



## Interfascial Pec's Block Success or Intramuscular Injection? Magnetic Resonance Imaging (MRI) Explanation

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### Clinical Image

Interfascial blocks of pectoral nerves ('pecs' blocks) are a novel technique that may be useful in multimodal analgesia during breast surgery. These blockades are easy to perform after localizing the US-landmarks and the anatomic limits (serratus anterior, pectoralis minor and major muscles) [1,2].

These Interfascial Plane Blocks (IPB) constitute part of multimodal analgesia in anterior chest-wall surgeries, reduce opioid needings and improve postoperative pain control and patient satisfaction [3]. Several studies have demonstrated the effectiveness of these blocks, but with heterogeneous results [4].

Some studies have described successful signs of the block performance: a hypoechoic, elliptical lens, and "double V" shape between the pectoralis muscles, because of the separation of the two fasciae [5].

Intramuscular injection is one cause of failure, avoiding the local anesthetic spread between pectoralis muscles (between deep pectoralis and clavipectoral fasciae) as it is shown in Figure 1.

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Received Date: 31 Jul 2023

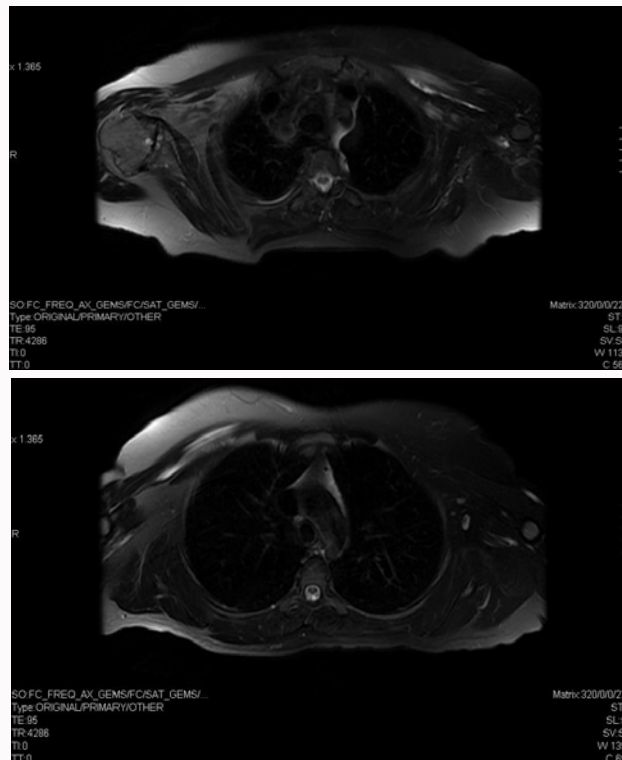
Accepted Date: 11 Aug 2023

Published Date: 16 Aug 2023

#### Citation:

Perez Herrero MA, Morales KE,  
Galluccio F, Perez MF. Interfascial  
Pec's Block Success or Intramuscular  
Injection? Magnetic Resonance Imaging  
(MRI) Explanation. *Clin Case Rep Int.*  
2023; 7: 1598.

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**Figure 1:** a) Thoracic Axial RMI sequence in T2 FSAT saturation with coronal reconstructions after pec's block performed. It could be seen the local anesthetic (hyperintensive image) between the pectoralis muscles reaching the axillary region. b) The contrast was introduced into the pectoralis major muscle, splitting the muscle fibers without reaching the axillary region and so that, the block fails in the axilla compartment.

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