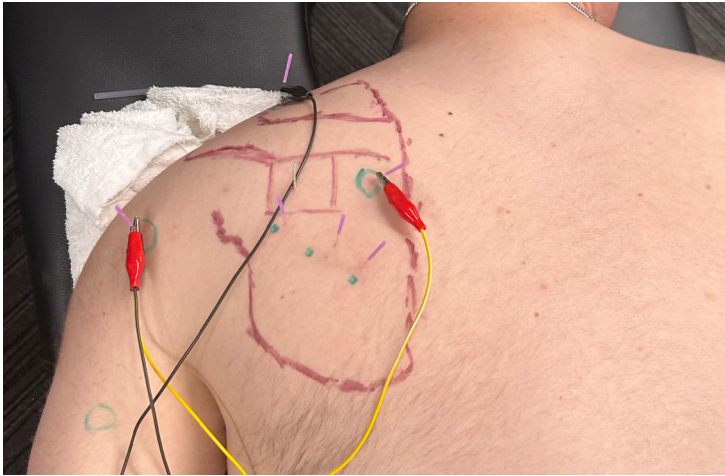


Using Dry Needling in Baseball: A Comprehensive Guide

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Introduction

Dry needling is a popular therapeutic technique used by sports medicine professionals at all levels of sport to relieve pain, improve muscle function and accelerate recovery in athletes. Baseball players, who often experience muscle tightness, repetitive stress injuries and biomechanical imbalances, can benefit significantly from dry needling. How can we best use this tool in the athletic training room, during the season? Let's discuss.

What is Dry Needling?

Dry needling involves inserting thin, sterile monofilament needles into myofascial trigger points, tight muscle bands, osteal and peri-neural areas or areas of neuromuscular dysfunction. It is based on western anatomical and physiological principles with the primary goal to release muscle tightness, reduce pain and improve function. There are three things we must always consider when dry needling: the local effects, the segmental effects and the systemic effects. These three considerations will drive our point selection, our treatment duration and treatment frequency.

Where to use Dry Needling?

Dry needling can be used with a variety of pathologies, including muscle strains, ligament sprains and muscle tightness. Depending on the practitioners' level of education, many of the conditions we commonly see in baseball can be needled safely. Whether we are talking about rotator cuff pathology, lat strains, flexor

tendon strains at the elbow or low back pain, many of these ailments can be helped with local needling. Any time we create a local lesion with the needle, we cause a healing response that improves blood flow to the area and stimulates angiogenesis, myogenesis and neurogenesis. The body releases endogenous opioids and monoamines at both the spinal cord and supraspinal levels to help with pain and inflammation segmentally and systemically.

