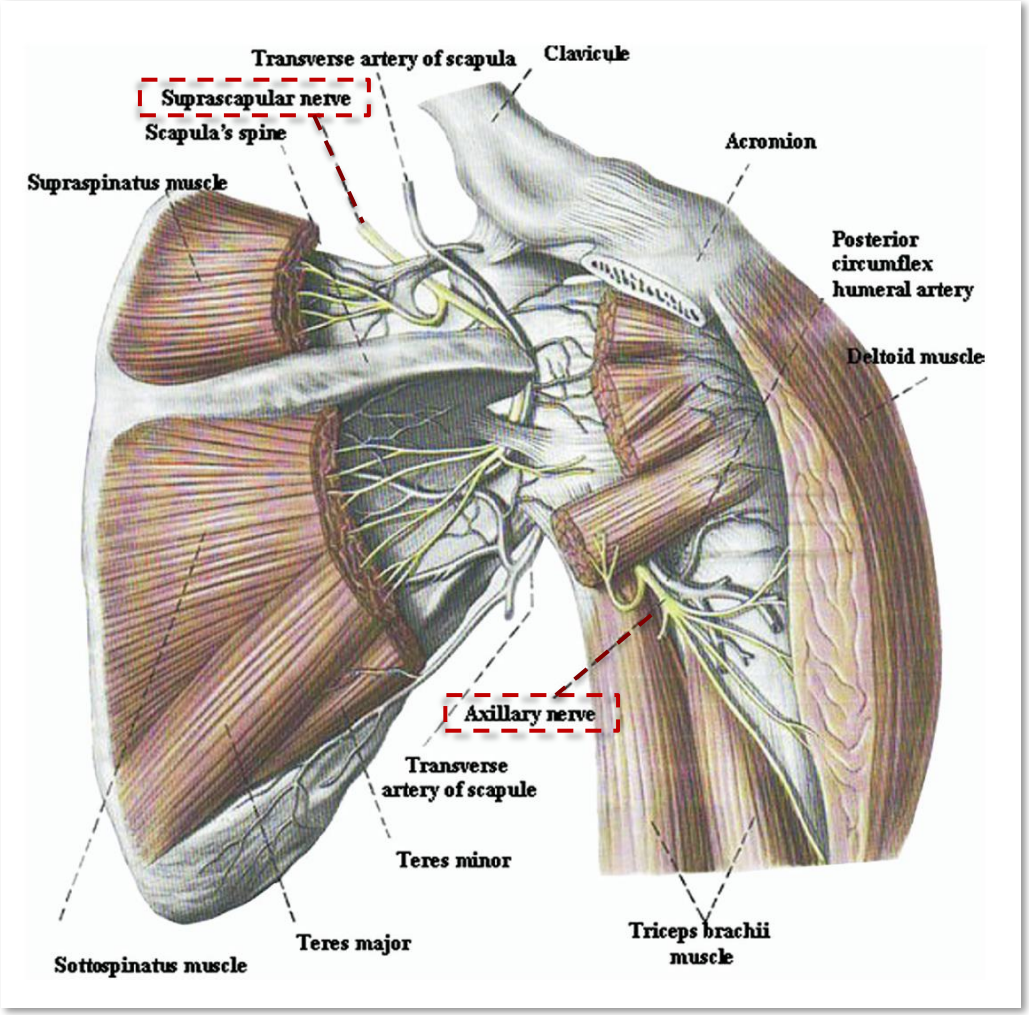
- *Nerf pectoral latéral* ← **Fx Lat**

Face postérieure épaule:

- *Nerf suprascapulaire* ← **Tronc Sup**
- *Nerf axillaire* ← **Fx Post**



Bloc nerfs SS-AX



G Checcucci, Arthroscopy 2008

Bloc nerfs SS-AX

A Comparison of Combined Suprascapular and Axillary Nerve Blocks to Interscalene Nerve Block for Analgesia in Arthroscopic Shoulder Surgery

An Equivalence Study

S Dhir, Reg Anesth pain Med 2016

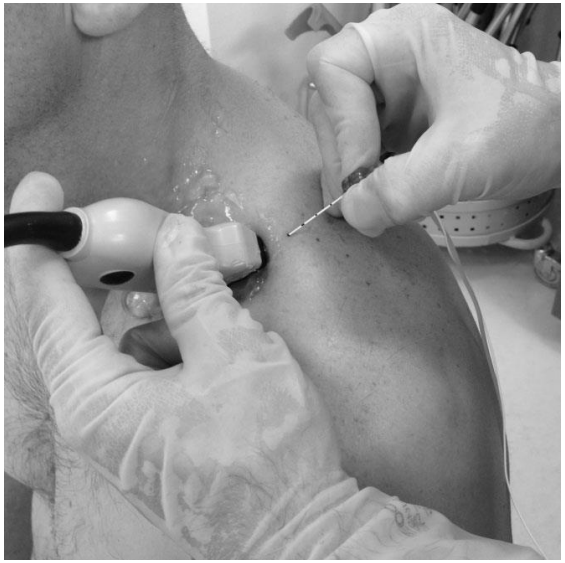
Anterior Suprascapular Nerve Block Versus Interscalene Brachial Plexus Block for Shoulder Surgery in the Outpatient Setting

