

PERTINENT DRY NEEDLING CONSIDERATIONS FOR
MINIMIZING ADVERSE EFFECTS – PART ONEJohn S. Halle, PT, PhD, ECS¹Rob J. Halle, PT, DPT, OCS, CSCS²

ABSTRACT

Background: Dry needling is an evidence-based treatment technique that is accepted and used by physical therapists in the United States. This treatment approach focuses on releasing or inactivating muscular trigger points to decrease pain, reduce muscle tension, and assist patients with an accelerated return to active rehabilitation.

Issue: While commonly used, the technique has some patient risk and value of the treatment should be based on benefit compared to the potential risk. Adverse effects (AEs) with dry needling can be mild or severe, with overall incidence rates varying from zero to rates of approximately 10 percent. While mild AEs are the rule, any procedure that involves a needle insertion has the potential for an AE, with select regions and the underlying anatomy increasing the risk. Known significant AEs from small diameter needle insertion include pneumothorax, cardiac tamponade, hematoma, infection, central nervous system injury, and other complications.

Purpose/Objective: Underlying anatomy across individuals has variability, requiring an in-depth knowledge of anatomy prior to any needle placement. This commentary is an overview of pertinent anatomy in the region of the thorax, with a 'part two' that addresses the abdomen, pelvis, back, vasovagal response, informed consent and other pertinent issues. The purpose of the commentary is to minimize the risk of a dry needling AE.

Conclusions/Implications: Dry needling is an effective adjunct treatment procedure that is within the recognized scope of physical therapy practice. Physical therapy education and training provides practitioners with the anatomy, basic sciences, and clinical foundation to use this intervention safely and effectively. A safe and evidenced-based implementation of the procedure is based on a thorough understanding of the underlying anatomy and the potential risks, with risks coordinated with patients via informed consent.

Levels of Evidence: Level 5

Key Words: Adverse effect, anatomy, dry needling, informed consent, pneumothorax

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