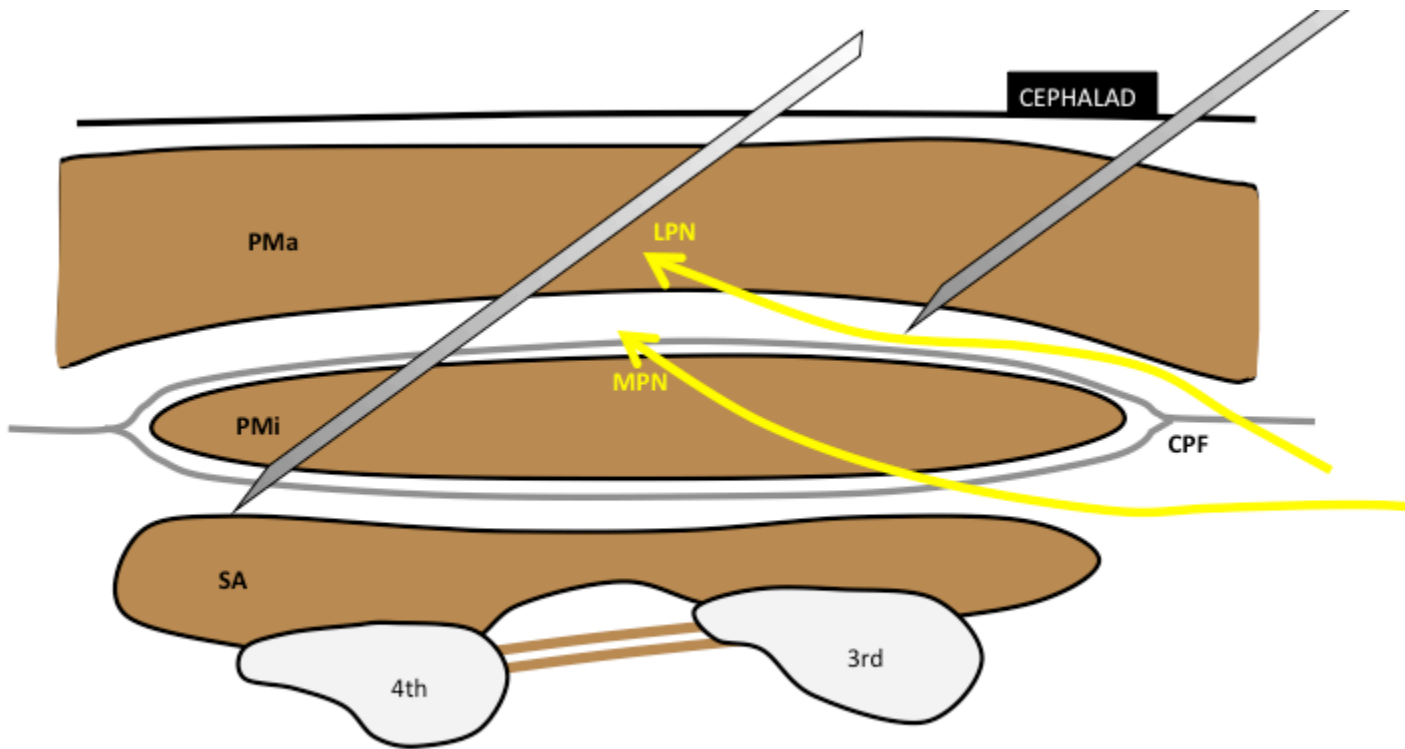


# PECTORAL BLOCKS I AND II

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## KEY STRUCTURES TO IMAGE

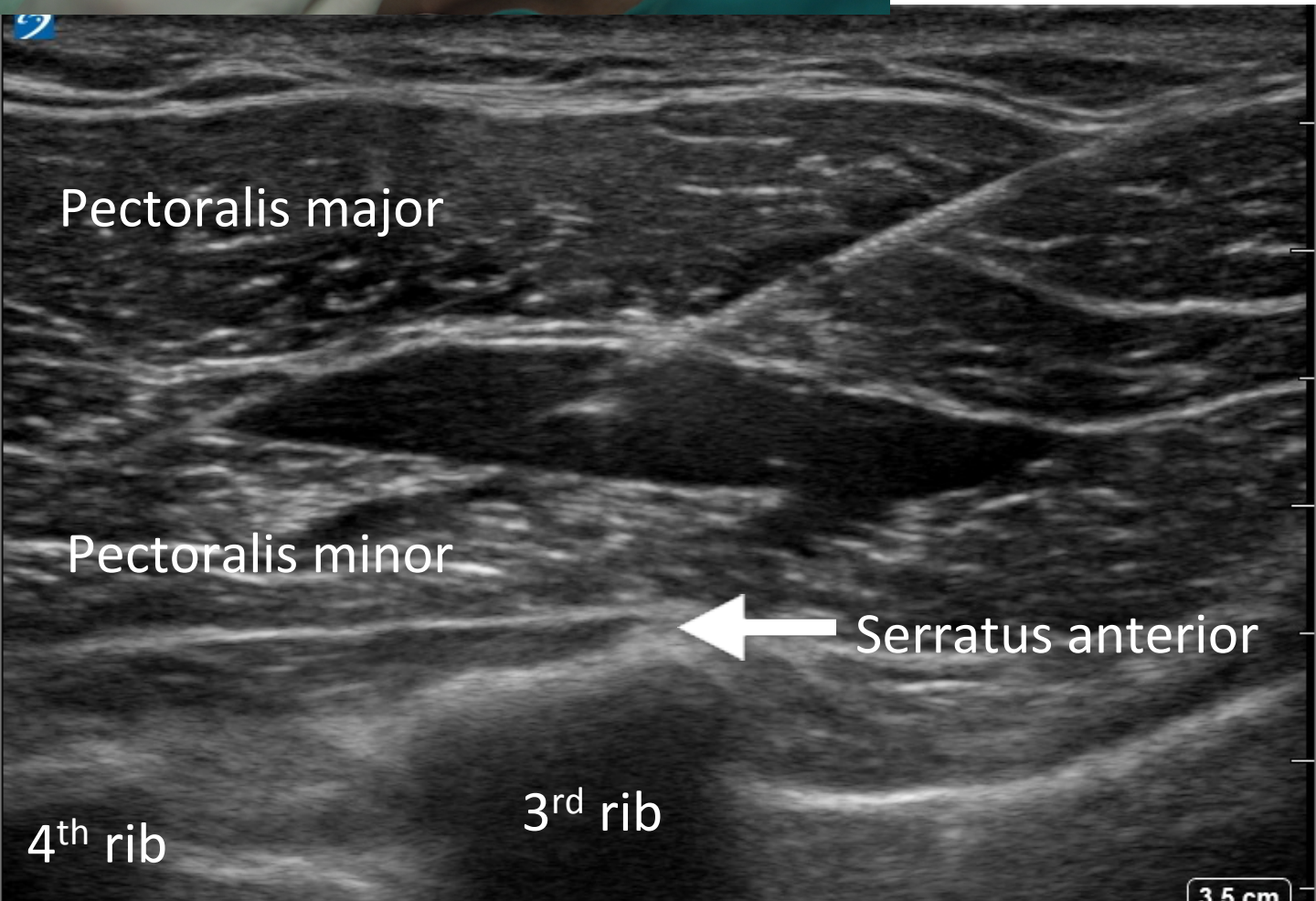
- PECTORALIS MAJOR MUSCLE (PMa)
- PECTORALIS MINOR MUSCLE (PMi)
- 2<sup>ND</sup> TO 5<sup>TH</sup> RIBS (3<sup>rd</sup> and 4<sup>th</sup> shown in above diagram)
- PLEURA
- SERRATUS ANTERIOR MUSCLE (SA)
- CLAVIPECTORAL FASCIA
- AXILLARY ARTERY AND VEIN
- PECTORAL BRANCH OF THORACOACROMIAL ARTERY (has close relation to the lateral pectoral nerve)

LPN, lateral pectoral nerve; MPN, medial pectoral nerve

# PECs I blockade – lateral and medial pectoral nerves



PECs I: aim to inject over 3<sup>rd</sup> rib between pectoralis major and minor muscles



