Ultrasound Guided and Cadaveric Studies in Dry Needling

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POSITIVE aspects of ULTRASOUND GUIDED
Visualization of the TRIGGER POINT

Can the Needle be seen with Ultrasound?

Visualization of the LOCAL TWITCH RESPONSE
TrP-DN Safety Model

Contraindications

Indications for TrP-DN

Safety

Complications

Main Issues
- Bruising
- Haematoma
- Nerve Injury
- Infection
- Pneumothorax

TrP-DN is not a Standalone Therapy
Multimodal Plan
Individualised for Specific Patient

TrP-DN is
1. Skill based
2. Knowledge Based
3. Clinical Reasoning Based

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Sternocleidomastoid - Ultrasound Guide Dry Needling

Anterior - Middle Scalene Muscles

Scalene / Braquial Plexus - Ultrasound Guide

David G. Simons, MD, Janet G. Travell, MD & Lois Statham Simons "Myofascial Pain & Dysfunction - The Trigger Point Manual", Volume 1, Copyright 1999

http://catedradefisioterapia-tmps.es
**Cadaveric Validation of Dry Needle Placement in the Lateral Pterygoid Muscle**

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**Abstract**

Objective: The aim of this anatomic study was to determine if a needle is able to reach the lateral pterygoid muscle during the application of dry needling technique.

Methods: A dry needle approach using 2 needles of 20 to 80 mm in length, one inserted over the zygomatic process posterior to the zygomatic arch (for the superior head) and the other inserted below the zygomatic process between the mandibular condyle and the coronoid process (for the inferior head), was proposed. A progressive dissection into 3 stages was conducted into 2 heads of fresh male cadavers. First, dry needling of the lateral pterygoid muscle was applied on the cadaver. Second, a block dissection containing the lateral pterygoid muscle was harvested. Finally, the nareus of the mandible was sectioned by osteotomy to visualize the lateral pterygoid muscle with the needle placements.

Results: With the needles inserted into the cadaver, the block dissection revealed that the superior needle reached the superior (glenoid) head of the lateral pterygoid muscle and the inferior needle reached the inferior (pterygoid) head of the muscle. At the final stage of the dissection, when the nareus of the mandible was sectioned by ostectomy, it was revealed that the superior needle entered into the belly of the superior head of the lateral pterygoid muscle.

Conclusions: This anatomic study supports that dry needling technique for the lateral pterygoid muscle can be properly conducted with the proposed approach. (J Manipulative Physiol Ther 2015;38:149-150)

Key Indexing Terms: Pterygoid Muscles; Temporomandibular Joint Dysfunction Syndrome; Dry Needling
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