(group C). RP severity was evaluated through a visual analogue scale (VAS) from 0 to 10. Group A and C patients were evaluated at baseline and after 3 months. Group B were evaluated at every infusion for 3 months. Environmental temperature for each patient was calculated as the mean temperature during the week before the evaluation in the place of residence (data supplied by Meteo Operations Italia (MOPI) SrL – Centro Epson Meteo). Moreover for each participations demographic and disease characteristics were collected at baseline.

Results: 96 patients were enrolled in the study: 52 in group A, 24 in group B, and 20 in group C. Of these 35, 21 and 16 respectively completed the study.

RP VAS was related to the average temperature observed the week before the evaluation at place of residence. In group A, VAS RP decreases of −0.072 for a growth of one grade of the temperature (IC 95%: −0.206–0.061, p-value=0.297). In group B, VAS RP decreases of −0.278 for a growth of one grade of the temperature (IC 95%: −0.397 – −0.160, p-value<0.001). In group C, VAS RP decreases of −0.053 for a growth of one grade of temperature (IC 95%: −0.201–0.095, p-value=0.483).

Conclusions: RP severity, as assessed by VAS, showed a correlation with the environmental temperature. This information could support the seasonal administration of IV ILO only during the coolest periods of the year.

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AB1354 RHEUMATOID ARTHRITIS IN ADULTS IN AN URBAN AREA: TRENDS FOR INCIDENCE, PREVALENCE AND HOSPITALISATION RATES FOR A 10-YEAR PERIOD

V. Dostanko[1], V. Yagur[1], A. Rekun[2], A. Tushina[1], N. Dostanko[1]. *[1]2-d Department of Internal Medicine, BSMU*; *[2]Rheumatology Department, 9-th Minsk City Clinical Hospital, Minsk, Belarus*

Background: Rheumatoid arthritis (RA) is the most common inflammatory polyarthropathy. According to the previously published data its prevalence was 0.3%–1.5% and incidence – about 0.01%–0.02%[1,2] with some variations due to genetic and ethnical factors.[3] During last decades significant progress has been achieved in early diagnostic and treatment of RA. Nevertheless a tendency for the increase of both incidence and prevalence of RA was reported lately by some national registers.[4]

Objectives: We estimated incidence, prevalence and hospitalisation rates for RA in Minsk (the Republic of Belarus) for a 10 year period.

Methods: Minsk is a typical urban area which is considered to be representative for the urban population of the whole country. The data on the new onset RA and the first visit for RA in a corresponding year were collected from all rheumatologic services of Minsk for the period 2005–2015. Only patients older than 18 years old with the diagnosis of RA according to the ICD-10 (M05-M06) were included. Demographic data on the population of the Republic of Belarus were obtained from the annual Statistical bulletins of the National Statistical Committee. Hospitalisation rates were calculated on the base of statistical reports on discharges for the corresponding years.

Results: Population size for adults in Minsk in 2005 was 1467390 with 135 new onset RA cases revealed and corresponding RA incidence was 9.2 ($CI_{95\%}$8.6–9.8) per 100 000 adults. Population size in 2010 increased to 1529470, 131 new onset RA cases were revealed and RA incidence was 8.6 ($CI_{95\%}$8.4–8.7) per 100 000 adults. Population size in 2015 also increased at the same rate and amounted to 1598120, 206 new onset RA cases were revealed and corresponding RA incidence increased to 12.9 ($CI_{95\%}$12.7–13.1) per 100 000 adults (p<0.001).

There were registered 2745 first visits for RA in 2005 with corresponding RA prevalence 187.1 ($CI_{95\%}$186.4–187.7) per 100 000 adults. There were registered 3373 first visits for $^{RA\ in\ 2010}$ and 4315 visits in 2015, RA prevalence rates were 220.5 ($CI_{95\%}$219.9–221.2) and 270.0 ($CI_{95\%}$269.3–270.7) per 100 000 adults, correspondingly. These data suggest a steady increase of RA prevalence for the last 10 years (p<0.001).

