

rich plasma (PRP) have been ascribed to its ability to rectify intra-articular inflammatory processes.

Objectives: The aim of this study was to determine the safety, feasibility and changes in symptom severity, sports activity, lower limb function, and function in daily living activities following intra-articular injections of PRP in mild to moderate knee OA.

Methods: In this double-blind randomized controlled pilot study, 34 patients with knee OA grade 2 or 3, from March 2013 to February 2016 were selected. Participants were randomly assigned one knee as the case and other knee was considered as control to receive three injections of either PRP or placebo. The administering doctor and the patients were blinded to group allocation. Outcomes included safety and recruitment data, 100 mm the EuroQol-visual analogue scales (EQ-VAS), the international knee documentation committee (IKDC), the Western Ontario and McMaster Universities Arthritis Index (WOMAC) and the Tegner Activity Score (TAS) at three and six months.

Results: Twenty four (100%) participants met the inclusion criteria. No treatment-related major adverse events were reported. The PRP group demonstrated significant improvements at all follow up time points in the WOMAC (3 months: $p=0.017$; 6 months: $p=0.029$, $ETA=0.601$). For the PRP group, the 11.47 mm reduction in EQ-VAS at 6 months ($p=0.040$) and the 7.35 mm at 3 months ($p=0.035$) was statistically significant improvement from baseline. The PRP group also significantly improved IKDC ($p=0.039$, $ETA=0.619$) and TAS ($p=0.028$, $ETA=0.641$) at three months. The placebo group showed improvements on only the IKDC Function at 3 months ($p=0.019$, $ETA=0.591$). There were no significant between-group differences for any of the self-reported measures at either time-point.

Conclusions: The study provides proof-of-concept evidence about the safety and feasibility of intra-articular injections of PRP necessary to appraise a larger clinical trial knee OA. Our preliminary findings also suggest PRP improves self-reported symptom severity, sports activity, and function in daily living activities, however no between-group differences were found. PRP may provide an effective and safe novel treatment for knee OA.

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Disclosure of Interest: None declared

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AB0804 SINGLE-NUCLEOTIDE POLYMORPHISM (SNP) RS143383 GROWTH AND DIFFERENTIATION FACTOR 5 (GDF5) IN KNEE OSTEOARTHRITIS IN EGYPTIAN POPULATION

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Background: Osteoarthritis (OA), is an age-related common polygenic disease characterized by the thinning and loss of the articular cartilage in synovial joints such as knees. The etiology and pathogenesis of OA is largely unknown, the single-nucleotide polymorphism (SNP) rs143383 (C/T) influencing OA susceptibility across a range of ethnic groups.

Objectives: The present study investigated to identify the association of polymorphism in GDF-5 gene with osteoarthritis in Egyptian population.

Methods: This Case control study of 100 women and 100 male ≥ 40 years that fulfilled American College of Rheumatology (ACR) for Knee OA and 100 controls recruited from the outpatient clinic of Department of Rheumatology, Assut university, Egypt. Clinical symptoms were assessed with WOMAC index and VAS for knee pain. The severity of disease was determined by radiological grades (Kellgren Lawren). Body Mass Index (BMI) was recorded. DNA isolation and genotype analysis the method of (Southam *et al.*, 2007) was followed for determining the GDF-5 gene (T/C; rs143383) polymorphism. Amplification was performed.

Results: There were weak but significant associations present between the GDF5 polymorphism and knee OA at the allele level (C vs. T: 0.85, 95% CI = 0.78–0.93) and genotype level (CC vs. TT: 0.72; CT vs. TT: 0.81; CC/CT vs. TT: 0.83; CC vs. CT/TT: 0.78) in the overall population. A stronger significant association was observed for CC vs. TT (OR = 0.83, $P < 0.001$) in comparison with other models. In males we identified a second polymorphism, located in the 3'-UTR of *GDF5*, that influenced allelic expression of the gene independent of rs143383.

Conclusions: GDF5 is an OA susceptibility gene with association between the GDF5 polymorphism and clinical symptoms of knee OA in Egyptian population.

Disclosure of Interest: None declared

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AB0805 PANLAR CONSENSUS. RECOMMENDATIONS FOR THE MANAGEMENT OF OSTEOARTHRITIS OF THE HAND, HIP AND KNEE. SHORT TITLE: PAN-AMERICAN LEAGUE OF ASSOCIATIONS FOR RHEUMATOLOGY (PANLAR) OSTEOARTHRITIS (OA) STUDY GROUP

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Background: This consensus derives from a previous study of Demographic and Clinical Characteristics by the PANLAR OA study group, reporting significant differences in handling these patients and in which it was evident the need of reaching an agreement in the management of hand, hip and knee OA in Latin America (2)

Objectives: The aim is to update the recommendations for the treatment of hand, hip and knee OA by agreeing on key propositions relating to the management of hand, hip and knee OA, identifying and critically appraising research evidence for the effectiveness of the treatments and by generating recommendations based on the available evidence and expert opinion.

Methods: Recommendations were developed by a group of 40 specialists made up of rheumatologists and members of other medical disciplines. A systematic review of articles, meta-analyses and guidelines for the management of hand, hip and knee OA published from 2008 and January 2014 was done. The level of evidence and strength of recommendation were classified according to the Jadad scale (3). The level of agreement was established through a Delphi technique.

Results: Both "strong" and "conditional" recommendations are given for management of hand, hip and knee OA and non-pharmacological, pharmacological and surgical modalities of treatment are presented according to the different levels of agreement.

Conclusions: These recommendations are based on the consensus of clinical experts from a wide range of disciplines considering the available evidence, while balancing the benefits and risks of non-pharmacological, pharmacological and surgical treatment modalities. It is hoped that these recommendations will be utilized by healthcare providers involved in the management of patients with hand, hip and knee OA.

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AB0806 THE EFFECT OF REPETITIVE ACTIVE RANGE OF MOTION VERSUS CONTINUOUS PASSIVE MOTION ON EARLY FUNCTIONAL OUTCOMES AFTER PRIMARY TOTAL KNEE REPLACEMENT

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Background: Continuous passive motion (CPM) is a common procedure in total knee replacement (TKR), but its effectiveness is controversial at early stage after TKR. Some studies have claimed that CPM promoting rapid postoperative recovery and the range of motion (ROM). However, some studies have demonstrated that CPM have any benefit on ROM, length stay of hospital and postoperative recovery (1, 2). Several studies have examined the use of CPM, but there is not any study that compared the effect of repetitive active range of motion (AROM) vs. CPM on early functional outcomes after TKR.

Objectives: The aim of this study was to compare the effect of AROM vs. CPM on early functional outcomes after TKR.

Methods: The study group consisted of 71 patients, who underwent primary TKR because of arthrosis were consecutively allocated to a AROM group (n=40, with