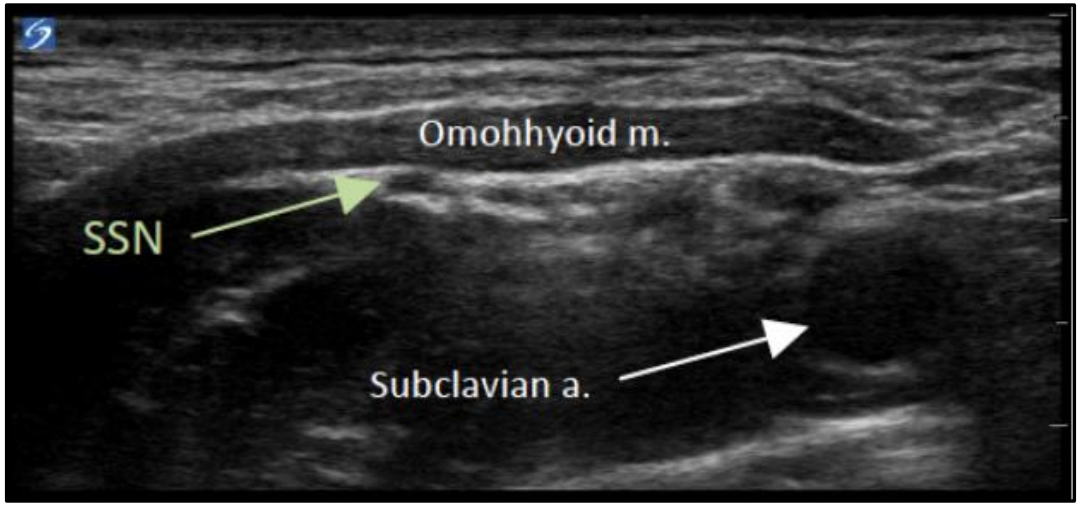
A Randomized Controlled Patient- and Assessor-Blinded Trial

M. Wiegel, Reg Anesth pain Med 2017

Nerf Supra Scapulaire

[Voie Antérieure]



