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FRI0719 BURDEN OF HEPATITIS E VIRUS INFECTION IN PATIENTS WITH RHEUMATIC DISEASES

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Background: Hepatitis E virus (HEV) is considered an emerging pathogen in developed countries, potentially causing chronic hepatitis.

Objectives: This cross-sectional analysis was undertaken to determine the seroprevalence of HEV in patients with autoimmune or inflammatory arthritis. This subgroup of patients is often treated with immune suppressive drugs, and is generally considered more susceptible to infections.

Methods: Serum samples were obtained from 449 consecutive patients consulting at the department of Rheumatology between October and November 2015. Patient characteristics with respect to diagnosis and treatment were collected. HEV IgM and IgG were measured by ELISA (Wantai Hepatitis E Virus IgG and IgM ELISA, Sanbio BV). Positive or borderline samples were further analyzed for HEV RNA (RealStar[®] HEV RT-PCR Kit, Altona Diagnostics NRC WIV).

Results: A total of 449 patients were included, 211 men and 238 women. HEV IgG was positive in 82 samples (18.26%), 6 were borderline, and 5 were non-determinable (not enough serum). IgM was positive in only 2 samples (0.45%). These 2 patients had normal liver function tests. Additional PCR was performed on all positive and borderline samples, which turned out negative in all samples. Of the 88 IgG positive and borderline samples, 86 patients had a known diagnosis of chronic inflammatory arthritis, of which 50 patients had previously been diagnosed with rheumatoid arthritis, 18 with spondyloarthritis, 8 with psoriatic arthritis. Fifty patients were treated with biologics (37 TNF inhibitors), 43 patients were treated with methotrexate (mean dose 12.5mg weekly), and 20 were treated with corticosteroids (mean daily dose 5.5mg prednisolone equivalent).

Conclusions: In a consecutive cohort of patients with known diagnosis of autoimmune or inflammatory arthritis, seroprevalence of HEV IgG was 18.2%. No active HEV infection could be detected. We found this to be comparable to a historical cohort of healthy patients from the departments of Orthopedics and obstetrics¹, where prevalence of HEV IgG was 14%.

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FRI0720 CHARACTERISTICS OF PATIENTS WITH GOUT TREATED TO SUA TARGET THAT CONTINUE TO EXPERIENCE FLARES: DATA FROM FRANCE, GERMANY, ITALY, SPAIN, UK AND US

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Background: Gout is a common form of inflammatory arthritis. Treatment guidelines recommend a target serum urate (sUA) ≤ 6 mg/dL. ACR and EULAR treatment guidelines indicate sUA targets may need to be surpassed to achieve treatment benefits in a subset of patient that continue to flare and/or have tophi.

Methods: Data were assessed from a survey of physicians about gout disease management. Patient results were confirmed through in-depth chart audits assessing diagnosis, comorbid conditions, disease severity and laboratory assessments. Disease severity was measured using a physician global assessment, flare counts, joint damage and presence of tophi. Type and dose of XO1, length of current treatment, compliance, physician type and patient socio-demographic factors were identified. Descriptive and multivariate statistics were used to describe patients having ≥ 2 flares per year (excluding treatment-related flares) in patients achieving target sUA ≤ 6 mg/dL.

Results: Overall, 251 rheumatologists and 250 primary care physicians were interviewed and provided data from 2505 patients with gout; 82% were male and the average age was 58 years (SD=12). 1823 (73%) patients were treated with an XO1, of these 813 (44%) had a least one assessment of sUA ≤ 6 mg/dL over a 12-month period. Of the 813 patients reaching sUA target, 307 (37.8%) reported ≥ 2 flares in the last year. On average, patients at sUA goal with ≥ 2 flares had been treated over 38.8 months on their current XO1 and patients with ≤ 1 flare had been treated for 40.7 months. Patients at sUA ≤ 6 mg/dL treated with an XO1 and reporting ≥ 2 flares a year were more likely to have tophi (32.9% vs. 19.2%; $p < 0.01$), alcoholism (22.8 vs. 10.7; $p < 0.01$), CVD (24.8 vs. 17.6%; $p = 0.014$), depression (14.3 vs. 9.3; $p = 0.027$), and diabetes mellitus (23.8 vs. 16.8; $p = 0.015$) compared to patients with ≤ 1 flare a year. A backward stepwise multivariate model predicting patients classified as controlled (sUA ≤ 6 mg/dL) and continuing to flare (≥ 2 flares in the last year) found the physician-reported and chart-documented comorbidities of chronic kidney disease (OR 1.9; $p < 0.01$),

