

**AMERICAN COLLEGE OF RHEUMATOLOGY
POSITION STATEMENT**

SUBJECT: Intra-Articular Hyaluronic Acid Injection in Osteoarthritis of the Knee

PRESENTED BY: Committee on Rheumatologic Care

FOR DISTRIBUTION TO: Members of the American College of Rheumatology
Medical Societies
Members of Congress
Centers for Medicare and Medicaid Services
Managed Care Organizations/Third-Party Carriers
Insurance Companies and Commissioners

POSITIONS

1. The American College of Rheumatology recommends the use of intra-articular hyaluronic acid injection for the treatment of osteoarthritis of the knee in adults, in accordance with the ACR 2012 OA guidelines.
2. Hyaluronic acid injection is clinically indicated for management of osteoarthritis in patients who are not good candidates or who do not respond to other treatment options.
3. The American College of Rheumatology supports patient access to appropriate therapies including hyaluronic acid injection.

BACKGROUND

The injection of hyaluronic acid (often termed viscosupplementation or HA injection) was introduced in Europe in the 1980's as a therapeutic option for patients with knee pain due to osteoarthritis. In 1997, the U.S. Food and Drug Administration approved the use of intra-articular hyaluronic acid products "for the treatment of pain in osteoarthritis (OA) of the knee in patients who have failed to respond adequately to conservative non-pharmacologic therapy and simple analgesics, e.g. acetaminophen."

When the American College of Rheumatology (ACR) developed its 2012 guidelines for management of knee, hand, and hip OA, it included HA injection in the list of evaluated therapies. In that paper, the ACR "conditionally recommended" the use of intra-articular HA injection in patients with knee OA who have not had an adequate response to non-pharmacologic modalities and full-dose acetaminophen (1).

HA injection offers several advantages over other treatment options. As a locally administered therapy, these products minimize the risk of systemic side effects and may even delay the need for total knee arthroplasty (2,3). In addition, many patients who are candidates for HA injection are older and have common age-associated comorbidities including heart disease, chronic kidney disease and/or hypertension which limit the utility of other options such as NSAIDs. Furthermore, older

patients are more susceptible to adverse reactions due to a number of analgesics (4). Even acetaminophen, the mainstay of treatment for pain in older adults, is commonly used in combination with other analgesics and can cause toxicity related to accidental overdose (5). None of these concerns is invoked with HA injection therapy. The ACR strongly advocates for autonomy in clinical decision making about each individual patient's therapeutic needs, taking into consideration that patient's values and preferences.

REFERENCES

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2. Neustadt DH. Intra-articular injections for osteoarthritis of the knee. *Cleveland Clinic Journal of Medicine* 2006; 73(10):897-911.
3. Migliore A, Bella A, Bisignani M, Calderaro M, De Amicis D, Logroscino G, et al. Total hip replacement rate in a cohort of patients affected by symptomatic hip osteoarthritis following intra-articular sodium hyaluronate (MW 1,500-2,000 kDa) ORTOBRIX study. *Clin Rheumatol*. 2012 Aug;31(8):1187-96.
4. The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. AGS updated Beers Criteria for potentially inappropriate medication use in older adults. *J Am Geriatr Soc* 2012; DOI: 10.1111/j.1532-5415.2012.03923.x.
5. Bolesta S, Haber SL. Hepatotoxicity associated with chronic acetaminophen administration in patients without risk factors. *Ann Pharmacother*. 2002; 36(2):331-3.