Degenerative Changes Are Often Inconsequential

It is undoubtedly true/correct that degenerative joint changes are becoming more common as a result of our ageing society (1), but in everyday German usage, articular changes without inflammation should be differentiated from those accompanied by signs of inflammation—for instance arthrosis versus osteoarthritis. Pain on exertion or even when resting creates new realities in the setting of degenerative changes. And possibly associated limitations are what really accounts for the major importance of articular or spinal changes. Lumbar back pain takes the top position in the global burden of disease (2). As a matter of principle, the impact of pain should therefore be determined in addition to the classificatory (qualitative) diagnosis as the metric (quantitative) diagnosis. Furthermore, paying attention to the “impairment threshold” makes sense diagnostically as well as in terms of management, since the disability and suffering crucially determine patients’ everyday and professional way of life.

Degenerative changes, which in practice affect everyone with increasing age, are often inconsequential. Determining these changes by means of imaging has no or merely a slight positive correlation with joint pain or back pain (3). Many people can cope with occasional mild symptoms. They should not necessarily be described as “patients with chronic pain” nor be treated with invasive procedures. Obviously it is equally well known that surgery will have to be carried out immediately in certain (threatening) injuries, such as cauda equina syndrome, for example.

Radiosynoviorthesis in Activated Osteoarthritis

Radiosynoviorthesis (RSO) is an additional long established and safe intra-articular, local, nuclear medicine injection treatment. This therapeutic approach has been in use since the 1960s and is given for chronic inflammatory articular changes but also for osteoarthritis with accompanying inflammation (activated osteoarthritis). After injecting colloidal radionuclides that emit beta rays into the affected joint space, the radiopharmaceutical agent will be subject to phagocytosis by the synovial cells and macrophages, with subsequent local irradiation of the thickened synovial membrane. The consequence: a reduction in inflammatory activity and resynovialisation as a result of fibrosis and sclerosis.

The particular advantage of RSO compared with intra-articular cortisone injection is its notably longer lasting effect, as shown in randomized controlled trials (1). Patients treated with RSO regularly manage to conduct their daily lives with notably regressive symptoms for several months—in some cases even for several years, and in rare cases even with a complete absence of symptoms in the long term. In our opinion, this therapeutic approach should therefore urgently be mentioned. The scientific evidence is sufficiently included in the list of references of the “Gemeinsame Handlungsempfehlung (SI-Leitlinie) von DGN, OGNMB und SGNM—Radiosynoviorthese” [the joint SI guideline for radiosynoviorthesis from the German Society of Nuclear Medicine, the Austrian Society for Nuclear Medicine and Molecular Imaging, and the Swiss Society of Nuclear Medicine] in cooperation with the German Society for Rheumatology and the German Pain Association (2). Anyone worried about using ionizing radiation for therapeutic purposes in this context (benign disorders) is advised to read additionally the up-to-date radiosynoviorthesis guideline from the European Association of Nuclear Medicine (EANM), which was developed under German leadership (3). The nuclear medicine institutions that provide this—evidently little known—intervention in Germany are listed on the website of the German Society of Nuclear Medicine.

References

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References

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In Reply:

We are pleased about the extensive feedback on our article entitled “Methods of Conservative Intra-Articular Treatment for Osteoarthritis of the Hip and Knee” (1). This shows how important and topical the subject is in a society shaped by demographic change.

Osteoarthritis as a degenerative joint disorder requires differentiated diagnostic evaluation before specific treatment can be initiated. The main emphasis of our article was, however, a detailed explanation of current therapeutic approaches; the topic of diagnostic evaluation was only slightly touched upon. Diagnostic evaluation is unquestionably an important basis for a differentiated decision on treatment and will continue to be a decisive factor in the quality of clinical studies, but also—especially—in the context of targeted care provision for osteoarthritis.

Some procedures that are not primarily ascribed to treating osteoarthritis were not included in the article for reasons of space. These include radiosynoviorthesis (RSO). By contrast to osteoarthritis, which is known as a degenerative disorder with mild inflammation, a multitude of chronic inflammatory articular disorders exist that are categorized as rheumatic disorders. These are typically associated with synovitis, which can be treated in a targeted way by means of radiosynoviorthesis, by applying appropriate radionuclides. RSO can also be successfully deployed to prevent bleeds in hemophilic arthropathy. In certain cases, RSO is credited with positive effects in activated osteoarthritis with accompanying synovitis, and it is therefore undertaken as a therapeutic alternative for local pain control (2, 3). Because of pathogenetic differences, however, and the current evidence base, RSO in osteoarthritis is not recommended by the German Society for Rheumatology at this time and is therefore not included as an indication in the S1 guideline. An additional intra-articular therapeutic method is the application of local anesthetics and opioids. It should be borne in mind that local anesthetics have chondrototoxic potential and accordingly can accelerate the progression of osteoarthritis if applied repeatedly (4). This should be considered accordingly when using these substances. As regards intra-articular injection of opioids, there are indications that results regarding pain reduction are comparable to those of intra-articular injection of corticosteroids (5). However, the evidence is limited and no unequivocal conclusions can be drawn.

Like every scientific article, our review article presents only a moment’s snapshot of the evidence (1). At this time, a multitude of novel therapeutic approaches exist in the area of intra-articular treatment of osteoarthritis, which our review article described in detail. Furthermore, combination therapies may influence future therapeutic successes in a decisive manner, in the sense of individualized therapy. It remains to be seen, however, how the evidence develops and how guidelines will be adapted in future.

References


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