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FRI0770-HPR **A BETTER WAY TO DECREASE KNEE SWELLING IN PATIENTS WITH KNEE OSTEOARTHRITIS: INTERMITTENT PNEUMATIC COMPRESSION – A RANDOMIZED CONTROLLED CLINICAL TRIAL**

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Background: One of the most common symptoms of knee OA is swelling. Knee swelling negatively affects knee mechanics and muscle activity in patients with OA. Thus, knee swelling should be eliminated in the early period of rehabilitation. The utility of cold therapy for musculoskeletal injuries has been clearly established (1). It was shown that cold therapy may not be a statistically effective modality in improving range of motion and decreasing knee swelling (2). Intermittent pneumatic compression (IPC), which has been used to treat limb swelling, is a common option for patients with lymphedema and venous leg ulcers. Currently, IPC is primarily used in the prevention of deep venous thrombosis. It is also used for venous insufficiency, arterial occlusive disease, prevention of hematoma, etc (3). However, despite its widely accepted use, the literature on IPC in musculoskeletal injuries is limited. In particular, there is no report on whether IPC, which is known to have positive effects on circulatory problems, affects the knee swelling in OA.

Objectives: In this study, we hypothesized that IPC may have better outcomes on knee swelling. We also investigated whether IPC may contribute to better short-term patient outcomes in patients with knee OA rather than cold therapy.

Methods: This was a randomized, prospective, comparative clinical study. The study included 81 patients aged 18–65, who were admitted to the Or – Ahayim Balat Hospital. The patients were randomly divided into two groups. One group (n=36) received ultrasound, transcutaneous electrical nerve stimulation, electrical stimulation, exercise, and cold packs. The second group (n=45) received ultrasound, transcutaneous electrical nerve stimulation, electrical stimulation, exercise, and IPC. The primary outcome on pre- and post – treatment follow – up was knee swelling. Secondary outcome measures included range of motion, muscle strength, pain intensity and disability.

Results: Intermittent pneumatic compression significantly decreased knee swelling in patients with osteoarthritis ($p < 0.001$). A significant difference between the groups was found in knee swelling in favour of the intermittent pneumatic compression group ($p = 0.028$). We also found significant improvements in range of motion, muscle strength, pain intensity and disability in both groups ($p < 0.05$). No significant differences in any of secondary outcome variables between the groups ($p > 0.05$).

Conclusions: The mechanism of our hypothesis was that in opposite of cold therapy which has local effects, IPC may affect circulatory of all lower extremity in patients with swollen knee. This randomized - controlled trial confirmed the hypothesized advantage of intermittent pneumatic compression over cold - pack on knee swelling in patients with knee osteoarthritis.

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FRI0771-HPR **WORK – RELATED LUMBAR PAIN IN PHYSIOTHERAPISTS WHO WORK IN DIFFERENT FIELDS – A PILOT STUDY**

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Background: Having a job exposing the load on the lumbar region increases lumbar pain risk. Lumbar pain takes first place in musculoskeletal disorders among health care workers. A survey which investigated musculoskeletal disorders in

physiotherapists indicated that the most common musculoskeletal disorders have seen in the lumbar region.

Objectives: The aim of this study was to determine the work – related lumbar pain in physiotherapists who work in different fields and differences in terms of occupational and personal variables.

Methods: This was a prospective, comparative and multi – central study. Physiotherapists who accepted to participate in this study voluntarily and work at any of paediatric, orthopaedic and neurological fields were received. Eighty – eight physiotherapists were taken first assessment. Their demographic information were taken and they filled out the Oswestry Low Back Disability Questionnaire. Twenty – nine cases who had any orthopaedic disease, surgical history and did not fill the entire of the Oswestry Low Back Disability Questionnaire excluded from the study. Twenty – eight women and 31 men met the criteria for inclusion. Physiotherapists were divided into three groups as paediatric (n=21), orthopaedic (n=24) and neurological (n=14). Lumbar pain level, the number of daily patient transfer, daily working hours and daily standing working hours in three groups were compared. One – way ANOVA was used to compare the groups. SPSS v11.5 was used for the statistical analysis.

Results: There were no significant differences in lumbar pain levels between groups ($p = 0.342$). Daily standing working hours of paediatric group were significantly less than orthopaedic group ($p = 0.021$) and the number of daily patient transfer were significantly higher in paediatric group according to orthopaedic group ($p = 0.028$). Daily standing working hours and the number of daily patient transfer of neurological group had no differences between other groups ($p = 0.173$).

Conclusions: We think that the reason why no differences between the pain level of paediatric and orthopaedic group may be due to more daily transfers in paediatric group and more daily standing working hours in orthopaedic group. The cause why no differences between neurological field and others, might be because of another working factors which we did not assessed. There is a need for research examining in detail on working conditions and trials including more cases.

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FRI0772-HPR **FORMAL RHEUMATOLOGY TRAINING FOR GENERAL PRACTITIONERS**

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Background: Formal post graduate training in rheumatology is limited for primary care physicians or general practitioners. General practitioners (GPs) have extraordinary wide knowledge base, and deal with all age groups, from minor ailments to serious illnesses, thus it's not possible to expect them to have a strong hold of specialised conditions like inflammatory arthritis (IA) (2). General practitioners can be trained to manage these conditions in order to break the disconnect between the flow of knowledge and the burden of care in rheumatic conditions.

Objectives: The Rheumatology department in Midlands Regional Hospital and University Hospital Waterford facilitates GPs teaching in rheumatology outpatients clinics. Every year six GP trainees are trained by consultant rheumatologist. Each trainee receives one on one education in managing rheumatologic conditions including joints and soft tissue injections. This survey was done to evaluate whether GP trainees benefited from it in diagnosing and treating rheumatologic diseases when compared to non rheumatology trainees.

Methods: This is a cross sectional study of a convenience cohort. GP trainees who received rheumatology training as part of their hospital rotation were included as “cases”, and compared to those who didn't have any formal rheumatology exposure during their training g as “control”. The cases attended supervised rheumatology outpatients for one year, and. A questionnaire was emailed as well as distributed to the GP trainees, it included questions on trainees' ability and comfort level in diagnosing, assessing and managing inflammatory and non inflammatory conditions, along with joint and soft tissue injections.

Results: There were 60 participants in the study, 30 cases and controls each. Majority (94%) didn't have formal rheumatology teaching in the medical school, but had rheumatology experience post graduation, 30 being GP trainee in rheumatology and 7 as senior house officers attached to rheumatology team. The GP trainees had an average of 7 months exposure to rheumatology. The GP trainees who attended the rheumatology clinics were confident in: examining joints, differentiating musculoskeletal/ mechanical from inflammatory conditions, educating patients and commencing them on DMARDs, interpreting serological tests (RF, CCP, ANA etc), managing osteoarthritis, tennis elbow, and soft tissue and intra-articular Knee and shoulder injections, as compared to the trainees who didn't have any formal rheumatology training ($P < 0.001$).

Conclusions: Rheumatology teaching for the GP trainees is certainly beneficial, and helps them in managing rheumatologic conditions in primary care settings.

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