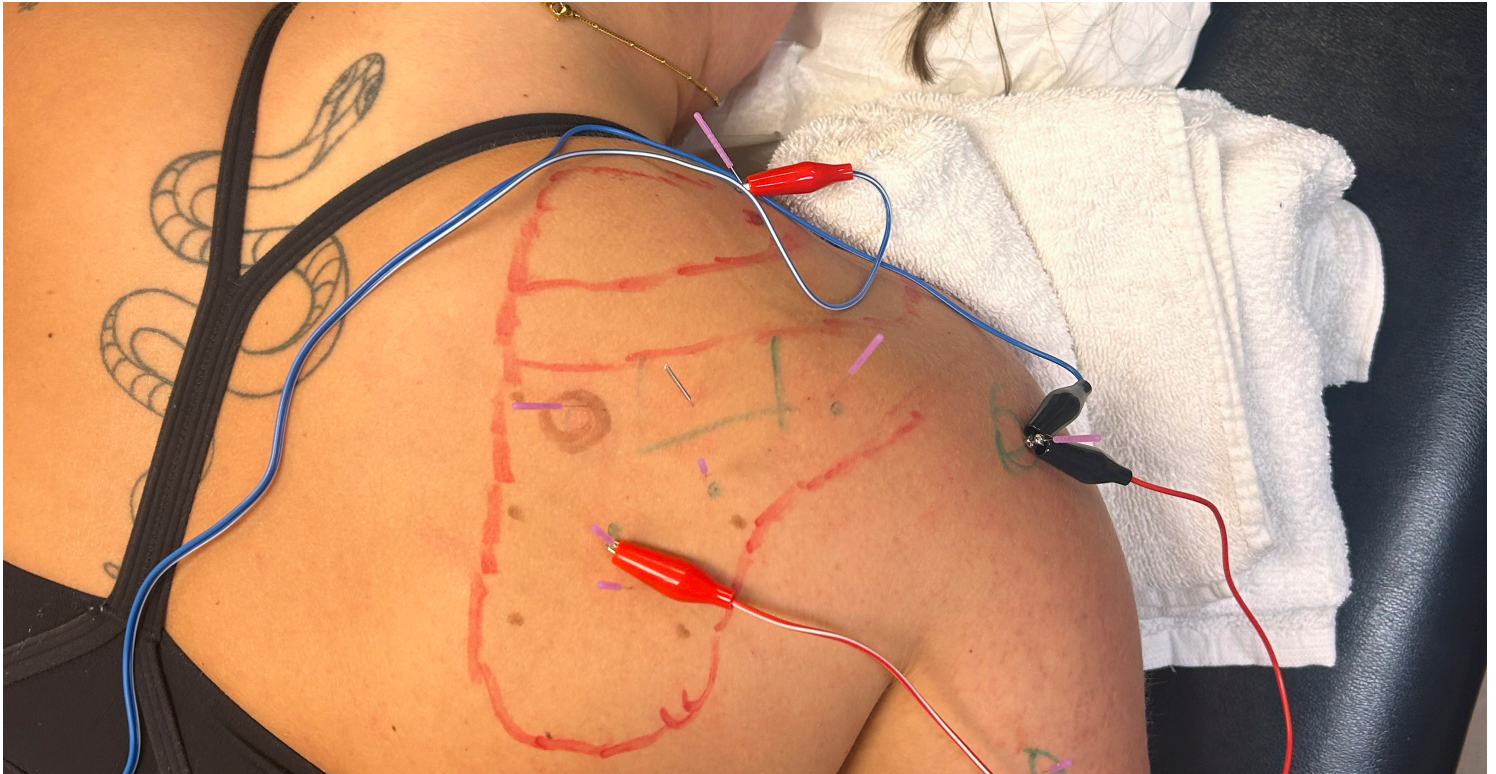
So, with this knowledge, if we can safely needle locally, we will. If, let's say, the patient has had surgery on their elbow and we don't want to needle locally, we could needle the opposite elbow, and still stimulate the segmental and systemic responses. But let's say the person has CRPS, or a significant emotional attachment to their pain and we don't want to stimulate the spinal segment, we could needle in their legs. We would forgo the local and segmental responses, but we could still stimulate systemic responses.

When to Use Dry Needling in Baseball

When we use needles is often dependent on the patient and their typical responses to needling. I personally have used dry needling in between innings if appropriate. The technique we select, the location of the needle, the patient and the actual location of treatment (in home, ATR, dugout, etc.) all impact our decision making here.

Pre-Game Preparation: Applied within hours before competition to optimize muscle function and mobility. An in-and-out piston-like technique can "release" last-minute trigger points or areas of tightness the player is feeling. This pistoning technique will also spike the sympathetic nervous system, which is a welcome autonomic stimulus pre-game.

Post-Game Recovery: Helps reduce soreness and accelerate muscle recovery after intense play. Techniques here would include leaving the needle in situ for up to 20 minutes. Specific point selection, more superficial insertion and leaving the needles in to sit with minimal to no needle manipulation will help the patient tap into the parasympathetic nervous system, allowing them to recover and potentially enhance sleep.



Specific Injury Rehabilitation: Used as part of a rehab program to address specific injuries and restore function, local needling techniques can be used every 48-72 hours to enhance healing, decrease pain and improve loading tolerance.

Safety Considerations and Best Practices

All needling education is not created equal, and all techniques are not the same. It is best to stick to techniques and areas of the body that you have been well educated in. Each area of the body brings specific safety considerations, and extrapolating what is learned in one area of the body to another is not recommended. Formal education is ideal before using any specific technique on a patient.

Ensuring a clean environment is a must. “Lotions and potions” baseball players like to use must be removed. Also, having time to explain to the player what you are doing and why you want to do it is key. Having clear communication as to what is going to happen and what is expected to occur afterward is key to a successful treatment. Mild soreness is normal, but players should report excessive pain, bruising or unusual symptoms to their clinician.

Finally, dry needling should complement, not replace, therapy, stretching and strength training. The point is not to stick needles into people. The point is to create a physiological healing response that allows our patients to load and move better.

Conclusion

Dry needling is a valuable tool for baseball players, helping to alleviate pain, enhance performance and accelerate recovery. When used appropriately by trained professionals, it can be an integral part of a comprehensive sports medicine strategy. By addressing muscular imbalances, reducing inflammation and promoting optimal movement, dry needling allows baseball players to perform at their best and stay injury-free throughout the season.



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