AB0861

CURRENT PHARMACOTHERAPY FOR KNEE OSTEOARTHRITIS: SPECIFIC FEATURES OF SYMPTOMATIC AND DISEASE MODIFYING EFFECTS

L. Denisov¹, E. Tsvetkova¹, N. Ionichenok¹, A. Lila¹, V.A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation

Objectives: to study the specific features of the symptomatic effect and tolerability of paracetamol (P), glucosamine sulfate (GS), chondroitin sulfate (CS), and meloxicam (M) in patients with knee osteoarthritis (OA).

Methods: An 18-month open-label randomized prospective parallel-group trial enrolled 80 patients with knee OA who fulfilled the American College of Rheumatology criteria and signed the informed consent. They had Kellgren and Lawrence grades I-III OA with visual analogue scale pain intensity of > 40mm in the target knee, a body mass index of < 35 kg/m², and no clinical dysfunctions of vital organs and systems. The patients were randomized into 4 groups: 1) P 2g daily; 2) a standard GS regimen; 3) a standard CS regimen; 4) M 15mg daily. The patients were followed up for 18 months. The effectiveness was evaluated by the WOMAC questionnaire, Lequesne index, and OMERACT-OARSI (D scenario) during 8 visits. Laboratory and clinical examination as well as electrocardiography were performed. Adverse events were recorded during each visit.

Results: After 4 weeks of treatment, symptomatic improvement was noted in all groups; however, the best effect was achieved by the use of M and continued to the end of the study. The percentage of patients reacting to the therapy by the OMERACT-OARSI criteria was highest in M group (100%), reached 90% in GS, 85% in CS groups and 75% in P group. In the groups of P, GS and CS failed to respond to treatment 25, 10, and 15% correspondingly. However, medium narrowing of articular space (NAS) was measured at the end of the study and was significantly lower in GS group (-0.07; p=0.0002), CS (-0.1; p=0.004) and M (-0.06; p=0.006). Besides, the quota of patients without heavy NAS (> 0.5mm in medial KJ) was the lowest in GS group as compared with three other groups.

Conclusion: The results of this trial suggest that it is expedient to use GS, CS and M long, support the recent guidelines of the European Society for Clinical and Economic aspects of Osteoporosis and OA (ESCEO), and can give proofs of the efficiency and safety of GS, CS, and M used in the treatment of knee OA.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.1160

AB0862

CONSENSUS STATEMENT ON INTRA-ARTICULAR INJECTIONS OF PLATELET-RICH PLASMA FOR THE MANAGEMENT OF KNEE OSTEOARTHRITIS

F. Eymard¹, P. Ornetti², J. Maillet³, E. Noel⁴, P. Adam⁵, V. Legré Boyer⁶, T. Boyer⁷, F. Allali⁸, V. Grémeaux Bader⁹, J. F. Kaux¹⁰, K. Louati¹¹, M. Lamontagne¹², F. Michel¹³, P. Richette³, H. Bard¹⁴ on behalf of GRIP (Groupe de Réflexion sur les Injections de PRP; PRP Injection Research Group). ¹AP-HP Henri Mondor Hospital, Rheumatology, Créteil, France; ²Dijon University Hospital, Rheumatology, Dijon, France; ³AP-HP Lariboisière Hospital, Rheumatology, Paris, France; ⁴Santy Orthopedic Center, Lyon, France; ⁵Medipole Garonne Sport Clinic, Imaging Department, Toulouse, France; ⁶American Hospital Paris, Neuilly sur Seine, France; ⁷IAL Nollet, Paris, France; ⁸El Ayachi Hospital, Rheumatology, Salé, Morocco; ⁹Lausanne University Hospital, Swiss Olympic Medical Center, Sport Medicine Unit, Division of Physical Medicine and Rehabilitation, Lausanne, Switzerland; ¹⁰University Hospital of Liège, Physical, Rehabilitation Medicine and Sports Traumatology, SportS2, FIFA Medical Centre of Excellence, IOC Research for Prevention of Injury and Protection of Athlete Health, FIMS Clinical Centre of Sports Medicine, Liège, Belgium; ¹¹AP-HP Saint-Antoine Hospital, Rheumatology, Paris, France; ¹²Montreal University Hospital Center, Montréal, Canada; ¹³CHRU hôpital Jean-Minjoz, Physical Medicine and Rehabilitation Department, Besançon, France; ¹⁴Cabinet médical Vaudoyer, Paris, France

Background: There has been much debate regarding the use of intra-articular injections of platelet-rich plasma (PRP) as symptomatic treatment for knee osteoarthritis. The heterogeneity of the preparation and injection protocols limits the extrapolation of data from randomized controlled trials and meta-analyses.

Objectives: The objective of this expert consensus was to develop the first clinical practice recommendations for PRP injections in knee osteoarthritis.

