demonstrated that even a brief workshop appears effective for assisting and encouraging nurses in providing psychological support to patients. Further studies of training methods and of nurses' application of the skills acquired in such training are ongoing.

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THU0737-HPR THE EFFECTIVENESS OF RELAXATION EXERCISES ON PAIN, FUNCTIONAL LEVEL AND MUSCLE STRENGTH IN PATIENTS WITH TOTAL KNEE ARTHROPLASTY: A PRELIMINARY RESULTS

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Background: Total Knee Arthroplasty (TKA) is a common procedure performed mainly due to advanced osteoarthritis (OA), pain, physical disability and reduced quality of life. However, approximately 20% of the patients respond poorly to the surgery and chronic pain and disability following TKA remains a major health burden for many patients. Among the most well documented predictors of poor outcome following TKA is pain catastrophizing. Inadequate pain relief can cause impaired functional performance, increased skeletal muscles tension which are close to surgery related incision site, longer length of hospital stay, unnecessary psychological distress and decreased patient satisfaction. There is high need of developing treatments aimed at improving self-management for patient with TKA at early postoperative period.
Objectives: The aim of this study is to investigate the effectiveness of progressive muscle relaxations exercises (PMR) on pain coping, physical function and muscle strength among patients with TKA due to OA.
Methods: The study group consisted of 22 patients (33 knees), who underwent primary TKA because of OA were consecutively allocated to an intervention group (n=11, with mean age; 66.18±13.29 years), and were allocated to a control group (n=11, with mean age; 62.45±7.28 years). After surgery, all patients underwent the same rehabilitation program. The intervention group also was instructed preoperative patient education about PMR exercises, and the intervention group received PMR exercises focusing on reducing overall body tension, anxiety and pain managed by a physiotherapist. Patients were evaluated regarding the pain (Numeric Pain Rating Scale (NPRS)), muscle strength, knee function score (Hospital for Special Surgery (HSS) score), pain-related fear (Tampa Scale for Kinesiophobia (TSK)), anxiety and depressive symptoms (Hospital Anxiety and Depression Scale (HADS)) and quality of life (Short-Form 12 Health Survey (SF-12)). Functional activities were evaluated using the Iowa Level of Assistance Scale and walking speed was evaluated using the Iowa Ambulation Velocity Scale. Also functional outcomes were evaluated with timed up and go (TUG) test and 10-metre walk test (10 MWT). Patients were evaluated preoperatively and at discharge.
Results: At baseline, demographic characteristics were similar in groups and there was no statistically difference between groups ($p>0.05$). It was determined at postoperatively that; the intervention group had better results in terms of reduction of pain severity ($p=0.001$), improvement of HADS anxiety level ($p<0.030$), pain-related TKS level ($p<0.035$) and SF-12 mental component score ($p<0.011$). When the HSS knee scores and quadriceps muscle strength were compared, there was statistically difference between groups and the two outcomes scores were lower in control group after surgery ($p<0.040$, $p<0.012$, respectively). There were no statistical differences between groups for other outcomes after TKA ($p>0.05$).
Conclusions: The current results suggest that the PMR exercises at early stage after TKA might be an effective method for patient rehabilitation outcomes. However, in this comparison to obtain more comprehensive results studies on larger series are needed. In this way, a more uniform and objective data can be achieved.
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THU0738-HPR COMPARISON OF THE FUNCTIONAL PROFILE OF THE FOOT BETWEEN THE PATIENTS WITH PATELLOFEMORAL OSTEOARTRITIS AND TIBIOFEMORAL OSTEOARTHRITIS

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Background: The biomechanics of the patellofemoral (PF) joint are distinct from the tibiofemoral (TF) joint and hence, interventions that have been designed to reduce pain and improve function in those with tibiofemoral disease may be inappropriate for those with Patellofemoral OA (PFOA). Therefore, patients with PFOA have been recently considered a subgroup different from patients with Tibiofemoral OA (TFOA). Loading asymmetries of the foot, discrepancy in foot contact area, and excessive increase in plantar pressure are associated with knee OA patients but there is lack of information that how PFOA or TFOA affect the foot profile.
Objectives: The purpose of this study was to investigate the foot profile differences between PFOA and TFOA patients and also compare these foot profiles with healthy individuals.
Methods: Twenty-nine patients with unilateral knee OA and 14 age-matched controls (median age=42.5 years, median BMI=23.8 kg/m^2) were included in the study. The patients were divided into two groups; PFOA group (n=16, median age=52.5 years, median BMI=26.7 kg/m^2) if they had a radiographic Kallgren and Lawrence (KL) score grade 2 or 3 in the PF joint, which was greater than KL score for the TF compartments; TFOA group (n=13, median age=54 years, median BMI=26.6 kg/m^2) if they had a radiographic KL score grade 2 or 3 in the TF joint, which was greater than KL score for the PF compartments. Plantar pressure distribution was recorded by Digital Biometry Scanning System and Milletrix software (DIASU, Italy). The static test was used to determine the maximum foot pressure (N/cm^2) of the foot, forefoot weight ratio, rarefoot weight ratio, total load and foot angle axis (FAA). Kruskall Wallis test was used to compare the affected side of TFOA and PFOA groups with the control group. After application of the Bonferroni correction, Mann Whitney-U was used to compare the two-group differences.
Results: The age ($p=0.179$) and BMI ($p=0.150$) were similar between the groups. There were no differences on the affected side maximum foot pressure ($p=0.603$), forefoot weight ratio ($p=0.247$), rarefoot weight ratio ($p=0.240$) and total load ($p=0.599$) between TFOA, PFOA and control groups. FAA was higher in TFOA group [median-IQR: 17.0°(13.3°−35.4°)] when compared to PFOA ($p<0.001$) and control group ($p<0.001$). In addition, foot angle axis was lower in PFOA groups [median-IQR: 9.4°(1.5°−19.5°)] than control group [median-IQR: 13.4°(10.0°−15.8°)] ($p=0.005$). A reference value is appreciable if found to be between 12°−16°.
Conclusions: The angle of the foot plays an important role on optimal weight distribution during walking. Changing the angle of the foot may affect all other joints and create a modifying effect on the moment around the lower extremity. PFOA patients presented lower foot angle axis than normal values while TFOA patients presented higher angles. This may indicate that the intervention should be design for the joint involvement in the knee OA patients.

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THU0739-HPR EFFECTIVE PREVENTION AND MANAGEMENT OF OSTEOPOROTIC FRACTURES: A SYSTEMATIC LITERATURE REVIEW OF NON-PHYSICIAN HEALTH PROFESSIONALS' INTERVENTIONS FOR A EULAR POINTS-TO-CONSIDER PROJECT

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Background: Osteoporotic fractures are a global concern due to associated patient mortality, morbidity and health service expenditure. Optimal care provided

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