out strategies for pain management could improve this PCS values and there-fore reduce the need for TKR. Furthermore, this study also highlights the two main types of OA etiology: mechanical and inflammatory. It suggests that inflammation is mostly responsible for OA progression in patients with low BMI, and plays a strong role in women pathology. Finally, specific treatments target-ing central pain sensitization could also improve the management of the pathology in women.

References:
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FRIO427

EULAR RECOMMENDATIONS FOR INTRA-ARTICULAR TREATMENTS FOR ARTHROPATHIES

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Background: Intra-articular therapies (IAT) are widely used in clinical prac-tice to treat patients with rheumatic and musculoskeletal disorders (RMDs).

Methods: At a first face-to-face meeting, the results of an overview of system-atic reviews were presented to the multidisciplinary task force of members from 8 countries. The aim, scope and outline of the taskforce were also established at this meeting. Thirty-two clinical questions ranked for priority (relevance for practice plus feasibility) drove the systematic reviews performed by two fellows. In addition, two surveys addressed to physicians, health professionals and patients throughout Europe were agreed to acquire more background infor-mation. At the second face-to-face meeting, the evidence for each research question was discussed, and each recommendation was voted in a first Delphi round. Level of agreement was numerically scored 0 to 10 (0 completely disagree, 10 completely agree). All panellists voted anonymously using a sli-doo app. Agreement needed to be greater than 80% to be included in a second Delphi round, which also allowed reformulation of statements. Finally, a third Delphi round was sent to the taskforce. The level of evidence was assigned to each recommendation according to the EULAR SOP for establishing recommendations.

Results: Recommendations focus on practical aspects for daily practice to guide health professionals before, during and after IAT in adult patients with peripheral arthropathies. Five overarching principles were established, together with 11 recommendations that address the following issues: (1) patient information; (2) procedure and setting; (3) accuracy issues; (3) rou-tine and special antisepsic care; (4) safety issues and precautions to be addressed in special populations; (5) efficacy and safety of repeated joint injections; (6) the usage of local anesthetics; and (7) aftercare. The docu-ment includes the supporting evidence and results from the surveys, level of evidence and agreement.

Conclusion: We have developed the first evidence and expert opinion based recommendations to guide health professionals using IAT.

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FRIO428

RESULTS FROM A CROSS-SECTIONAL, OBSERVATIONAL STUDY TO ASSESS INADEQUATE PAIN MANAGEMENT IN PATIENTS WITH KNEE AND/OR HIP OSTEOARTHRITIS IN CHINA


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Background: Osteoarthritis (OA) of the knee and hip is a leading cause of disability worldwide, particularly due to the primary symptom of pain in the weight-bearing joints. There is limited data that characterizes patients who expe-rience moderate to severe pain despite analgesic treatment in China.

Objectives: This study estimates the real-world prevalence of inadequate pain relief (IPR) among patients with knee and/or hip OA who have been prescribed analgesic therapy and characterizes this patient population. The study was con ducted in China, the Philippines, Thailand, Russia, and Mexico. This abstract presents results from China.

Methods: This is a multinational, multi-site, cross-sectional, observational study. Physicians managing patients with OA were recruited and asked to enroll patients over 50 years of age with knee and/or hip OA who had been prescribed topical and/or oral pain medication for at least 30 days prior to study visit. Patients with a score of <4/10 for pain, associated with a one-point reduction in health-related quality of life (HRQOL) using patient reported outcome (PRO) instruments. Physicians abstracted data from patient charts. IPR was defined as an average pain score of >4/10 on Brief Pain Inventory Question #5 (average pain). Statistical tests including chi-square for categorical variables and Mann-Whitney Wilcoxon test for continuous variables were conducted to assess differences in demographic and clinical characteristics as well as PIRs between patients with and without IPR. Multivariate regression analysis was conducted to assess the relationship between IPR and PROs.