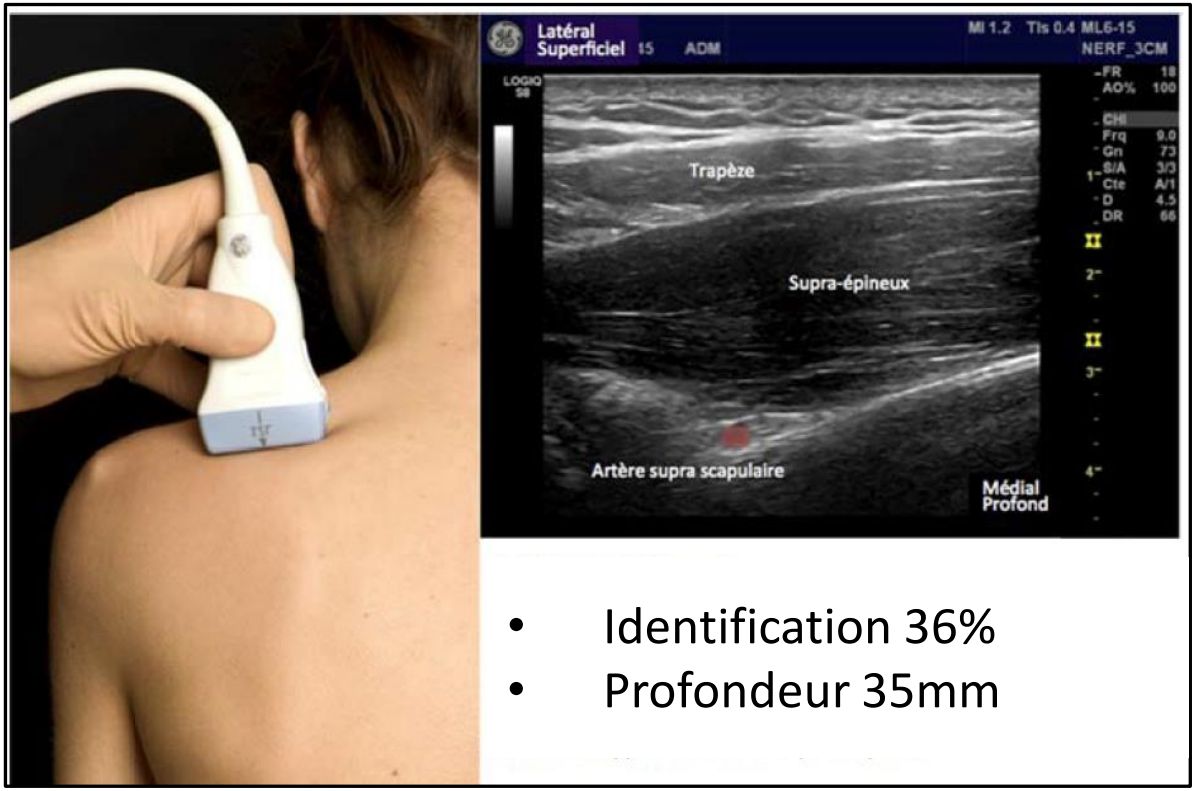


- Identification 81%
- Profondeur 8 [6-9] mm
- Distance NSS – PB: 9 [4-18] mm

A Siegenthaler, Reg Anesth pain Med 2012
C Rothe, Acta Anaesthesiol Scand 2014

Nerf Supra Scapulaire

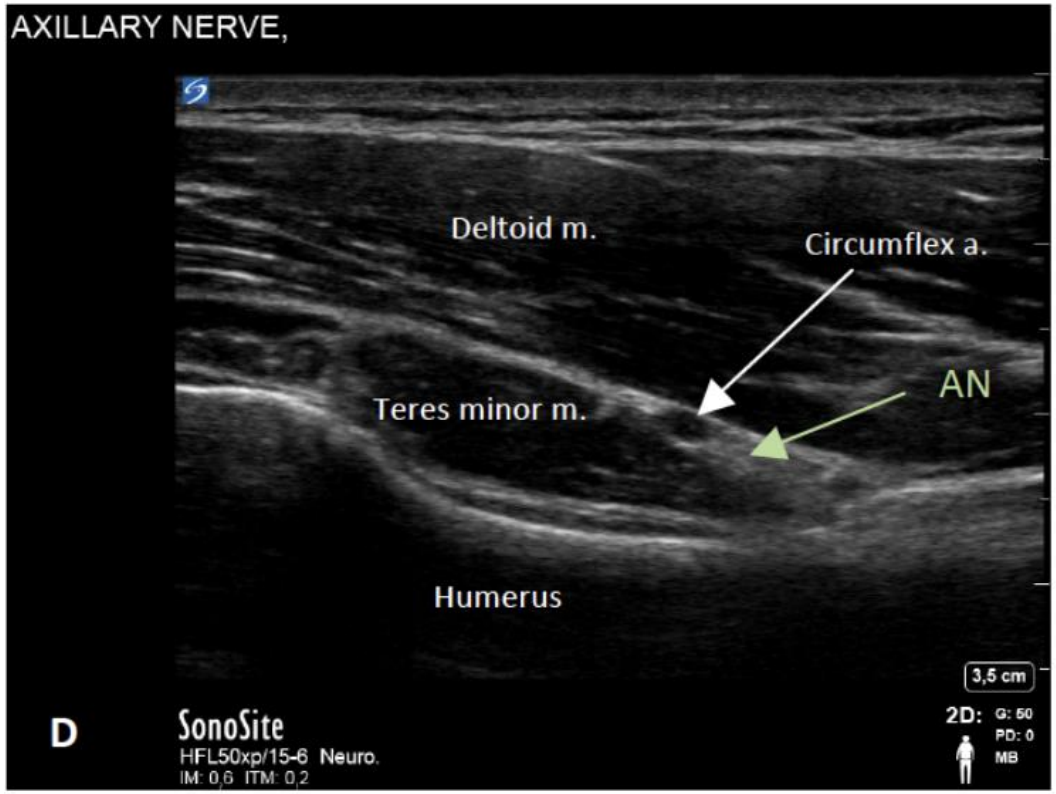
[Voie Postérieure]



