



AB260. The efficacy of bone marrow aspirate concentrate in treating hip osteoarthritis: a systematic review

John Patrick Scanlon, Richard Tyrrell, Brian Lenehan

Department of Orthopaedics, University Hospital Limerick, Limerick, Ireland

Background: The use intra-articular injection of bone marrow aspirate concentrate (BMAC) has emerged as a novel treatment in managing osteoarthritis of the hip. This is one of the few methods of delivering autologous stem cells and growth factors that is approved by the United States Food and Drug Administration (FDA). To our knowledge there is no systematic review regarding the outcomes of BMAC used for the treatment of osteoarthritis of the hip.

Methods: A systematic review was performed by two independent reviewers according to the Preferred Reporting Items for Systematic Reviews (PRISMA) guidelines. The MEDLINE, EMBASE, CINAHL and The Cochrane Library databases were searched from their inception

to September 25th 2019. The titles and abstracts were screened and full texts of potentially relevant studies were then reviewed. The references of all of the included studies were screened for additional articles that were not identified through our search strategy. Studies were included for further analysis with the agreement of both independent reviewers (JS, RT).

Results: Eight studies were considered. Of these, 5 were prospective studies, 2 were case series and 1 was a case report. None of them were randomised. All 8 studies reported good to excellent overall outcomes with the use of BMAC.

Conclusions: There is a growing interest in the use of BMAC and other biological alternatives for the treatment of hip osteoarthritis in recent times. The studies included in this systematic review reported varying degrees of beneficial results with the use of BMAC. Most articles present the use of BMAC as a safe procedure and report good results however there are no comparisons against alternatives.

Keywords: Bone marrow aspirate concentrate (BMAC); hip osteoarthritis; treatment

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