

Regenerative injection therapy with whole bone marrow aspirate for degenerative joint disease: a case series. Hauser RA1, Orlofsky A. *Clin Med Insights Arthritis Musculoskeletal Disord.* 2013 Sep 4;6:65-72.

Abstract

Regenerative therapeutic strategies for joint diseases usually employ either enriched concentrates of bone marrow-derived stem cells, chondrogenic preparations such as platelet-rich plasma, or irritant solutions such as hyperosmotic dextrose. In this case series, we describe our experience with a simple, cost-effective regenerative treatment using direct injection of unfractionated whole bone marrow (WBM) into osteoarthritic joints in combination with hyperosmotic dextrose. Seven patients with hip, knee or ankle osteoarthritis (OA) received two to seven treatments over a period of two to twelve months. Patient-reported assessments were collected in interviews and by questionnaire. All patients reported improvements with respect to pain, as well as gains in functionality and quality of life. Three patients, including two whose progress under other therapy had plateaued or reversed, achieved complete or near-complete symptomatic relief, and two additional patients achieved resumption of vigorous exercise. These preliminary findings suggest that OA treatment with WBM injection merits further investigation.