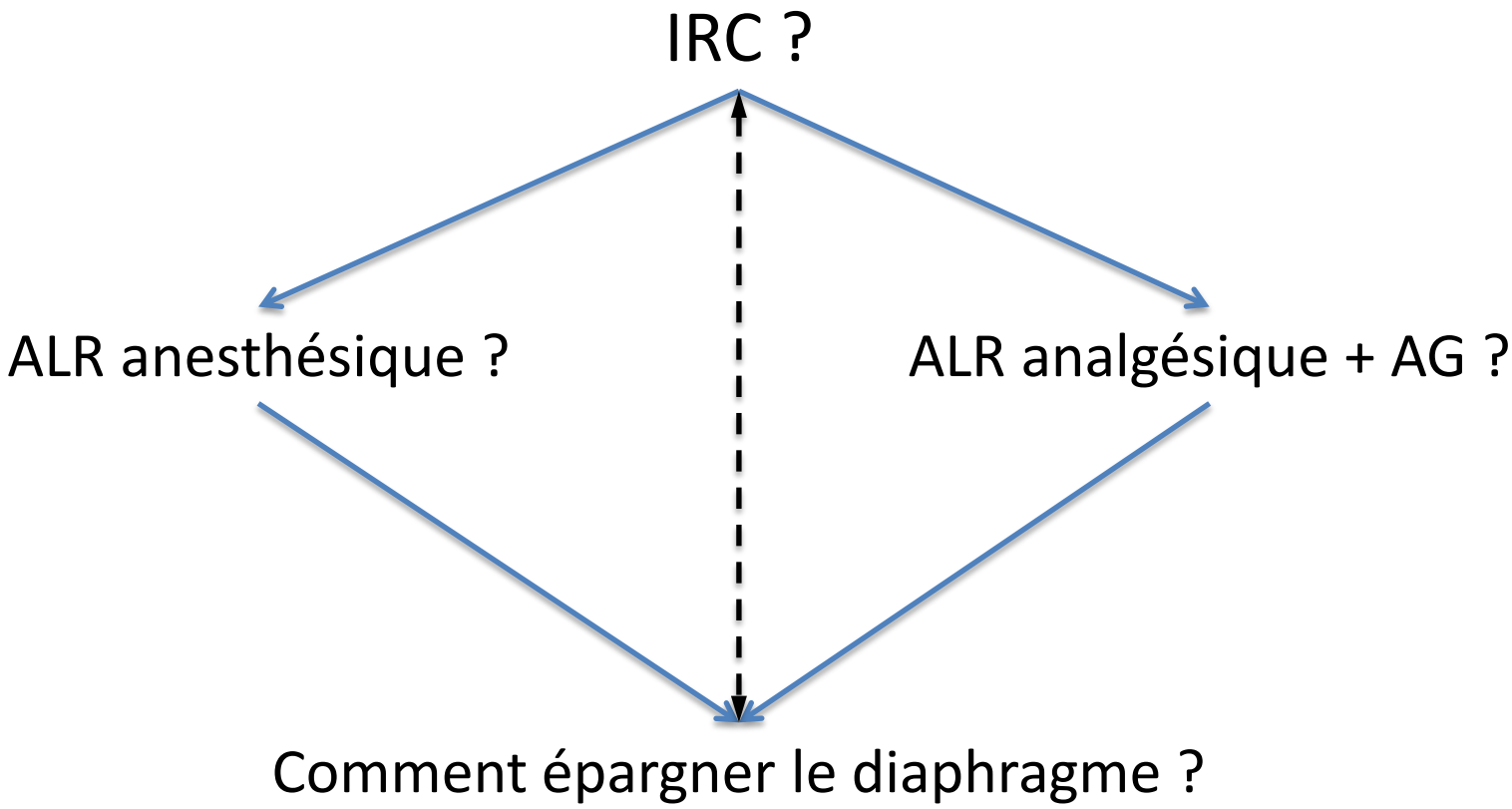
- Identification 36%
- Profondeur 35mm

A Siegenthaler, Reg Anesth pain Med 2012

Nerf Axillaire



F Ferré, Anesth Analg 2017


IRC ?
ALR anesthésique ?
ALR analgésique + AG ?
Comment épargner le diaphragme ?

Regional Anesthesia With Noninvasive Ventilation for Shoulder Surgery in a Patient With Severe Chronic Obstructive Pulmonary Disease: A Case Report

F Ferré, Anesth Analg 2017

Conclusions

- ALR anesthésique: Bloc PB + PCS
  - BIS + PCS
  - BSC + PCS
  - BIC + NSS + PCS
- ALR analgésique: Bloc PB ou SSAX (pour chirurgie mineure…)
- IRC:
  - Bloc épargnant diaphragme ?
  - SSAX ++
- Monitorage US PhD

Diaphragm-Sparing Nerve Blocks for Shoulder Surgery

BIS:

- Faible volume (5 mL)
- Diluer concentration AL (Ropivacaïne 0,1%)
- Injection extra fascia latérale (4 mm)
- Bloc racine C7

BSC: Corner Pocket

BIC

SSAX ± PB AL courte durée d'action

De Q.H. Tran,Reg Anesth Pain Med 2017