Conclusion: High levels of sCTX-I and uCTX-II at BL were associated with increased risk of undergoing TJR of the knee or hip during the two year study. Our findings support the role of sCTX-I and uCTX-II as important biomarkers in clinical OA trials evaluating incidence of TJRs.

Disclosure of Interests: None declared.

Funding: Supported by grants from the Australian National Health and Medical Research Council (NHMRC) and Tasmania Government.

Abstract THU0420 – METABOLIC SYNDROME AND TRAJECTORIES OF LOCALISED PAIN AND GENERALISED PAIN

Feng Pan1, Jing Tian1, Flavia Cicuttini2, Graeme Jones1. 1University of Tasmania, Menzies Institute for Medical Research, Hobart, Australia; 2Monash University Medical School, Department of Epidemiology and Preventive Medicine, Melbourne, Australia

Background: Metabolic syndrome (MetS) has been associated with a link to the pathophysiology of pain; however, no study has assessed whether MetS and its components are associated with localised pain and generalised pain and their courses over time.

Objectives: To describe the associations of MetS and its components with trajectories of localised knee pain (pain severity) and generalised pain (number of painful sites (NPS)) in a general older population.

Methods: 1,099 participants from a population-based older adult cohort study were recruited at baseline. 875, 768 and 563 participants attended years 2.6, 5.1 and 10.7 follow-up, respectively. Data were collected on demographic, psychological, lifestyle and comorbidities, blood pressure, 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. Presence/absence of pain at the neck, back, hands, shoulders, hips, knees and feet was collected by questionnaire at each time-point.

Group-based trajectory modelling was applied to identify pain trajectories. Multi-nominal logistic regression was used for the analyses.

Results: Of 985 participants included in this study, 32% of participants had MetS and 60% had ROA at baseline. Three localised knee pain severity trajectories were identified: ‘Minimal pain’ (52%), ‘Mild pain’ (33%) and ‘Moderate pain’ (15%). Three NPS trajectories were identified: ‘Low NPS’ (12%), ‘Medium NPS’ (38%), and ‘High NPS’ (49%). In multivariable analysis without adjusting for central obesity, central obesity increased risk of belonging to both ‘Mild pain’ and ‘Moderate pain’ trajectories as compared to the ‘Minimal pain’ trajectory group, but MetS, hypertriglyceridaemia and low HDL were only associated with ‘Moderate pain’ trajectory [relative risk (RR): 1.67-2.26, all P<0.05]. Similarly, central obesity was also associated with both ‘Medium NPS’ (RR 2.35, 95%CI 1.40-3.92) and ‘High NPS’ trajectories (RR 3.07, 95%CI 1.85-5.08) compared to ‘Low NPS’ trajectory group, whereas MetS was only associated with ‘High NPS’ trajectory group (RR 2.60, 95%CI 1.54-4.41). These associations became weak and non-significant after further adjustment for central obesity.

Conclusion: 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.

Disclosure of Interests: None declared.

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

Seyed Ahmad Raeissadat1, Azadeh Ghanooei Ahangar2, Seyed Mansoor Rayegani, Pegas Yavari1, Shahid Beheshti University of medical sciences, physical medicine and rehabilitation, Tehran, Iran (Islamic Republic of); 2Zanjan University of medical sciences, physical medicine and rehabilitation, Zanjan, Iran (Islamic Republic of)

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 57.08±7.3 in PRGF compared to 58.63±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 symp- tomatic mild to moderate knee osteoarthritis.

REFERENCES:
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Disclosure of Interests: None declared

THU0423

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

Stijn Arnaert1, Paul Byttebier2, Sam Van Rossom3, Evie Vereecke4, Ilse Jonkers3, Edwin De4, S.M.A. Bierna-Zeinstra5, Rik Lores6,8, Marienke Van Middelkooip7, Stefan Clockaerts2,7, 1KU Leuven, Leuven, Belgium; 2AZ Groeninge, Orthopaedic Surgery and Traumatology, Kortrijk, Belgium; 3KU Leuven, Human Movement Biomechanics Research Group, Leuven, Belgium; 4KU Leuven (KULAK), Development and Regeneration, Kortrijk, Belgium; 5Erasmus MC Medical University Rotterdam, Radiology, Rotterdam, Netherlands; 6Erasmus MC Medical University Rotterdam, General Practice, Rotterdam, Netherlands; 7KU Leuven, Skeletal Biology and Engineering Research Center, Leuven, Belgium, 8University Hospitals Leuven, Rheumatology, Leuven, Belgium

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. In the ankle, trauma is the primary etiology of osteo-

Disclosure of Interests: None declared

Figure 1

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