Metabolic Syndrome and Trajectories of Localised Pain and Generalised Pain

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Background: Metabolic syndrome (MetS) is the most prevalent syndrome among the general population, and its components: waist circumference, body mass index (BMI), blood pressure, and blood glucose, triglycerides, and high-density lipoprotein (HDL) cholesterol. MetS was defined based on the National Cholesterol Education Program-Adult Treatment Panel III criteria. Radiographic knee osteoarthritis (ROA) was assessed by X-ray. Knee pain was measured by Western Ontario and McMaster Universities Osteoarthritis Index pain questionnaire at each time point.

Methods: Groups of patients with knee pain, aged 40-70 years, and were diagnosed with Kellgren-Lawrence stage 2, 3, 4 idiopathic knee osteoarthritis was included. Patients were randomly assigned to two equal groups (n = 25) as the control and the study group. Age, sex, weight, height, duration of illness was recorded for all patients. In the bilateral two-way knee radiography; Kellgren-Lawrence score of the knee with the higher visual analog scale (VAS) pain score was recorded. Conventional physical therapy program, associated with knee osteoarthritis exercises, was applied routinely to all patients with knee osteoarthritis for three weeks. In the study group, all patients received virtual reality applications using interactive games for rehabilitation have become a focus of interest in recent years.

Objective: The aim of this study was to evaluate the effects of virtual reality games on knee pain, functional mobility and balance in patients with knee osteoarthritis.

Methods: Fifty patients who were complaining of knee pain, aged 40-70 years, and were diagnosed with Kellgren-Lawrence stage 2, 3, 4 idiopathic knee osteoarthritis was included. Patients were randomly assigned to two equal groups (n = 25) as the control and the study group. Age, sex, weight, height, duration of illness was recorded for all patients. In the bilateral two-way knee radiography; Kellgren-Lawrence score of the knee with the higher visual analog scale (VAS) pain score was recorded. Conventional physical therapy program, associated with knee osteoarthritis exercises, was applied routinely to all patients with knee osteoarthritis for three weeks. In the study group, all patients received virtual reality applications using interactive games for rehabilitation have become a focus of interest in recent years.

Results: In both groups, significant change in VAS, WOMAC osteoarthritis index, and CB&co score of each patient were recorded. Mann-Whitney U and Independent Samples T tests were used for statistical analysis, and p value less than 0.05 was considered significant.

Conclusions: MetS is predominantly associated with trajectories of localised and generalised pain through central obesity, suggesting that weight management is important in the prevention and therapy of pain over time.
and final scores of VAS and WOMAC were significantly higher (p<0.05) in study group.

Conclusion: The results of the present study showed that virtual reality game-based exercise programs performed better results than conventional treatment program in patients with knee osteoarthritis.

REFERENCES:


Disclosure of Interests: None declared


THU0422

COMPARISON OF PRP DERIVED GROWTH FACTOR (PRGF) VERSUS HYALURONIC ACID (HA) IN MILD TO MODERATE KNEE OSTEOARTHRITIS: A SINGLE BLIND ONE YEAR RANDOMIZED CLINICAL TRIAL STUDY

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Background: Osteoarthritis (OA) is the most common joint disease with characteristics of progressive loss of joint cartilage.

Objectives: Aim of this study was to evaluate clinical outcomes of intra-articular injection of PRP derived growth factor (PRGF) versus hyaluronic acid (HA) in patients with knee osteoarthritis.

Methods: 102 patients with grade I or grade II knee OA were randomly assigned to 2 intra-articular injections of PRGF 3 weeks apart or 3 weekly injec-
tions of HA. Primary outcome was the mean change from baseline until 2, 6 and 12 months post intervention in scores of visual analog scale (VAS), WOMAC and Lequesne index.

Results: The mean age of patients was 57±6.7 years in PRGF group and 58±7.09 in HA group. In PRGF group, VAS decreased from 7.8±1.5 to 4.5±1.7, and from 7.8±1.1 to 6.1±1.8 in the HA group after 12 months (P<0.0001). Total WOMAC score decreased from 41.96±11.71 to 27.10 ±12.3 (P = 0.02), and from 39.71±10.4 to 32.41±11.8 after 12 months, respectively (P > 0.05). In Lequesne index, all scores were significantly decreased after 12 months in PRGF group in comparison to HA group (P<0.001).

Conclusion: Although PRGF and HA were both effective, but PRGF injection resulted in significantly higher satisfaction, lower VAS and Lequesne pain score and improvement in function of patients with symptomatic mild to moderate knee osteoarthritis.

REFERENCES:


Disclosure of Interests: None declared


THU0423

ANTERIOR TIBIALAR FAT PAD MORPHOLOGY AND SIGNAL INTENSITY ON MAGNETIC RESONANCE IMAGING ARE CORRELATED WITH PATIENT CHARACTERISTICS AND JOINT PATHOLOGY

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Background: Ankle sprains are the most frequent form of trauma in the ankle and up to 33% of patients experience ongoing pain 1 year after the initial trauma.1 In the ankle, trauma is the primary etiology of osteo-

arthritis with an overwhelming proportion of 70-78%.2 Recently, our group completed a small pilot study that suggested that the anterior tibialar fat pad (ATFP) should be investigated as a source of inflammation and pain.3

Objectives: In this study, we tried to investigate the innovative concept of the ATFP as missing link in the pathogenesis of persistent complaints and potential source driving inflammation in the development of osteoarthritis.

Methods: The present study is a secondary analysis of an observational case control study by Van Ochten et al.4 We included 106 patients with a Kellgren & Lawrence score of 0 in the tibialar joint on x-ray. T1 MRI scans were assessed for the signal intensity and area of the ATFP by a Kellgren & Lawrence score of 0 in the tibiotalar joint on x-ray. T1 MRI scans were assessed for the signal intensity and area of the ATFP by

Conclusion: This study demonstrates the involvement of the ATFP as missing link in the pathogenesis of persistent complaints and potential source driving inflammation in the development of osteoarthritis.

REFERENCES:


Disclosure of Interests: None declared


THU0422 – Figure 1. Mean values of Lequesne total at baseline, 2, 6 and 12
months after injection. PRGF indicates plasma rich in growth factor

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