

the female to male ratio 5.5:1 in the north and 2:1 in the south. Time period from the first symptoms occurrence to the RA diagnosis was 17.7 (13.2) months for the northern part and 25.0 (16.9) for the southern; 20.6 (14.9) for Serbia; in that period patients were mostly treated with NSAIDs (82%) and physical therapy (30%); short-lasting corticosteroids were given to 13%, peroral corticosteroids to 4% and no patients were treated with DMARDs.

Conclusions: RA prevalence in the southern and northern part of Serbia is in line (0.42% [95% CI 0.12;0.72]) vs 0.30% [95% CI 0.09;0.51]), being more frequently presented in females as compared to males (five times more in the north and two times more in the south). Delay in diagnosis as compared to the first symptoms occurrence was 21 months and during that time no patients were treated with DMARDs.

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AB1150 SLEEP HEALTH AND QUALITY OF LIFE IN PATIENTS WITH KNEE OSTEOARTHRITIS BEFORE AND AFTER TOTAL KNEE REPLACEMENT

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Background: Studies report that sleep disturbances are often associated with chronic musculoskeletal disease. There is no agreed definition of sleep health, but some characteristics, such as sleep duration (number of hours daily) and sleep quality or satisfaction (subjective evaluation of good or poor sleep) are used to evaluate sleep health. In a previous study in patients with severe osteoarthritis awaiting total knee replacement (TKR), patients reporting good quality sleep had better health-related quality of life (HRQL) measured by the specific WOMAC and generic SF-36 questionnaires.

Objectives: To measure sleep health in patients included on a waiting list for TKR and 12 months after TKR.

Methods: Prospective study with a 12-month follow up. Sociodemographic and clinical variables were determined. Sleep health: hours of sleep and reparative sleep (RS) were examined using the question "How well do you usually sleep?" measured on a Likert scale (1=good [RS], 2=regular, 3=badly, 4=with medication/treatment (non-reparative sleep [NRS])). Function and pain were measured using the WOMAC and SF-36 questionnaires. Comparisons were made using t-tests (paired samples) and McNemar's test. Linear regression models were used to analyze associations. Dependent variables: WOMAC and SF-36 pain and function dimensions; independent variables: sleep quality, age, sex, BMI, number of comorbidities, depression/anxiety.

Results: 105 patients (79% female, mean age 69.39 years [SD 8.3]) were included. 80% had ≥2 comorbidities (mean 2.71 [SD 1.8]), mean BMI was 33.68 (SD 6.7), 32 had depression/anxiety, and mean sleep duration was 6.63 hours (SD 1.4). 12 months after TKR there were significant improvements in WOMAC dimension scores (mean >25 points, p<0.001) and SF-36 scores (mean >19). At study inclusion, 23% reported RS with a mean sleep duration of 7.5 hours (SD 1.1) vs. 6.24 hours (SD 1.5) in NRS patients (p=0.002). 12 months after TKR, 40% of patients had RS (p=0.029). Patients with RS had better scores in all quality of life dimensions (<10 points) than those with NRS (p<0.05) at baseline and at 12 months. Multivariate analysis showed RS was independently associated with pain and function (WOMAC and SF-36) (p<0.007).

Conclusions: Sleep health was associated with better HRQL before and after TKR. Although more patients had RS after TKR, 60% of patients continued not to have sleep health. Although often undervalued clinically, sleep health is closely associated with the health status.

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AB1151 MONTH OF BIRTH AFFECTS THE RISK OF RHEUMATIC DISEASES: A NATIONWIDE CASE-CONTROL STUDY

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Background: There have been several studies which demonstrated the impact of birth on the risk of certain diseases such as asthma or cardiovascular diseases.

However, rheumatic diseases have not yet been thoroughly investigated in terms of association with birth month.

Objectives: In this study, we sought to determine whether birth month or season could affect the risk of rheumatologic diseases.

