Practice in rehabilitation after cartilage therapy: an expert survey.

Abstract:
Current cartilage therapy modalities like microfracture, ACT/MACT, AMIC or osteochondral transplantation are important tools to treat symptomatic (osteo)chondral lesions of the knee joint. However, until now there exists no high-level evidence based accepted rehabilitation plan for the postoperative treatment.

HYPOTHESIS/PURPOSE: This survey describes the predominantly used rehabilitation plan as implemented by expert musculoskeletal surgeons for operatively treated (osteo)chondral lesions. Survey and systematic review. An electronic questionnaire covering general and specific items concerning aftercare following cartilage therapy in the knee joint was designed and disposed to analyze rehabilitation programs among a population of expert musculoskeletal surgeons of the AGA (Society of arthroscopy and joint surgery). All instructors (304 in 01/2011) were included into the survey. A total of 246 (80.9 %) instructors answered the questionnaire. The predominant used therapy to treat cartilage lesions is microfracture and for osteochondral lesions the osteochondral transplantation. Physiotherapy starts directly after surgery and takes more than 6 weeks. Most surgeons do not immobilize patients after surgery and use partial weight-bearing for up to 5 weeks. The change from partial to
full weight-bearing is done step-wise with a 20-kg/week increase. Free ROM is allowed by the majority of instructors (55 %) directly after surgery. A CPM-device is also used directly and up to 5 weeks. Swimming and biking are allowed after 6 weeks, running is allowed after 12 weeks and contact sports after 24 weeks. Most instructors do not use braces in the aftercare procedure, but nearly all (93 %) prescribe crutches. Typical drugs used during the aftercare are NSAID, Heparin and antibiotics. For most instructors (79 % respectively 75 %) knee stability and a straight leg axis are necessary for a successful cartilage therapy. If a concomitant therapy like ACL reconstruction or an osteotomy is performed, aftercare is mainly dependent on cartilage therapy (62 % respectively 59 % of instructors). Today there exists no detailed rehabilitation program for treatment after a cartilage-related operation on the basis of an evidence-based level I study. The reason might be that many variables contribute to a specific aftercare procedure. Therefore, the survey of experienced surgeons may help to identify the most promising rehabilitation regime for today, at least until evidence-based level I studies are accomplished.