Results: 571 patients treated at 10 hospital centers in China were enrolled. 73% were female, the mean (SD) age was 62 (8.32) years. The number of years with OA ranged from less than one year to over 37 years, suggesting a broad sam-ple of patients. Most patients were impacted by knee OA only (90%). Almost half (43%) of the study population, had received one or more injections. IPR tended to be older, have greater prevalence of obesity, have more comorbidities, and had longer disease duration. The majority (98%) of patients were receiving nonsteroidal anti-inflammatory drugs (NSAIDS), followed by chondroprotective
medications (23%). However, more patients with IPR mentioned being dissatisfied with treatment (38% vs. 21%). After adjusting for covariates, patients with IPR reported worse HRQOL, more functional limitations, and reduced work productivity compared to patients without IPR.

Conclusion: IPR is highly prevalent among individuals with knee and/or hip OA in China and is associated with decreased HRQOL and work productivity, impaired function, and treatment dissatisfaction. Developing awareness among healthcare professionals about the presence and potential impact of IPR is important for the ultimate improvement of OA patient management.

<table>
<thead>
<tr>
<th>PRO</th>
<th>No IPR</th>
<th>IPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ-5D Index (N=328)</td>
<td>0.72 0.01</td>
<td>0.49 0.02</td>
</tr>
<tr>
<td>EQ-5D VAS (N=243)</td>
<td>72.3 0.85</td>
<td>65.5 1.00</td>
</tr>
<tr>
<td>WOMAC Pain Subscale (N=328)</td>
<td>13.1 0.78</td>
<td>22.7 1.52</td>
</tr>
<tr>
<td>WOMAC Stiffness Subscale (N=328)</td>
<td>4.2 0.27</td>
<td>7.4 0.51</td>
</tr>
<tr>
<td>WOMAC Physical Function Subscale (N=328)</td>
<td>44.8 2.61</td>
<td>76.9 0.07</td>
</tr>
<tr>
<td>Work Productivity Loss (N=236)</td>
<td>30.0 4.07</td>
<td>473.10 4.16</td>
</tr>
</tbody>
</table>

Multivariate analysis adjusted for age, year since OA diagnosis/follow-up, gender, BMI, number of medication classes, insurance, physician specialty/academic responsibilities, number of affected joints, diabetes, CVD, hyperlipidemia/hypertension, and depression. All differences were statistically significant (p < 0.05) except work productivity loss (p = 0.11).


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UROLITHIN B ATTENUATES THE INFLAMMATORY AND NITROSATIVE STRESS ON INTERLEUKIN-1 INDUCED CHONDROCYTES

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Background: Osteoarthritis (OA) is one of the most common degenerative disorders with cartilage degeneration especially to the elderly resulting in disability. Many inflammatory cytokines involve the pathogenesis of the OA and lead to destruction and decomposition of articular cartilage, including interleukin 1 beta (IL-1b). Urolithin B is a small polyphenolic compound, produced by gut flora from ellagitannins-rich foods, such as pomegranate, strawberries, raspberries, etc. Urolithin B has been documented in anti-inflammatory and antioxidant properties. However, the mechanism underlying the effects of Urolithin B on IL-1 stimulated human osteoarthritis (OA) chondrocytes remains unrevealed.

Objectives: The aim of this study was to investigate the biologic effects of Urolithin B on OA models and associated mechanism.

Methods: Primary culture of human chondrocyte, knee joint obtained from total knee replacement of patients with osteoarthritis, were used IL-1b-induced and treated with/without 100μM Urolithin B for 24 hours respectively. Total cell lysates were collected for western blotting to analyze the catabolic molecules. Culture medium were collected for gelatin zymography to analyze the secretion of MMP 2 and 9.

Results: Urolithin B inhibits the overexpression of not only inflammatory marker COX2 and nitrosative marker NOS2, but also matrix metalloproteinases (MMPs) 1, 3, 13 in IL-1β induced chondrocytes by western blotting. It also restored the IL-1β induced glycosaminoglycan degeneration in ex vivo articular cartilage evaluated by Safranin O stain. Meanwhile, Urolithin B can activate autophagy, increasing LC3 II/I ratio, in IL-1β induced chondrocytes.

Conclusion: Collectively, the study demonstrates that Urolithin B may be of value in the treatment of osteoarthritis through its anti-inflammatory, anti-oxidant and anti-proteinase activities.

References:


Disclosure of Interests: None declared

References:


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