Methods: The birth month patterns of patients with rheumatic diseases were compared with those of general population. We utilized the claims data of Health Insurance Review and Assessment Service (HIRA) which covers nearly 90% of total population in Korea. The associations between birth month/season and 32 diseases were investigated using logistic regression.

Results: Our dataset included 17,247,458 (male 8,224,670; female 9,022,788) individuals from HIRA database from January, 1997 to August, 2015. Among 27 rheumatic diseases, 8 diseases including Crohn's disease (CD), ulcerative colitis (UC), rheumatoid arthritis (RA), systemic lupus erythematosus, polymyalgia rheumatica (PMR), ankylosing spondylitis (AS), multiple sclerosis, gout, fibromyalgia (FMS) were significantly associated with birth month (P<0.05). In terms of seasonality, CD, UC, RA, Sjogren's syndrome, PMR, AS, Gout, and FMS demonstrated significant difference. CD, UC and AS showed higher prevalence in individuals born in winter and lower prevalence in summer. On the other hand, people who were born in summer showed higher possibility to have gout and FMS compared to those born in winter. In consistent with previous reports, type 1 diabetes is more prevalent in those born in winter. Angina and myocardial infarction showed higher prevalence in patients born in spring and lower in fall. This consistency reflects the relevance of our dataset and methodology.

Conclusions: We found significant impacts of birth month/season on various rheumatic diseases. Seasonal variation of infective agents, sun exposure or food ingestion during gestation or early infancy may explain the association between birth month/season and certain disease development.

Disclosure of Interest: None declared

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AB1152 THE INCIDENCE OF HYPERSENSITIVITY TO NSAIDS IN THE GROUP OF PATIENTS WITH MUSCULOSKELETAL DISORDERS

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Background: Non-steroidal anti-inflammatory drugs (NSAIDs) are among the most common cause of drug hypersensitivity reactions (DHR). Recent studies show that the prevalence of hypersensitivity reaction to drug is particularly in Poland.

Objectives: To assess the frequency and the risk of developing NSAID hypersensitivity in patients with chronic disorders of the musculoskeletal system.

Methods: The study group consisted of 200 patients (age 19–88 years - 54.5±14, women-161, men-39) hospitalized in the Department of Rheumatology in 2015–2016. All patients filled questionnaire regarding symptoms of DHR after ingestion of non-steroidal anti-inflammatory drugs. The presence of DHR, clinical pattern of the reaction, frequency of NSAIDs administration and comorbidities have been studied. In statistical studies the main risk factors were defined.

Results: Seventy-seven patients from study group (38.5%) reported symptoms that occurred within 24 hours after NSAIDs ingestion. Symptoms characteristic for hypersensitivity reaction were reported by 40 patients (20%). Respiratory symptoms like dyspnea and/or cough were reported by 22 patients (11%). Cutaneous symptoms (urticaria/angioedema/dermal flush) were reported also by 29 patients (14.5%). Three patients experienced loss of consciousness. Thirty-seven patients reported isolated stomach cramps.

The symptoms developed usually between 2–12 hours after drug intake. In 37 patients oral administration caused DHR reaction, moreover in 14 patients also topical application led to adverse reaction. In most of patients reaction appeared due to COX-1 inhibitor and interestingly in 3 patients reaction was evoked by celecoxib which is perceived to be safe alternative for patients with NSAIDs hypersensitivity. Chronic urticaria, asthma and systematic drug intake occurs the main risk factors of hypersensitivity.

Conclusions: Drug hypersensitivity reactions are reported very frequently in population of patients with chronic musculoskeletal disorders. Our studies suggest that patients taking protracted NSAIDs are in group with high risk of drug hypersensitivity development.

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AB1153 OSTEOPOROSIS RISK FACTORS IN PARTICIPANTS OF HEALTHY AGING ACADEMY

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Background: Osteoporosis is a major cause of morbidity and mortality in elderly population. It is known that the mortality rate in European population within 1 year of hip fracture is about 30%, and another 30% of patients need long term nursing for the rest of their life. However, the prevalence and associated risk factors in the Polish elderly population have not been well documented. The aim of the