existing options, there is still no general consensus on the choice and priority of the best intra-articular injection in knee osteoarthritis.

Objectives: Our study compare the short and long-term efficacy of the intra articular injections (IAls) of hyaluronic acid (HA), platelet-rich plasma (PRP), plasma rich in growth factors (PRGF), and ozone in patients with knee osteoarthritis (OA).

Methods: In this single-blinded randomized clinical trial, 238 patients with mild to moderate knee OA were randomized into 4 groups of IAls: HA (3 doses weekly), PRP (2 doses with 3 weeks interval), PRGF (2 doses with 3 weeks interval), and Ozone (3 doses weekly). Our outcome measures were the mean changes from baseline until 2, 6, and 12 months post intervention in scores of visual analog scale, Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), and Lequesne index.

Results: A total of 200 patients enrolled final analysis. The mean age of patients was 56.9 ± 6.3 years, and 69.5% were women. In 2 months follow up, significant improvement of pain, stiffness, and function were seen in all groups compared to the baseline, but the ozone group had the best results ($P < 0.05$). In 6 month follow up HA, PRP, and PRGF groups demonstrated better therapeutic effects in all scores in comparison with ozone ($P < 0.05$). At the end of the 12th month, only PRGF and PRP groups had better results versus HA and ozone groups in all scores ($P < 0.05$). Despite the fact that ozone showed better early results, its effects begin to wear off earlier than other products and ultimately disappear in 12 months.

Conclusion: Ozone injection had rapid effects and better short-term results after 2 months, but its therapeutic effects did not persist after 6 months and at the 6-month follow up, PRP, PRGF and HA were superior to ozone. Only patients in PRP and PRGF groups improved symptoms persisted for 12 months. Therefore, these products could be the preferable choices for long-term management.

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AB0879

DOES BODY WEIGHT INFLUENCE THE KNEE INJURY AND OSTEOARTHRITIS OUTCOME SCORE IN PERSONS WITH SYMPTOMATIC KNEE OSTEOARTHRITIS?

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Background: Overweight is a major risk factor for the development and progression of knee osteoarthritis (OA). Weight loss for patients with knee OA has been associated with improvement in self-reported pain and function and is recommended by EULAR as part of the therapeutic management.

Objectives: The aim of the study was to evaluate the relation between overweight and functional impairment in adults with knee OA.

Methods: It was a prospective study conducted in a rheumatologic department over a 4 months period. Patients with symptomatic knee OA based on the ACR criteria, were included. A screening of body mass index (BMI) was carried out for all patients. It was categorized following the WHO classification into: normal ($< 25 \text{ kg/m}^2$), overweight (25 to < 30), obese (up to 30).

Pain level was evaluated using the Visual Analogue Scale (VAS). Function was assessed by the short form of the Knee injury and Osteoarthritis Outcome Score (KOOS-PS) (KOOS-PS scores to 0 representing no difficulty and 100 representing extreme difficulty). The patients' knee radiographies were graded according

to Kellgren Lawrence criteria (KL). The patients were allocated in two groups; as grade I-II KL (Group 1) and grade III-IV KL (Group 2).

Results: We included 143 patients with a mean age of 65.17 ± 10.7 years and 88.1% of women. Patients were from low socio-economic class in 30.8% of cases. Mean disease duration of the KOA was 5.4 years [3months-20 years] and mean BMI was $31.8 \pm 5.6 \text{ kg/m}^2$. Patients were with normal weight in 16.1%, overweight in 19.6% and obese in 64.3%.

Knee OA was bilateral in 85.3% and other OA sites were associated in 37.8% of patients. Mean VAS pain of knee OA was 6.6 ± 1.5 and KOOS-PS was $48.8 \pm 16.5/100$. Concerning the radiographic damage; we found grade I-II (KL) in 22.6% and grade III-IV (KL) in 77.4%.

High BMI ($\text{BMI} \geq 25 \text{ kg/m}^2$) was not significantly associated with worse KOOS score ($p=0.9$), more pain ($p=0.5$) or an increasing severity of radiological knee osteoarthritis ($p=0.14$). Moreover, the level BMI was not associated with the presence of other OA sites ($p=0.9$) or a bilateral KOA ($p=0.07$).

Conclusion: These data, from a subset of participants with symptomatic radiographic knee OA, demonstrate no correlation between obesity and pain, functional impairment and radiographic severity.

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AB0880

NEUROPATHIC PAIN IN PATIENTS WITH KNEE OSTEOARTHRITIS: PREVALENCE AND RELATED FACTORS

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Background: Discordance between radiographic and pain severity in osteoarthritis (OA) has led researchers to investigate other pain mechanisms, including neuropathic pain (NP). Recent meta-analysis concluded that NP prevalence in people with knee or hip OA was 23% [1].

Objectives: The primary objective of this study was to determine the prevalence of NP in patients with painful knee OA. Secondly, we evaluated the relationship between NP and pain intensity, function and radiographic severity of knee OA.

Methods: This cross-sectional study enrolled patients with knee OA (ACR criteria) from a rheumatology outpatient Hospital over a four-month period. Exclusion criteria were: knee surgery, chronic conditions of the nervous system, cognitive or psychiatric disorders. The patient's characteristics and pain severity using the Visual Analogue Scale (VAS) were evaluated. The NP was assessed according to the Douleur Neuropathique 4 questionnaire (DN4) (arabic valid version). Functional impairment was estimated using the short form of the Knee injury and Osteoarthritis Outcome Score (KOOS-PS) (KOOS-PS scores to 0 representing no difficulty and 100 representing extreme difficulty). Radiographs were rated using the Kellgren Lawrence (KL) grade classification (I-IV). Statistical analysis was performed to find the factors closely related with NP.

Results: Ninety three patients with knee OA were included in the study. The mean age was 65.03 ± 18.5 years with a sex ratio of 0.08. Mean duration of symptoms was 3.5 years [3months-20 years]. Concerning the marital status: 53.8% were married, 34.4% were widow and 10.8% were divorced. The majority of patients were illiterate (65.6%) and only 2.2% went to university. Patients were from low socio-economic class in 37.6% of cases. At least one comorbidity was revealed for 90.3% of patients and their mean BMI was 31.6 ± 6.3 [19.9-52.3]. Concerning the clinical features of the KOA, mean VAS pain was 6.6 ± 1.6 and KOOS-PS was 45.6 ± 18.5 . Of the subjects, 22.6% have radiographic at grade II, 57% at grade III and 20.4% at grade IV based on KL grading.

The mean (SD) score by the study participants on the DN4 was 4.9 ± 2.4 . The prevalence of NP ($\text{DN4} \geq 4$) was 71%.

A $\text{DN4 score} \geq 4$ was significantly associated with the VAS pain ($p=0.00$) and the KOOS-PS ($p=0.00$) and the presence of comorbidity ($p=0.04$). However, there was no significant relation between DN4 score and, age, sex, marital status, socio economic class, level of education, BMI and KL grade ($p=0.7$, $p=0.08$, $p=0.7$, $p=0.3$, $p=0.7$, $p=0.7$, $p=0.6$).

Conclusion: Our results highlight the high frequency of NP in patients with knee OA according to the DN4. Knee OA patients with NP encounter clinically relevant functional limitation. Thus, it is important to be aware of this neuropathic component to ensure appropriate management in the treatment of knee OA pain.

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