71.19 Steroid Injections for Core Muscle Injuries in High-Performance Athletes

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Introduction:

In every season of every sport many different types of injuries occur in the musculoskeletal core. In the literature, core muscle injuries have gone by terms such as sports hernia, athletic pubalgia, Gilmore's groin, and pubic inguinal pain syndrome. Coaches, management, and trainers continue to search for optimal temporizing solutions for these injuries. A number of treatments are currently in use, including prolotherapy and injections of platelet-rich plasma, bovine cartilage, and corticosteroids. However, there is little data available in regards to their effectiveness. We reviewed our experience with corticosteroid injection in highly competitive athletes over the course of an athletic season.

Methods:

We selected patients who we were able to follow closely over a complete season during the past two years. The information was attained through direct patient interviews and from our database.The patients underwent clinical evaluation, MRI and plain x-ray imaging of the pelvis, and other diagnostic tests as indicated. Full discussion occurred among the various involved parties (players, agents, trainers, etc) and steroid injection was selected as a minimum intervention.

We injected up to 400mg of triamcinolone acetonide mixed with bupivacaine directly into sites of elicitable pain and injury (sites of muscle tears and separation of the pubic fibrocartilage plate). We did not perform direct symphyseal joint injections. It is our standard practice to put patients on indomethacin 25 mg three times daily with food for six weeks. Injections were complete upon elimination of pain with resistance testing. The patients returned to play within one day following injection, in accordance with our physical therapy protocols.

Outcome measures include: a performance score (players' assessment of their play following the injection, Table 1), days played after injection, and completion of season. We recognized that some patients were difficult to assess due to coaching/roster decisions and

considered them separately.

Results:

5 of 19 patients were considered non-assessable. One of the 5 was able to finish the season and the other 4 played for a mean of 27 days. The post-injection performance score for all non-assessable patients was 3.4 (range 3-4).

12 of the 14 (86%) assessable patients completed their seasons. One patient was still competing at the conclusion of this study. The remaining 2 patients that did not complete their season played for a mean of 37 days. The post-injection performance score for all assessable patients was 3.9 (range 3-5).

Conclusion:

Corticosteroid injection is a reasonable intervention to temporize a core muscle injury during a season, however performance scores are inferior to our experience following difinitive surgery.