ABSTRACT

Background and Purpose: Secondary impingement syndrome (SIS) is a common complaint in the sporting population particularly among athletes engaging in overhead activities. While symptoms may be present at the shoulder with patients complaining of SIS, spinal alignment or dysfunction can influence scapular positioning and overall shoulder girdle function. As an adjunct therapy to traditional interventions for SIS, thoracic high-velocity low-amplitude (HVLA) thrusts have been utilized and correlated with patient reported decreases in pain. Mulligan Concept (MC) thoracic sustained natural apophyseal glides (SNAGs) are an emerging treatment intervention utilized to treat patients with shoulder pain and dysfunction as the evidence supporting an interdependent relationship between the thoracic spine and the shoulder is growing. The purpose of this case series was to investigate the effects of one MC thoracic SNAG treatment session on subjects classified with SIS, while utilizing a classification-based treatment protocol.

Case Descriptions: Seven subjects classified with SIS were treated utilizing a MC thoracic SNAG. The Numeric Rating Scale (NRS) was administered at initial evaluation, immediately following intervention, and at the 48-h follow-up to identify patient-reported pain during range of motion, manual strength testing, and special tests of the shoulder. Investigators collected the Shoulder Pain and Disability Index (SPADI) at initial evaluation and the 48-h follow-up to identify patient-reported dysfunction.

Outcomes: Following one MC thoracic SNAG treatment (3 sets of 10 repetitions), minimal clinically important differences (MCIDs) were reported utilizing the NRS. A decrease in pain during active shoulder abduction (ABD) was detected immediately post-treatment, and the NRS change scores for resisted external rotation (RER) and active ABD were statistically different and clinically important at the 48-h follow-up.

Discussion: Based on the results of this case series, thoracic SNAGs may influence short-term pain levels and shoulder mobility in the included subjects with SIS and support the concept of regional interdependence (RI) between the thoracic spine and glenohumeral joint. Continued exploration into the proposed benefits of the MC thoracic SNAG treatment as an adjunct therapy when treating patients complaining of SIS is warranted.

Key Words: Impingement syndrome, regional interdependence, intervention

Level of Evidence: 4 (Case Series)