alcoholism (OR 2.4; $p < 0.01$), diabetes mellitus (OR 1.5; $p < 0.05$), and have tophi (1.7; $p < 0.01$) to be associated with having higher flare rates despite achieving sUA ≤ 6 mg/dL. There was no difference by the type of XO1 or physician.

Conclusions: Of the patients achieving target sUA level of ≤ 6 mg/dL, 62% have ≤ 1 flare; however, over a third reported ≥ 2 in a 12-month period. Patients with multiple flares were more likely to have higher urate burden in the form of tophi, chronic kidney disease, alcoholism, and diabetes mellitus comorbid conditions. Frequent flares and greater tophaceous burden may require treating more aggressively to an sUA level of 5 mg/dL or lower as recommended by treatment guidelines.

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FRI0721 SLEEP DISORDERS IN PATIENTS AT THE FIRST ACCESS TO A RHEUMATOLOGY OUTPATIENT CLINIC

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Background: Sleep disturbances are frequently found in patients affected by rheumatic conditions (1). Chronic pain, the most common manifestation of these conditions is associated to poor sleep (2).

Objectives: Our primary objective was to evaluate prevalence of excess daytime sleepiness and impaired sleep quality in a patient population at the first access to a Rheumatology outpatient clinic. Secondary objective was evaluation of pain and others factors well known to be associated to sleep disorders.

Methods: 961 out of 1454 (mean age was 52.6 years; 14.3% were male) consecutive patients admitted for the first time to an Italian Rheumatology Outpatient Clinic, between December 2014 and November 2016, accepted to answer a self-administered questionnaire study. We considered the following parameters: pain intensity on visual analogic scale ranging from 0 to 100 according to commonly used classification (3), patient's assessment of General Health (GH), Epworth Sleepiness Scale (ESS), Pittsburgh Sleep Quality Index (PSQI), Health Assessment Questionnaire (HAQ), and Body Mass Index (BMI). Smoke habits were also considered.

Results: 70 patients showed both sleep disorders (7.3%), 624 patients had only impaired sleep quality (64.9%), 25 showed isolated excessive daytime sleepiness (2.6%). 242 patients did not have any sleep disorders (25.2%). We found that the presence of both $ESS \geq 10$ and $PSQI \geq 5$ was correlated to moderate-severe pain VAS ≥ 40 , $BMI \geq 35$, $HAQ \geq 1$ and $GH \geq 50$ with a statistical significance (respectively $p = 0.004$; $p = 0.032$; $p = 0.0004$; $p = 0.0001$). A correlation with $GH \geq 50$ in the patient group with only $PSQI \geq 5$ was detected ($p = 0.03$). Smoke habits did not correlate with sleep disturbance measures investigated. No other correlations were found in the other groups.

Conclusions: Thus excess daytime sleepiness and impaired sleep quality may be a target of therapeutic intervention in the treatment of rheumatic conditions. Further studies are needed to generalize results and suggestions.

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FRI0722 CROSS-SECTIONAL ASSOCIATIONS BETWEEN DEMOGRAPHIC, JOB RELATED, HEALTH RELATED AND PSYCHOSOCIAL FACTORS AND THREE DIFFERENT MEASURES OF PRESENTEEISM: RESULTS FROM EULAR-PRO AT-WORK PRODUCTIVITY STUDY

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Background: Several measures of at-work productivity loss (i.e. presenteeism)