Guest editorial

Stretching the postoperative limits in knee and hip arthroplasty: restrictions and traditions?

Karin STEEN [1,2] and Maziar MOHADDES [1,2]

[1] Department of Orthopedics, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg;
[2] Department of Orthopedics, Sahlgrenska University Hospital, Gothenburg, Sweden
Correspondence: maziar.mohaddes_ardebili@vgregion.se
Submitted 2022-06-03. Accepted 2022-06-09.

Osteoarthritis affects more than 500 million people worldwide, and this number is gradually increasing. A large proportion of patients with hip and knee arthritis benefit from non-surgical treatment. When the non-surgical treatment is ineffective, arthroplasty is an excellent treatment option. The primary indication for arthroplasty is intermittent or constant pain. During recent years there have been several publications highlighting the importance of arthroplasty in improving quality of life and reducing patient-reported disability due to osteoarthritis (1-3). In a Delphi consensus study by Lange et al. (4) patients with knee osteoarthritis were asked to rank the treatment goals following knee arthroplasty. In this paper the main treatment goals identified by patients were symptom reduction and functional improvements.

From a clinical perspective it seems as if the demands of patients, especially young ones, are rising concerning return to activities following arthroplasty. Clinicians must discuss and determine the acceptable level of activity following arthroplasty (5). Improvements in prosthesis designs and surgical techniques partly question the necessity of restrictions following arthroplasty. It is partially unknown to what extent different activities may affect prosthetic wear and if limitations after prosthetic surgery may negatively impact the general health and patients' satisfaction.

The article by Straat et al. (6) recently published in *Acta Orthopaedica* illustrates that there is a lack of evidence in recommendations for resuming work and returning to daily life activities after knee arthroplasty. The authors also report a large variation among Dutch hospitals and clinics that answered a questionnaire. Recommendations regarding return to work differ from 2 weeks to 4 months. Meanwhile the multidisciplinary guideline in the Netherlands recommends return to work within 3 months. A large variation was also found regarding sports activities, where recommendations on when to resume cycling outside varied from 3 weeks to 3 months. In some activities, such as jumping and taking public transport, there was no time range reported as to when to resume these activities. Authors also highlight that there is a major gap among guidelines from the departments regarding daily activities and a lack of information on activities that might be important from a patient perspective. The authors suggest a need for more evidence-based recommendations and propose recommendations by an expert focus group.

Activity restrictions are also applied in rehabilitation after total hip arthroplasty (THA) with hip precautions having been a common and important component of standard postoperative care. In the past, there has been a wide range of restrictions aiming to prevent hip dislocation and facilitate healing. Gromov et al. (7) reported that use of postoperative restrictions following primary THA differs among the Nordic countries. The authors also found a strong tendency towards less restrictive mobilization following THA.

Patients are commonly recommended to resume activities in consultation with the orthopedic surgeon or a physiotherapist following arthroplasty. Due to lack of scientific evidence for return to moderate or high-impact sport activities following THA or TKA (8,9) it may be difficult for the individual surgeon or physiotherapist to address specific questions raised by patients. Lack of evidence might also expose patients to contradictory information regarding restriction following arthroplasty. It could also be speculated that lack of evidence and fear of complications may lead to more restrictive recommendations than necessary. Unnecessary restrictions may have a negative impact on patients' quality of life and on making a full recovery following joint replacement (10).

With an increasing number of patients in need of arthroplasty, a disparity in postoperative recommendations, an obvious gap between patients' expectations and professional

DOI 10.2340/17453674.2022.3977

recommendations, and lack of scientific evidence for specific restrictions following arthroplasty there is certainly a need for creation of mutual guidelines regarding restrictions and recommendations for return to activity following arthroplasty. The orthopedic community should focus on facilitating and enabling postoperative rehabilitation following arthroplasty rather than restricting patients based on traditions and myths.

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