



**NHS Birmingham and Solihull CCG
NHS Sandwell and West Birmingham CCG
NHS Dudley CCG
NHS Walsall CCG
NHS Wolverhampton CCG**

Policy for the use of Image Guided High Volume Intra-Articular Injections

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The CCG policy has been reviewed and developed by the Treatment Policies Clinical Development Group in line with the groups guiding principles which are:

17. CCG Commissioners require clear evidence of clinical effectiveness before NHS resources are invested in the treatment;
18. CCG Commissioner require clear evidence of cost effectiveness before NHS resources are invested in the treatment;
19. The cost of the treatment for this patient and others within any anticipated cohort is a relevant factor;
20. CCG Commissioners will consider the extent to which the individual or patient group will gain a benefit from the treatment;
21. CCG Commissioners will balance the needs of each individual against the benefit which could be gained by alternative investment possibilities to meet the needs of the community
22. CCG Commissioners will consider all relevant national standards and take into account all proper and authoritative guidance;
23. Where a treatment is approved CCG Commissioners will respect patient choice as to where a treatment is delivered; AND
24. All policy decisions are considered within the wider constraints of the CCG's legally responsibility to remain fiscally responsible.

Category: Not Routinely Commissioned

Joint Pain

Pain in the joints affects millions of people worldwide. The causes of joint pain are numerous. Joint pain can be related to osteoarthritis or inflammatory joint disorders such as rheumatoid arthritis and psoriatic arthritis. Joint pain can also be as a result of traumatic injury, joint surgery or crystal deposition in the joints such as gout or chondrocalcinosis. Other causes of joint pain include sports injuries, general sprains and strains, frozen or unstable shoulder, and bleeding into joint spaces caused by torn ligaments.

Depending on the individual, pain might be felt in the joint or in the muscles around the joint. Depending on the cause the pain may be diffuse and constant, occurring at rest or while moving. Despite the wide range of underlying conditions and symptoms, joint pain of different aetiology may share similar mechanisms, manifestations, and potential treatments.

Image Guided High Volume Intra-Articular Injections

Treatment of joint pain consists of both pharmacologic and non-pharmacologic modalities. First-line therapy generally includes analgesia and physiotherapy.

Hydrodilatation (HD) also known as arthrographic capsular distension or distension arthrography is a procedure where a high volume injection of saline solution and/or steroids or air is given into the joint. Dependent upon the contracted state of the joint capsule, hydrodilatation usually occurs with an injection of between 10ml and 55ml of normal saline.

The procedure is performed under imaging guidance, using fluoroscopy, ultrasound or Computed Tomography (CT). Hydrodilatation is felt to provide benefit via two mechanisms: manual stretching of the capsule and thus disruption of adhesions that might be limiting the movements of the glenohumeral joint and causing pain and disability which are characteristic of adhesive capsulitis; and the introduction of cortisone, which provides a potent anti-inflammatory effect and thus prevents further recurrence of adhesion.

Clinical Evidence Review

From the evidence reviewed, there is no clear benefit of treatment for joint pain with an image-guided high volume intraarticular injection.

Evidence from two systematic reviews of Randomised Controlled Trials (RCTs) comparing hydrodilatation with corticosteroids, and corticosteroid injection only, is conflicting. The systematic review (with meta-analysis) by Saltychev et al (2018) reported that hydrodilatation with corticosteroids has only a small, clinically insignificant effect for pain and Range Of Movement (ROM) (seven RCTs) when treating adhesive capsulitis. Conversely, Catapano et al (2018) reported that the intervention is likely to be effective. However, this conclusion was based on the results from two of five RCTs and three of five RCTs which reported improvements in pain scores and range of movement respectively. The evidence is therefore at best inconsistent. No long term results were reported. Both authors report that the included RCTs were of moderate quality.

Evidence from one small RCT suggests that arthrographic capsular release is associated with a higher Oxford Shoulder Score (OSS) than hydrodilatation at six months follow-up. It is not known for how long this effect is likely to be sustained (Gallacher 2018). In addition, the study may not have been sufficiently powered to show any meaningful differences. The pain scores were reported by the patients who were not blinded to their treatment, this could have introduced bias. It is also unclear whether the Range Of Movement assessors were blinded to the treatments.

Eligibility Criteria

Due to the limited quality of evidence of clinical effectiveness for image-guided high volume intra-articular joint injections, high volume injections are Not Routinely Commissioned.

This means **(for patients who DO NOT meet the above criteria)** the CCG will **only** fund the treatment if an Individual Funding Request (IFR) application proves exceptional clinical need and that is supported by the CCG.

Guidance

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6. Georgiannos D, Markopoulos G et al. Adhesive Capsulitis of the Shoulder. Is there Consensus Regarding the Treatment? A Comprehensive Review. *The open orthopaedics journal*. [Review]. 2017; 11:65-76.
7. Buchbinder R, Green S et al. Arthrographic distension for adhesive capsulitis (frozen shoulder). *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD007005.
8. Saltychev M, Laimi K et al. Effectiveness of Hydrodilatation in Adhesive Capsulitis of Shoulder: A Systematic Review and Meta-Analysis. *Scandinavian Journal of Surgery: SJS*. 2018:1457496918772367.
9. Catapano M, Mittal N et al. Hydrodilatation with Corticosteroid for the Treatment of Adhesive Capsulitis: A Systematic Review. *Pm & R*. [Review]. 2018; 10(6):623-35.
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