Pectoralis major

Pectoralis minor

← Serratus anterior

4<sup>th</sup> rib

3<sup>rd</sup> rib

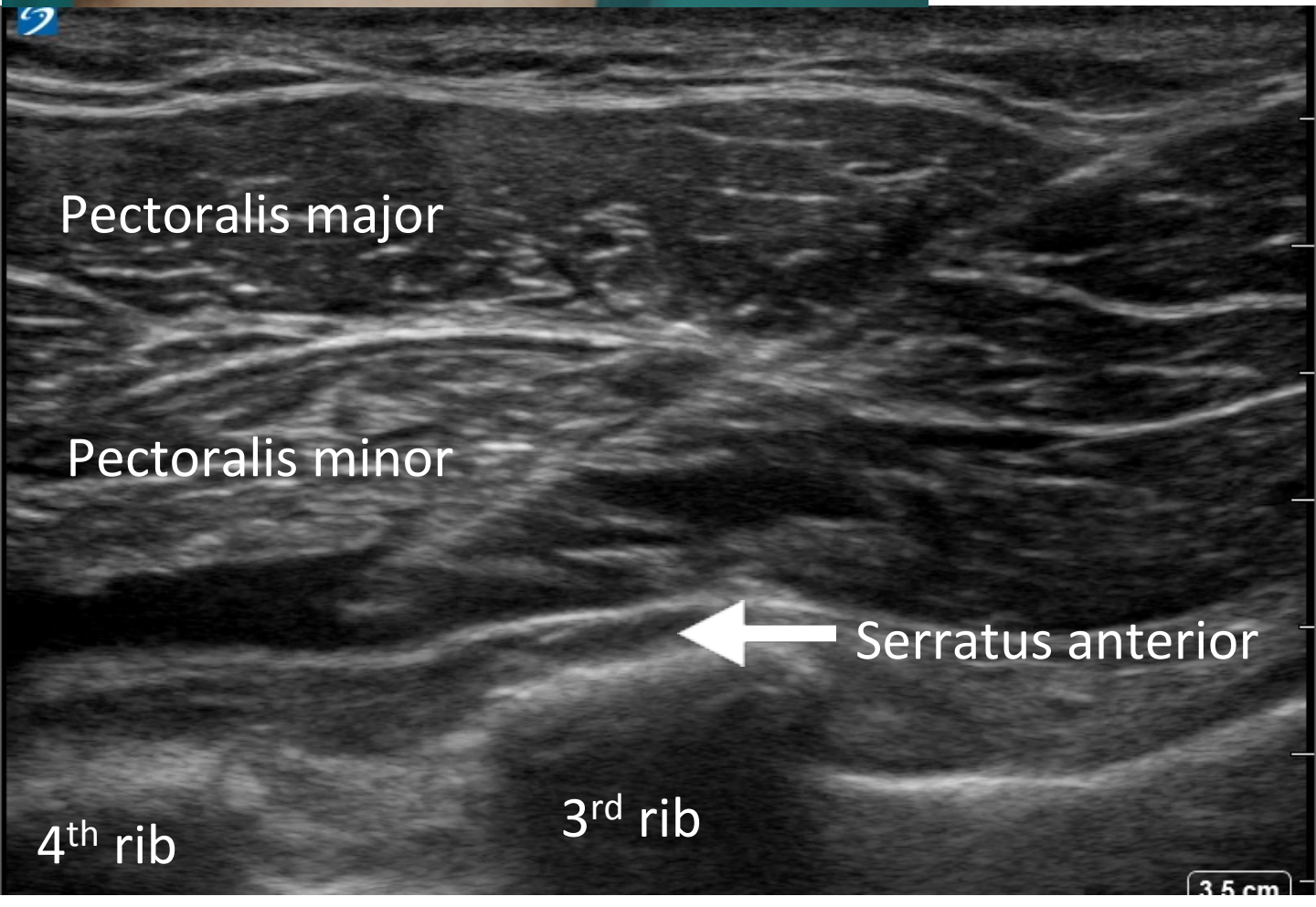
3.5 cm



# PECs II blockade – intercostal nerves



PECs II: aim to inject over 4th rib between pectoralis minor and serratus muscles



## **BACKGROUND**

PECs I and II blocks were developed as a simpler alternative to paravertebral blockade for breast surgery. PECs I block will provide lateral and medial pectoral nerve blockade, blocking pectoralis major and minor muscles. PECs II block provides intercostal nerve block providing cutaneous anesthesia. Commonly, PECs I and II are performed together.

## **INDICATIONS**

- BREAST SURGERY

## **SUGGESTED LOCAL ANESTHETIC DOSAGES**

- PECs I block 0.2 mL/kg of 0.375 - 0.45 %ropivacaine
- PECs II block 0.25 mL/kg of 0.375 - 0.45% ropivacaine
- Alternatively 10 and 20 mL at PECs I and II respectively

## **TRANSDUCER**

- High or intermediate frequency linear transducer. Curvilinear transducer in larger individuals.

**NEEDLE** 70 – 100 mm

**TIP** PECs II injection is superficial (or deep depending on preference) to serratus anterior, essentially same as serratus plane block, only that the latter is described as being performed more posterior, so that the injection plane is between serratus anterior and latissimus dorsi muscles. Regardless, the goal is the blockade of the lateral cutaneous branches of the intercostal nerves.