compare mean change in knee function tests and KOOS subscales between the two visits. Spearman correlations were computed to compare the magnitude of change between objective knee function tests and self-reported questionnaire scores.
Results:Patients were on average 44±13 years-old, BMI 27.2 ±4.8, and 71% male. All performance-based knee function tests improved significantly ($p<0.05$) 6 weeks after partial menisectomy. Active and passive ROM improved the least, each with a 4% increase from preoperative measurements. The greatest improvement in performance was observed with stair descent (13%) and sit-to-stand (15%) activities. Similarly all KOOS subscales improved significantly following surgery. KOOS Pain scores improved 32%, Symptoms 32%, Activities of Daily Living 22%, Sports and Recreation 48%, and Quality of Life 65%. Correlations between the change in KOOS Activities of Daily Living and performance-based tests were weak (r ranging from 0 to 0.41).
Conclusions: This study demonstrates that all nine performance-based knee function tests are responsive to patients undergoing partial menisectomy. The low degree of correlation between improvements in performance-based tests and questionnaires indicates that these two types of measures may reflect distinct information about actual joint mechanics versus patient perception of knee-related function. Performance-based tests could potentially provide information about knee function that is unique and complimentary to questionnaire data.

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RADIOGRAPHIC FEATURES, BETTER THAN CLINICAL FEATURES, REPRESENT ACTUAL JOINT DEGENERATION AND INFLAMMATION: CONSIDERATIONS FOR TOTAL KNEE REPLACEMENT SURGERY

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Purpose: Clinically, osteoarthritis (OA) is characterized by joint pain, tenderness, limitation of movement, crepitus, occasional effusion, and local inflammation. Pain, joint deformation, and stiffness of the joint capsule may lead to severe restriction of function, and in the long term to disability. In end-stage disease total knee replacement (TKR) surgery might become a treatment option. Indication for TKR is primarily based on persistent pain and functional disability despite conservative therapy. Unfortunately, specific indications for timing of TKR are not clearly defined. Radiographic joint damage adds to decision-making, but is not leading. The aim of this study is to evaluate whether radiographic characteristics and/or clinical characteristics prior to TKR predict actual cartilage damage and/or synovial inflammation.
Methods: Demographics, radiographic features of OA (K&L and Altman grade) and clinical symptoms (WOMAC-pain, -stiffness, and -physical function) of 172 knee OA patients were assessed shortly before TKR. NSAIDs and acetaminophen use was registered. During surgery, cartilage and synovial tissue were obtained and evaluated by macroscopy, histology, and biochemistry. To examine the relationship of radiographic features as well as clinical features with the actual cartilage damage and synovial inflammation, binary logistic regression modeling was used. All analyses were performed with and without adjustment for demographics age, gender, and BMI.
Results: The average K&L score of this population was 3.1 (range 1-4). The average Altman scores for this population were 2.5 (range 0-3) for joint space narrowing and 3.2 (range 0.8-6) for the osteophytes. Both the K&L score and the Altman osteophyte score were associated with the actual macroscopic cartilage damage [2.375, p=0.006 / 2.229, p=0.005, respectively]. Joint space narrowing also showed an association with macroscopic cartilage damage [1.619, p=0.067]. Additionally, osteophyte score was associated with macroscopical synovial inflammation [1.593, p=0.029] and histological synovial inflammation [1.454, p=0.039], suggesting synovial inflammation to be involved in osteophyte formation. No clinical parameter related to any of the actual structural cartilage damage of synovial inflammation parameters.
Conclusions: Radiographic OA characteristics correlate better with actual cartilage damage and synovial inflammation parameters in patients undergoing TKR than clinical parameters do. As such, it is important to include radiographic OA characteristics when selecting patients for TKR.

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PHYSICAL THERAPISTS WORKING IN EXPANDED ROLES IN ORTHOPAEDIC CLINICS: IMPACT ON NON-SURGICAL PATIENTS WITH ARTHRITIS

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Purpose: Specially trained physiotherapists known as advanced practice physiotherapists (APP) are working in orthopaedic clinics to improve access to orthopaedic services and support chronic disease management for patients with arthritis. Little attention has been paid to the potential impact APPs may have on management behaviours and self-efficacy in non-surgical patients. Our goal was to examine the short term impact of a specially trained physiotherapist consultation on non-surgical patients with hip or knee arthritis who visited orthopaedic clinics for consideration for total joint replacement surgery (TJR).
Methods: The study was a single group pre-post-test design embedded within a pilot program in the orthopaedic departments of two tertiary care urban teaching hospitals. In the orthopaedic clinic, patients referred for orthopaedic consultation for consideration for TJR were assessed by an APP. The APP performed a detailed history, musculoskeletal examination, and review of diagnostic imaging such as radiographs and magnetic resonance imaging, and made an assessment as to potential need for surgery. All patients assessed likely to need surgery received further care from an orthopaedic surgeon. For patients with hip or knee arthritis who were deemed non-surgical, our study sample, APPs provided education on various conservative management strategies, such as exercise, adaptive behaviours, use of assistive devices and weight management. Participants completed the adapted Stanford Exercise Behaviour Scale and the Chronic Disease Self-efficacy Scale at baseline and during a structured follow-up telephone interview six weeks later. At the six week follow-up patients also completed questions on recall of APP's recommendations, use of management strategies and barriers to implementation of strategies.
Results: Seventy three patients with hip or knee arthritis who were deemed non-surgical participated in the study. Sixty patients had been referred for their knee, 12 for their hip and 1 for both hip and knee. Sixty seven percent of the sample were female (mean age 58.5). Seventy one percent of patients (52) reported that the APP recommended exercise during their clinic visit, of whom 83% (43) reported using exercise to manage their arthritis since the visit. Almost 50% reported an increase in time spent stretching and over 40% reported an increase in time spent walking or doing strengthening exercises at the six week follow-up. Common barriers to uptake of arthritis management strategies reported by participants were time (37%), cost (24.7%) and other health problems (24.7%). Mean chronic disease self-efficacy scores significantly improved at follow-up ($p< 0.001$); the effect size was 0.51.
Conclusions: The results suggest specially trained physiotherapists have a role in the management of non-surgical patients with arthritis referred for orthopaedic consultation, particularly for enhancing use of conservative management strategies such as exercise.

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SEXUAL FUNCTION IN LOWER LIMB OSTEOARTHRITIS

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Purpose: Sexual activity is an important part of normal life and yet there seems to be little in the way of research to investigate how it is affected by arthritis of the hip and knee joint. Sexual function may be of increasing relevance bearing in mind changes to modern prosthetic design, surgical technique, rehabilitation, changing attitudes and younger demographics of those patients receiving hip or knee replacements. This sample was to establish if patients with hip and knee arthritis requiring surgery had impaired sexual function.
Methods: We recruited patients from the dual-centre Clinical Outcomes in Arthroplasty Study (COASt) undergoing hip and knee replacement (THR/TKR) surgery. Participants completed four non-validated basic questions at baseline about the impact of their condition on their sexual function: Are