Methods: Fifteen physicians (10 rheumatologists, 4 specialists in rehabilitation and sport medicine and 1 interventional radiologist) from different countries were selected given to their expertise in the fields of PRP and osteoarthritis. Twenty-five recommendations were finally retained after several meetings using the modified Delphi method to establish clinical consensus. All experts voted their agreement or not for each recommendation using a score between 1 (totally inappropriate) and 9 (totally appropriate).

Depending on the median value and extreme scores, recommendations were judged as appropriated or unappropriated with a strong or relative agreement but could also be judged as uncertain due to indecision or absence of consensus.

Results: The main recommendations are listed below:

- Intra-articular injections of PRP constitute an efficient treatment of early or moderate symptomatic knee osteoarthritis. Median = 8 [6-9] – Appropriate. Relative agreement.
- Intra-articular injections of PRP may be useful in severe knee osteoarthritis (Kellgren-Lawrence grade IV). Median = 7 [6-7] – Appropriate. Relative agreement.
- Intra-articular injections of PRP in knee osteoarthritis should be proposed as second-line therapy, after failure of non-pharmacological and pharmacological (oral and topic) symptomatic treatment. Median = 9 [5-9] – Appropriate. Relative agreement.
- Intra-articular injections of PRP should not be performed in osteoarthritis flare-up with significant effusion. Median = 7 [5-9] – Appropriate. Relative agreement.
- Intra-articular PRP treatment may include 1 to 3 consecutive injections. Median = 9 [7-9] – Appropriate. Strong agreement.
- Leukocyte-poor PRP should be preferred for knee OA treatment. Median = 8 [5-9] – Appropriate. Relative agreement.
- PRP injections should be performed under ultrasound or fluoroscopic guidance. Median = 8 [3-9] – Uncertain. No consensus.
- PRP should not be mixed with injectable anesthetic or corticosteroid. Median = 9 [6-9] – Appropriate. Relative agreement.

Conclusion: Twenty-five recommendations were discussed by an international multidisciplinary task force group in order to provide a basis for standardization of clinical practices and future research protocols.

Disclosure of Interests: Florent Eymard Consultant of: Regenlab, Paul Ornetti: None declared, Jérémy Maillet Consultant of: Regenlab, Eric Noel Consultant of: Regenlab, Philippe Adam Consultant of: Regenlab, Virginie Legré Boyer Consultant of: Regenlab, Thierry Boyer Consultant of: Regenlab, Fadoua Allali: None declared, Vincent Grémeaux Bader: None declared, Jean-François Kaux: None declared, Karine Louati: None declared, Martin Lamontagne Consultant of: Pendopharm, Fabrice Michel: None declared, Pascal Richette: None declared, Hervé Bard Consultant of: Regenlab

DOI: 10.1136/annrheumdis-2020-eular.618

AB0863

RADIOGRAPHY VERSUS ULTRASONOGRAPHY – WHICH IMAGING MODALITY TELLS US MORE ABOUT PAIN SEVERITY IN KNEE OSTEOARTHRITIS?

G. Gerganov¹, T. Georgiev¹, T. Shivacheva^{1,2}. ¹UMHAT "St. Marina", Medical University - Varna, Clinic of Rheumatology, Varna, Bulgaria; ²Medical University - Varna, 1st Department of Internal Diseases, Varna, Bulgaria

Background: Osteoarthritis (OA) is a leading cause of disability worldwide and pain is its cardinal symptom. Ranging from structural injuries to central sensitization, multifactorial mechanisms play an important role in pain perception in patients with knee OA (KOA) defining a discrepancy between pain and structural damage. Imaging modalities such as radiography and musculoskeletal ultrasonography may assess those structural findings and both are well embedded in routine clinical practice. However, their association with pain severity is poorly studied.

Objectives: To evaluate the place of X-ray- and ultrasound-derived parameters of structural damage for pain perception in knee osteoarthritis patients.

Methods: Sixty-four knees from 38 patients with KOA fulfilling the ACR criteria were assessed. The pain severity was evaluated in all knees by 100-millimeters (mm) visual analogue scale (VAS). Anteroposterior radiographs of the fully extended knees in an upright weight-bearing position were obtained and images were evaluated according to the Kellgren-Lawrence (KL) and OARSI atlas. All patients were investigated with a portable MyLab 25 Gold system equipped with an LA435 transducer (Esaote SpA, Genoa, Italy) by two experienced ultrasonographers. The presence or absence of synovial thickening, effusion in the suprapatellar bursa, and popliteal cyst were assessed. Medial meniscal extrusion and medial and lateral femoral cartilage thickness (medial and lateral) were measured in mm in full extension and flexion position, respectively. Femoral osteophytes were semi-quantitatively scored using a scale consisted of four grades (0-3).

Results: The levels of pain differed significantly in the KL groups (p = .001) and in the groups classified according to the medial tibiofemoral compartment narrowing defined in line with the OARSI atlas (p = .005). The other knee osteoarthritis radiographic characteristics derived from the OARSI atlas did not correlate with the pain. From the assessed ultrasound parameters, medial