

Effects of Phonophoresis on Supraspinatus Tendinitis in Abducted Position and Adducted and Internally Rotated Position of College Men

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Abstract

The purpose of the study was to analyse the effects of phonophoresis on supraspinatus tendinitis in abducted position and adducted and internally rotated position of college men. Ten college sports men with clinically diagnosed supraspinatus tendinitis in acute state were selected for this study. Their age was between 20 – 25 years and all of them were males. The subjects were randomized into two treatment groups of five each. One of the groups (G1) underwent phonophoresis treatment in abducted position and the other one (G2) underwent phonophoresis treatment in adducted and internally rotated position. Pain due to acute supraspinatus tendinitis was found to be relieved earlier by the phonophoresis in adducted & internally rotated than phonophoresis in abducted position.

Key Words: Phonophoresis, Supraspinatus Tendinitis, Abduction, Adduction, internal rotation

Introduction

Physiotherapy in the sports field has great potential to play a vital role in the prevention of injury, treatment, training and developing a particular skill for an athlete in the specialized field. Proper diagnosis, choosing the appropriate modalities and applying the perfect methods are the pillars of the successful treatment. So choosing the appropriate modality is the key to produce good results.

One of the most common overuse injuries that occur in the upper limb is supraspinatus tendinitis (*Frank, 1986; Ciullo, 1992; David, 1992; Kerstina et al, 1994; Wilder & Sethi, 2004*). Supraspinatus tendon plays a vital role in all sports and games. Supraspinatus tendinitis is caused by repeated stress or over use injury. In severe cases supraspinatus injury badly hits sports activities and affects the sports men career.

Phonophoresis has been suggested by early studies to enhance the absorption of analgesics and anti-inflammatory agents (*Bare et al, 1996; Kassar et al, 1996*). *Singh et al (2002)* compared the efficacy of iontophoresis and phonophoresis with diclofenac sodium (1%) in the treatment of shin splints. Evaluation of results showed that both iontophoresis and phonophoresis were effective in introducing the medication deep into the periosteum and adjacent musculo-tendinous structures. More recent, better-controlled studies have consistently failed to demonstrate that phonophoresis increases the rate of absorption or the extent of absorption over placebo. Several reviews stated that more research is needed to ascertain optimal techniques and conditions for safe and efficacious utilization of physical modalities including phonophoresis; and there is a need for additional research to establish clinical effectiveness and determine optimal treatment parameters