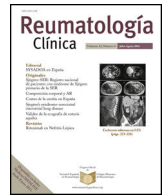




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Letter to the Editor

Hydric distension of shoulder capsulitis[☆]



La distensión hídrica en las capsulitis de hombro

Dear Editor,

Hydric distention of the shoulder may be an inexpensive, non-surgical, alternative treatment for a painful shoulder and has been suggested in cases of capsulitis and/or involvement of the rotator cuff.¹

Shoulder capsulitis causes pain and limitation in active and passive movements; it is a disease which is recognised as one of the most painful and frequent of the musculoskeletal system, with an estimated prevalence of between 2% and 5%.²

Common treatment options consist of physiotherapy, intra-articular injections and arthroscopic arthrolysis in prolonged cases.

Its physiopathology is not specifically known. This is an inflammatory process which develops adhesion and fibrosis.³ This fibrosis triggers a reduction of the capsular volume which may be corrected with the HD procedure.

HD of the glenohumeral joint is performed with a saline solution (20–90 ml), together with steroids and local anaesthesia, injected under ultrasonographic control. The mechanical effect by the HD of the glenohumeral capsule reduces the distress on the painful receptors⁴ and also obtains an anti-inflammatory effect from the applied steroids. The adverse effects of the method involve trauma of the ligaments, blood vessels and nerves, septic arthritis and rupture of the capsule.

We carried out a systematic search on Medline, found 2 recent meta-analysis^{5,6} and 7 randomised and comparative clinical trials; these trials differed in several aspects such as the volume of saline solution injected, and the injection-associated drugs, and the number of injections given, which complicated the comparison of findings.

The main objectives in several cases focused on the mere HD procedure, whilst others attempted to address the capsule rupture.

Buchbinder et al., in a 2008 Cochrane review concluded that there is “silver level” proof of the benefits of HD for pain and range of movement in the short term and with no significant differences to steroid injections or physiotherapy.⁷ In a meta-analysis of 2017 Wu et al. concluded that the efficacy of HD of the glenohumeral joint was similar to that of corticosteroid injections.⁵

In another meta-analysis of 2018 that included 7 trials, Saltychev et al.⁶ found that there was insignificant efficacy of HD both

in pain and mobility, concluding that the low benefit did not justify the procedure.

In a 2017 review where capsule rupture was sought Rymaruk and Peach concluded that this was a fast, non-surgical and cost-effective treatment which reduced pain and restored function, concluding that HD could be a first line treatment for a secondary care frozen shoulder, with capsule rupture being essential to achieve the benefit. This data has not been analysed in previous studies.¹

Conclusion

The review of the different trials and meta-analysis shows that there is no proven benefit to be had between HD compared with other modes of treatment. HD under ultrasonographic control is an alternative in cases of capsulitis which do not respond to standard treatment.

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Moreen Meißner, Cayetano Alegre de Miquel*

Servicio de Reumatología, Hospital Universitario Dexeus-Quirón,
Barcelona, Spain

* Corresponding author.

E-mail address: 11120cam@comb.cat (C. Alegre de Miquel).

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