FRI0395

PROGNOSIS OF TREATMENT OUTCOMES IN PATIENTS WITH ANKLE JOINT OSTEOCHONDRAL LESIONS AND DEFECTS

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Background: in most cases osteochondral lesions and defects (OHL) in the ankle joint are the consequences of trauma, and the results of their treatment depend on a number of factors. Some factors are directly related to the area of damage (depth, localization, size), others are connected to the patients age, presence of degenerative changes in the affected joint, comorbidities, body mass index (BMI), etc.

Objectives: to develop an effective system for predicting long-term outcomes in patients with ankle joint OHL.

Methods: 24 prognostic factors (age, gender, severity of injury, Charlson comorbidity index, BMI, OA stage, size of defect, localization of injury, degree of osteoporosis, contracture, instability, etc.) influence on the long-term (36 ± 4.5 months) treatment outcomes was analyzed by Bayesian probability analysis in 223 patients after ankle joint OHL. The prognostic coefficient (PC) was calculated by Wald sequential analysis for each prognostic factor and prognostic system was developed for prediction of high, medium or low probability of positive treatment result, which was determined as a functional joint outcome in AOFAS 75 - 100 points.

Results: the greatest predictive value for the positive result of OHL treatment had the following factors: age < 40 years (PC = 8.5); BMI < 25 kg/m² (PC=7.0), time from trauma < 1 year (PC = 4.1); OA stage < II (PC = 7.2); size of OHL < 1.0 cm²; volume < 1.5 cm³ (PC = 8.0). The prognostic system is based on the calculating of total factors values for individual patients case in points (Σ PC). If Σ PC is less (-20) the probability of achieving a positive joint-saving result is absent; at Σ PC from (-20) to (+40) the probability is medium; and at Σ PC above (+40) probability is high. The accuracy of the prognostic assessment was retrospectively tested with a 95% confidence interval, the accuracy of predictive method – 84,17% (76,59-89,62)%.

Conclusion: the size and volume of osteochondral damage, BMI, age and time from trauma has the greatest predictive value for the determination of the long-term results of treatment in patients with ankle joint OHL; use of the developed prognostic method can be used as a basis for the clinical decision making in choosing different approaches in treatment.

Disclosure of Interests: None declared

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FRI0396

HOW DOES OSTEOARTHRITIS PAIN IMPACT FUNCTION, MOBILITY AND REQUIREMENT FOR HELP IN DAILY ACTIVITIES IN EUROPEAN PATIENTS?

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Background: Symptomatic osteoarthritis (OA) leads to functional limitations and loss of independence. OA management focuses on pain relief and preserving physical function using non-pharmacologic and pharmacologic therapy. Additionally, patients commonly manage OA pain by avoiding activities that exacerbate their pain. Informal care, i.e. assistance from an unpaid caregiver, plays a major role in the total care provided to patients with chronic diseases like OA.

Objectives: To evaluate how OA pain severity affects physical functioning and the subsequent need for assistance with mobility and daily activities in 5 EU countries: France, Germany, Italy, Spain and UK.

Methods: Data were drawn from the Adelphi OA Disease Specific Programme (2017-18), a point-in-time study of physicians and their OA patients. Patients rated their average pain intensity over the last week on a 0-10 scale (0 = no pain; 10 = worst possible pain) and were then categorised into mild (0-3), moderate (4-6) and severe (7-10) pain groups. Patients also provided an assessment of their physical function (0-10 WOMAC scale where higher scores indicated greater functional impairment), impact on mobility, whether caregiver assistance was required, daily activities requiring caregiver assistance and home modifications made due to their OA. Physicians also rated patients' functioning on

a 0 to 10 scale (0 = fully functional; 10 = completely impaired). Comparisons among pain severity groups were made using chi-squared tests and analysis of variance.

Results: The analysis included 1750 OA patients: 24% mild pain (n=413); 47% moderate pain (n=822); 29% severe pain (n=515). The patients were predominantly women (58%) and had a mean (SD) age of 65.6 (11.5).

Increased pain severity was associated with greater functional impairment scores as reported by patients (WOMAC scores: mild pain=2.1; moderate pain=4.1; severe pain=5.9) and physician-rated functional impairment (mild pain=3.5; moderate pain=4.3; severe pain=5.6). Mobility was impacted for 78% of patients with severe pain (vs. 41% mild; 63% moderate) and the need for a walking aid such as a walking stick or walking frame increased with worsening severity; wheelchair assistance was needed for 7% of severe patients (compared with <1% of mild or moderate patients). Furthermore, 31% of patients with severe pain reported having to modify their home due to their OA (vs. 11% mild; 18% moderate [p<0.001]), typically adapting their bathroom (23%) or fitting a stairlift (6%).

The need for assistance from a caregiver to help with daily activities was associated with an increase in patients' pain (9% mild; 20% moderate; 42% severe [p<0.001]). For most patients this was an immediate family member, however, the proportion of patients paying for professional care also increased with severity (1% mild; 2% moderate; 7% severe). Taking the patient to work or doctor's appointments; help with shopping; preparing/cooking meals and help with travelling out of the home were most frequently reported activities needing caregiver assistance.

Conclusion: In this study of European patients, increased pain severity was associated with greater functional impairment and impact on mobility as expected; however, this study highlights the substantial need for assistance with daily activities as well as modifications to the home. The unseen costs to the patient with moderate to severe OA pain are significant.

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FRI0397

THE IMPACT OF OSTEOARTHRITIS DISEASE SEVERITY ON HEALTHCARE RESOURCE USE: ANALYSIS OF REAL-WORLD EUROPEAN DATA

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Background: Osteoarthritis (OA) is a chronic joint disease associated with pain and impaired activity. With increasing obesity trends and an ageing population, the prevalence of OA is expected to rise in the future. This represents an increasing societal problem which will lead to an increased burden on healthcare services.

Objectives: To understand the pattern of healthcare resource utilisation (HCRU) across France, Germany, Italy, Spain and the UK, as OA disease severity increases.

Methods: Data were drawn from the Adelphi OA Disease Specific Programme (2017-18), a point-in-time study of physicians and their OA patients. OA disease severity was reported by physicians, who categorised patients' OA severity as mild, moderate or severe. Patients were excluded from the analyses if they suffered from back and neck OA only, and shoulder OA that had not been diagnosed by X-ray. Physicians provided information, on a patient record form, about OA-related visits to healthcare professionals (HCPs), tests/scans conducted, emergency room (ER) visits and surgeries. Statistical comparisons among disease severity groups were made by analysis of variance and chi-squared tests.

Results: The study included 489 physicians (primary care physicians, rheumatologists, orthopaedists) reporting on 3596 of their patients with OA: 24% mild (n=874), 53% moderate (n=1904) and 23% severe (n=818). Over the last 12