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DETERMINANTS OF CERVICAL PROGRESSION IN INDIVIDUALS WITH AXIAL SPONDYLOARTHRITISH. Ferjani¹, O. Boudriga¹, D. Ben Nessib¹, K. Maatallah¹, D. Kaffel¹, W. Hamdi¹¹Kassab Institute of Orthopedics, Rheumatology, Tunis, Tunisia

Objective: The assessment of cervical, lumbar spinal structures, and hip joints holds significant importance, as reflected in variables within scoring systems for patients with axial spondyloarthritis (axSpA). This study aimed to investigate the factors contributing to cervical spinal progression in patients with axSpA.

Methods: Patients diagnosed with axSpA, whose cervical modified Stoke Ankylosing Spondylitis Spinal Score (mSASS) was evaluated through cervical X-rays, were included in the study. Demographic, clinical, and laboratory characteristics were recorded. The relationship between the presence of cervical structural damage and other factors was assessed through both univariate and multivariate analyses.

Results: Among the 115 patients in the study, 65.22% were male, and the median age at diagnosis (IQR) was 33 (14). Additionally, 65.22% of the patients had radiographic axSpA. Demographic, clinical, and laboratory characteristics were comparable in the study groups. Cervical involvement was identified in 21 patients (18.26%). The presence of cervical structural damage was associated with symptom duration ($p=0.004$), age at symptom onset ($p=0.011$), age at diagnosis ($p<0.001$), the presence of total ankylosis in sacroiliac joint X-ray ($p<0.001$), cervical mSASS score ($p<0.001$), the presence of cervical syndesmophyte ($p<0.001$), and baseline lumbar mSASS score ($p<0.001$). Cervical progression did not show associations with HLA-B27, smoking, the presence of either extramusculoskeletal or peripheral involvement, nor with disease activity scores (BASDAI, ASDAS-CRP). In multivariate analysis, age at diagnosis ($p<0.001$), the presence of cervical syndesmophyte ($p=0.014$), and sacroiliac joint score ($p=0.004$) were identified as factors associated with cervical progression.

Conclusion: It is essential to consider age at diagnosis, the presence of spinal involvement, and sacroiliac joint score as potential predictors of cervical spinal progression during the follow-up of axSpA patients.

P1009

COST-EFFECTIVENESS ANALYSIS OF PHARMACEUTICAL-GRADE CHONDROITIN SULFATE IN THE TREATMENT OF KNEE OSTEOARTHRITIS: A POST HOC ASSESSMENT DERIVED FROM INDIVIDUAL PATIENT DATA FROM A RANDOMISED CLINICAL TRIALO. Bruyère¹, J.-Y. Reginster¹

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Objective: In a previously published randomised, placebo-controlled trial, 800 mg/d of pharmaceutical-grade chondroitin sulfate (CS) was shown to be superior to placebo in reducing pain and improving function over 6 months in patients with symptomatic knee osteoarthritis (OA) (Reginster J-Y, et al. Ann Rheum Dis 2017;76:1537). The aim of the current post hoc analyses is to evaluate the cost-effectiveness of CS compared to placebo in a European perspective using individual patient data from this clinical trial.

Methods: Patients with knee OA randomised to CS or placebo were followed up at 1, 3 and 6 months. The algo-functional Lequesne index was used to derive the EQ-5D-5L score based on a validated formula. The EQ-5D-5L scores at each time point were used to calculate the changes in quality-adjusted life years (QALYs) with the area-under-the-curve (AUC) method. Costs were assessed using the average price of CS in the countries where (1) the original study took place and (2) CS is currently marketed. The costs of CS in 3 countries were then used (i.e., Czech Republic, Italy and Switzerland). The incremental cost-effectiveness ratio (ICER) threshold for CS to be considered cost-effective was set at 91,8705 EUR per QALY (equivalent to the usually recommended threshold of US \$100,000). The study used an intention-to-treat (ITT) population, i.e., patients who received one dose of the study drug, and imputed missing values using the basal observation carried forward method.

Results: No significant differences in baseline characteristics were observed between the CS group (N=199) and the placebo group (N=205). The mean cost of CS for 6 months of treatment was 179 EUR. After 6 months of treatment, CS showed a mean ICER of 31,415 EUR per QALY gained, indicating cost-effectiveness compared to placebo.

Conclusion: These results highlight the role of CS as a cost-effective therapeutic option in the management of OA. However, further studies taking into account the use of other health care resources are warranted for a more complete understanding.

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MAPPING THE LEQUESNE FUNCTIONAL INDEX INTO THE EQ-5D-5L UTILITY INDEX IN PATIENTS WITH KNEE OSTEOARTHRITISN. Dardenne¹, A.-F. Donneau¹, O. Bruyère²

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Objective: To map the Lequesne Index onto the EuroQol 5 Dimension (EQ-5D-5L) utility index in patients with knee osteoarthritis (OA).

Methods: The baseline data from a previously published randomized controlled trial were used to develop mapping functions. All patients diagnosed with knee osteoarthritis (OA) completed both the EQ-5D-5L and Lequesne questionnaires. Out of all patients in-