

## Hyaluronic Acid in Rheumatoid Arthritis: Some Facts

### To the Editor:

The article by Chou et al that was published in the August 2008 issue of the journal discusses some important aspects of intra-articular injection of hyaluronic acid in knee osteoarthritis.<sup>1</sup> The authors meticulously described the role of hyaluronic acid. It is interesting to mention that recent studies have shown that synthesis of hyaluronic acid requires glucosamine as one of its building blocks and proper administration of glucosamine can increase the production of hyaluronic acid.<sup>2</sup>

The authors cited all past references to prove the effective use of hyaluronic acid, and this should benefit any reader. Hyaluronic acid also plays an important role in the apoptosis of the chondrocyte. A past study showed that hyaluronic acid inhibited interleukin-1 $\beta$ -induced chondrocyte apoptosis.<sup>3</sup> The most important aspect from a treatment perspective is the fact that hyaluronic acid has been found to be safe, tolerable and cost-effective.<sup>4</sup> No serious side effects have been reported while administering hyaluronic acid.<sup>4</sup> The wider usage of hyaluronic acid also leads to less use of nonsteroidal anti-inflammatory drugs, which may be advantageous for patients.

Interestingly, 6 human hyaluronidase-related genes have been identified to date, and any mutations in any 1 of these genes may cause a deficiency in hyaluronidase 1 that can lead to a lysosomal storage disorder, mucopolysaccharidosis IX.<sup>5</sup> One wonders if administration of hyaluronic acid will always prove to be beneficial or if it may fail at times. Further studies are needed to explore the failure of hyaluronic acid in osteoarthritis.

The authors and the editor need to be congratulated for publishing on an important topic.

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