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.

REFERENCES:

Disclosure of Interest: None declared

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 pre-operatively 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)).

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), pain and 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 no 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.

Disclosure of Interest: None declared

THU0738-HPR
COMPARISON OF THE FUNCTIONAL PROFILE OF THE FOOT BETWEEN THE PATIENTS WITH PATELLOFEMORAL OSTEOARTHRITIS AND TIBIOFEMORAL OSTEOARTHRITIS

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Background: The biomechanics of the patellofemoral (PF) joint are distinct from the tibiobimal (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 analysis show the foot and forefoot 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/m²) 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/m²) if they had a radiographic Kellgren 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/m²) 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 distibution was recorded by Digital Biometry Scanning System and Milletrix software (DIASU, Italy). The static test was used to determine the maximum foot pressure (N/cm²) of the foot, forefoot weight ratio, rarefoot weight ratio, total load and foot angle axis (FAA) of each patient. Kruskall Wallis test was used to compare the affected side of TFOA and PFOA groups with the control group. After application of the Bonferonni 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° (15.5° – 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 designed for the joint involvement in the knee OA patients.

REFERENCES:

Disclosure of Interest: None declared

THU0739-HPR
EFFECTIVE PREVENTION AND MANAGEMENT OF OSTEOARTROSCOPIC FRACTURES: A SYSTEMATIC LITERATURE REVIEW OF NON-PHYSICIAN HEALTH PROFESSIONALS’ INTERVENTIONS FOR A ULAR 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...
Determination of exercise behaviour in patients with juvenile idiopathic arthritis

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Background: Juvenile idiopathic arthritis (JIA) is one of the most common rheumatic diseases in childhood, affecting at least 1 in 1000 children. Children with JIA experience joint inflammation and swelling, pain and tenderness, morning stiffness, limited mobility. Children with JIA complain pain and have lower functional ability and decreased quality of life compared with their peers. Many studies have reported that patients with JIA have low physical activity levels and also exercise intolerance due to joint inflammation, pain and tenderness, morning stiffness, limited mobility, pain and tenderness, morning stiffness, limited mobility.

Objectives: The objective of this study was to determine exercise behaviour in patients with JIA.

Methods: 34 patients with JIA (23 female and 11 male), age range 5–18 years, were participated in the study. The survey that was created with Google Forms was sent via WhatsApp to patients after 1 week-10 days than setting home base exercise program for each patient. In the survey, disease duration, involvement joint(s), Childhood Health Assessment Questionnaire (CHAQ) for functional ability, 11-point Numeric Analogue Scale (NRS) for satisfaction of exercising, Exercise Stages of Change Scale–Short Form (ESCS), Exercise Self-Efficacy Scale (SES), and Decisional Balance Scale (DBS) for exercise behaviour were required for the patients with JIA.

Results: The mean age and disease duration were 11.38±4.68 and 5.36±4.16 years, respectively. The mean of the number of affected joints was 5±4.41. According to the five behavioural processes by ESCS, the patients were enrolled 38.2% of them in the stage of maintenance, 26.5% of them in the stage of action, 14.7% of them in the stage of preparation, 14.7% of them in stage of contemplation, 5.9% of them in stage of pre-contemplation. 67.5% of them was satisfied for exercising (<5 for NRS). When comparison of the patients’ CHAQ scores due to satisfaction level with NRS, the mean of CHAQ scores was significantly lower in patients with high satisfaction than patients with low satisfaction (p=0.014). The mean of scores ESSES and DBS were 17.06±6.13 and 12±4.61, respectively. All of the patients represented ‘positive perception of exercise’ due to DBS. Only a significant correlation with age of patient and DBS was found (r=0.375, p=0.029).

Conclusions: This study demonstrated that patients with JIA were in high stages participated in exercising and have high self-efficacy of exercise, decreasing of functional ability may affect the satisfaction level of exercising and as age increases, decisional balance for exercising also increases. Therefore, future researchers should investigate potential facilitators of and barriers to exercise for larger population in patients with JIA by following up long term.

Disclosure of Interest: None declared