There were 7147 hospitalizations in Minsk for RA for the period 2010–2015. Hospitalisation rates for RA increased from 75.4 ($CI_{95\%}$73.8–77.1) to 79.2 4 ($CI_{95\%}$77.5–80.9) per 100 000 adults (p<0.001) with the same provision of the population with the specialised rheumatologic beds – 15.7 ($CI_{95\%}$14.9–16.5) and 15.0 ($CI_{95\%}$14.3–15.8) per 100 000 adults (NS) in 2010 and 2015, correspondingly, while hospitalisation rates among RA patients decreased from 34.2% to 29.3% (p<0.001).

Conclusions: We revealed the significant increase (1.4 times) in incidence and prevalence of RA in adults in Minsk (Belarus) for the period 2005–2015. Hospitalisation rates for RA in the population had the same trend for the study period.

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AB1355 BONE MINERAL DENSITY, T-SCORE AND Z-SCORE IN YOUNG MEN WITH JUVENILE IDIOPATHIC ARTHRITIS

V. Povoroznyuk[1], M. Dzhus[2]. *[1]D.F. CHEBOTAREV INSTITUTE OF GERONTOLOGY NAMS UKRAINE*; *[2]O. Bohomolets National Medical University, Kyiv, Ukraine*

Background: Juvenile Idiopathic Arthritis (JIA) is term used to classify a group of heterogeneous paediatric rheumatic diseases. Many of these conditions remain active until adulthood. Presences of chronic inflammatory disease together with glucocorticoid treatment are the risk factors of development of osteoporosis in young adult males.

Objectives: Aim: to study the bone mineral density (BMD), T-score, Z-score in young adult males with JIA.

Methods: The study included 50 adult men aged 19 to 25 years, divided into two groups: I – 25 practically healthy young males; II – 25 young men from different regions of Ukraine with a history of JIA in childhood regardless of the presence or absence of active inflammation at the time of the observation. Two-energy X-ray densitometry (Prodigy, GE Lunar, Madison, USA) was performed on the basis of the Institute of Gerontology, Ukrainian Research Centre of Osteoporosis Problems with analysis of BMD, T- and Z-scores in different skeletal areas.

Results: Young men with JIA and healthy individuals did not differ in age, height, weight and BMI. In assessing the number of fractures in patients with JIA were identified 4 patients (16%), while in the control group were no fractures. negative impact of the JIA on the BMD was found in the I group compared with II group. Lumbar spine BMD in I group was lower (p<0.01) than in healthy subjects, as well as the Z-score (p<0.001) in the L1-L4 lumbar spine region. BMD, T-score and Z-score in femoral neck region were lower in I group than in II (p<0.001, p<0.001, p<0.01 corresponding). Reliable differences between the two groups were found in total body BMD (p<0,001), T-score (p<0.01), Z-score (p<0.05). Patients with JIA had lower (p<0.01) BMD and T-score (p<0.05) in ultradistal area of forearm. Reduction of BMD up to the level of osteopenia (Z-score <2 SD) was found in 5 out of 25 (20%) patients at the level of L1-L4 lumbar spine, in 2 (8%) patients at the level of femoral neck, in 3 (12%) patients at total body and in 2 (8%) patients at the level of ultradistal area of forearm.

Conclusions: Young men with JIA aged 19–25 years had reduced total body BMD, T-score, Z-score, which indicates the negative impact of the disease on the bone tissue compared with healthy men of the corresponding age.

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AB1356 AGE PECULIARITIES OF BONE MINERAL DENSITY IN YOUNG FEMALE WITH JUVENILE IDIOPATHIC ARTHRITIS

V. Povoroznyuk[1], M. Dzhus[2]. *[1]D.F. CHEBOTAREV INSTITUTE OF GERONTOLOGY NAMS UKRAINE*; *[2]O. Bohomolets National Medical University, Kyiv, Ukraine*

Objectives: Aim: to study the bone mineral density (BMD) in young adult females with juvenile idiopathic arthritis (JIA) depending on the age.

Methods: 99 females aged 19–39 (40 patients with JIA and 59 practically healthy persons) were examined. All surveyed were divided into 2 groups by age: I group–20–29 years old and II group–30–39 years old. The age of disease onset, delay in diagnosis, disease duration, ILAR-variant of JIA, BMD, T-score and Z-score were estimated.

Results: The onset of JIA was at the age of 11.16±4.34 years, delayed diagnosis–23.52±21.37 months, the disease duration–11.9±9,4 years, persistent