CORRESPONDENCE

Cartilage Repair and Joint Preservation: Medical and Surgical Treatment Options

by Prof. Dr. med. Henning Madry, Dr. med. Ulrich Wolfgang Grün,
Prof. Dr. med. Gunnar Knutsen in volume 40/2011

Experiences With Other Joints

The title of the article raises the expectation that the focus is on conservative and surgical measures in cartilage defects in human joints. However, on further reading it becomes obvious that the article is actually restricted to the knee joint—something that the reader is not told. The latest moment for readers to become aware of this state of affairs is when reading about imaging modalities for diagnostic evaluation: the X-ray in the Rosenberg view is a weight bearing imaging technique particularly for the knee joint. On reading further, one wonders whether what follows also focuses exclusively on the knee joint. Has anyone reported experiences with intra-articular injection of hyaluronic acid into the shoulder joint, for example? Have marrow-stimulating techniques been successfully used on other joints? Where are the explanations regarding joint-sparing surgical measures on the hip joint, for example, in treating femoroacetabular impingement? These questions remain unanswered, which is regrettable in such an interesting article.

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Dr. med. Achim Schröder

Klinik Münsterland, Bad Rothenfelde, schroeder@klinik-muensterland.de

Conflict of interest statement

The author declares that no conflict of interest exists.

In Reply:

In spite of concepts of causality, progressive cartilage destruction can so far not be stopped by means of medical drugs. Surgical-reconstructive approaches may delay the implantation of an endoprosthesis. Articular cartilage repair in the knee joint is the focus of clinical studies with high levels of evidence and guidelines, followed by the hip joint. In the face of the scarcity of evidence for other joints, the same conservative and medical therapeutic approaches apply there in principle.

Only very few high quality studies exist on the value of visco-supplementation for the treatment of osteoarthritis of the shoulder, as mentioned by Schröder.

A current review article includes this option, but the evidence is not satisfactory (evidence level IV), and randomized, double blinded studies are lacking (1). In the shoulder region, cortisone is usually injected into the gleno-humeral or acromio-clavicular joint, although the studies supporting such treatment are less conclusive.

In principle, marrow stimulation may be used in other joints, although the evidence is scarce. This applies primarily to the ankle. A recent review of the treatment of osteochondral defects of the talus reports a weighted success rate of 85% for marrow-stimulating techniques on the basis of 18 studies (388 patients) (2). Only few case reports exist for the hip joint.

The treatment of femoroacetabular impingement, which—owing to the deviations from the normal shape of the bony joint components—can, as a pre-osteoarthritic deformity, result in chronic stress on circumscribed areas of cartilage and subsequent hip osteoarthritis, could not be reflected in our manuscript because of the complexity of this subject. Several case reports exist, but only very few studies with higher evidence levels have been published. They report good clinical results after defining the indication correctly (3).

Data on other joints have thus far not shown with any degree of certainty whether these treatments inhibit the progression of osteoarthritis.

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Prof. Dr. med. Henning Madry

Lehrstuhl für Experimentelle Orthopädie und Arthroreforschung
Universität des Saarlandes, henning.madry@uks.eu

Dr. med. Ulrich Wolfgang Grün

Klinik für Orthopädie und Orthopädische Chirurgie
Universitätsklinikum des Saarlandes

Prof. Dr. med. Gunnar Knutsen

Klinik für Orthopädische Chirurgie
Universitätsklinik Nord-Norwegen, Universität Tromsø, Norwegen

Conflict of Interest Statement

Professor Madry is the principal investigator of Merck Serono's randomized, double blinded, placebo controlled, international, multicenter, clinical phase II study "AS902330 in Cartilage Injury Repair" of the intra-articular efficacy of FGF-18 in cartilage defects.

Dr Grün holds shares in Orthogenics.

Professor Knutsen declares that no conflict of interest exists.