

golimumab and certolizumab) and all 3 had recurrence of the lesions, in 2 patients the anti-TNF was replaced by a non-anti-TNF biological. Topical treatment was used in all cases, one patient also required systemic treatment with methotrexate.

Conclusions: TNF antagonist induced psoriasis is a well-described adverse event. Pustular psoriasis is the most frequent presentation. In most cases there is no personal or family history of psoriasis. Topical therapy may be effective but some patients require discontinuation of the drug. Skin lesions can reappear when switching to another anti-TNF drug.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2877

AB1209-HPR THE PREVALENCE OF DENTAL AND SINUS INFECTION IN PATIENTS WITH RHEUMATOID ARTHRITIS BEFORE BIOLOGIC THERAPY INITIATION: USEFULNESS OF A SYSTEMATIC SCREENING?

C. Tawil, E. Descamps, M. Forien, A. Gardette, E. Palazzo, S. Ottaviani, P. Dieudé. *Rheumatology Department, Bichat Hospital, Paris, France*

Background: Introduction of the biologic therapies has dramatically improved the outcome of severe rheumatoid arthritis (RA). Biologic therapies play a central role in the control of synovial inflammation. However they also decrease host defenses leading to an increased rate of infection. Because of their adverse effects, a careful assessment is needed before their initiation. A systematic assessment of dental or sinus infection before a biologic therapy is not required.

Objectives: The aim of our study was to assess the prevalence and the usefulness of a systematic screening of oral (dental and/or sinus) infection of RA patients before biologic therapy initiation.

Methods: This was a monocentric retrospective study. We included RA (ACR/EULAR 2010 criteria) patients with active disease despite disease-modifying anti-rheumatic drugs (DMARDs) and requiring biologic therapy initiation between 2010 and 2016. The following parameters were collected: demographic and disease characteristics, disease activity (C-reactive protein, disease activity score (DAS) 28), current therapies (DMARDs, corticosteroids). Dental infection was assessed by stomatologist after clinical and panoramic dental X-ray evaluation. Sinusitis was defined on sinus computed tomography as partial or complete opacification of one or more sinus cavities. Factors associated with oral infections were analyzed in uni- and multivariate models.

Results: We included 223 RA patients (79.4% of female, mean \pm SD disease duration of 8.9 \pm 8.6 years). The mean age was 54 \pm 10.9 years, 70.8% rheumatoid factor (RF) positive, 84.4% anti-citrullinated protein antibody (ACPA) positive and 68.1% had radiographic damages. The mean DAS 28 was 5.5 \pm 2.6; 71% of patients received corticosteroids (mean 7mg per day of equivalent prednisone) and 63% methotrexate (mean 17.8mg per week). No patient had pain or other sinus or dental symptoms. Before biologic agent initiation, systematic dental and sinus screening revealed an oral infection in 31.5% of patients (dental: 20.2% and sinus: 14.8%). In univariate analysis, active smoking was associated with a higher risk of oral infection (OR=2.16 [1.02–4.57], p=0.038) and methotrexate with a lower rate (OR=0.43 [0.23–0.81], p=0.006). Corticosteroid, disease duration, DAS 28, RF, ACPA and structural damages were not associated with oral infection. No significant association was confirmed with oral infection using multivariate analysis.

Conclusions: In our study, one third of RA patients requiring biologic agents had asymptomatic oral infection. The high prevalence of oral infection in RA patients suggests the usefulness of systematic dental and sinus screening before biologic therapy initiation.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4037

AB1210-HPR MENDELIAN RANDOMIZATION ANALYSIS INDICATES SERUM URATE HAS A CONDITIONAL CAUSAL EFFECT ON SERUM CREATININE AND RENAL FUNCTION

J. Liu¹, H. Zhang¹, Z. Dong¹, J. Zhou¹, Y. Ma¹, Y. Li¹, Q. Qian¹, Y. Yang^{1,2}, X. Wang^{1,2}, H. Zou^{3,4}, L. Jin^{1,2}, J. Wang^{1,2,4}. ¹State Key Laboratory of Genetic Engineering, Collaborative Innovation Center for Genetics and Development, School of Life Sciences, Fudan University, Shanghai; ²Fudan-Taizhou Institute of Health Sciences, Taizhou; ³Division of Rheumatology, Huashan Hospital, Fudan University; ⁴Institute of Rheumatology, Immunology and Allergy, Fudan University, Shanghai, China

Background: Uric acid, the weak organic acid and the end product of purine nucleotide degradation, is excreted predominantly by the proximal tubules [1]. Although large numbers of epidemiological, molecular and animal studies have focused on various pathogenic effects of serum uric acid, including chronic kidney disease (CKD), metabolic syndrome, and coronary artery disease [2], whether the serum uric acid is an independent risk factor or has causal impact on serum creatinine (Scr) and renal function remains unclear.

Objectives: We aim to study the effect of serum uric acid on renal function by applying the method of Mendelian randomization.

Methods: The study was represented by estimated glomerular filtration rate (eGFR) with potential confounding factors in 3,734 Chinese subjects. Four genetic variants of uric acid transporter genes (*rs1481012 [ABCG2]*, *rs16890979*

[SLC2A9], *rs2231137 [ABCG2]* and *rs3799352 (SLC17A1)*) were selected for this study as they had highest correlation with serum uric acid in Chinese population in our previous study. In this research, serum uric acid was selected as exposure, genetic risk score of uric acid transporters was selected as instrumental variable, and Scr and eGFR were selected as the outcomes.

Results: 1) The results of the analysis showed that increased serum uric acid has a causal effect on reducing estimated glomerular filtration rate in both female population and the subjects who were under 65 years old. Because of protective effects on renal function of ovarian hormones such as estrogen, we postulated that estrogen might be the cause leading to the difference between men and women. 2) We also found that increased serum uric acid led to the damage of renal function in the subjects with normal eGFR value. 3) In addition, the serum uric acid was a risk factor to renal function in the subjects with relative high level of fasting glucose or who were smoking currently. Because of metabolic defects in people affected by diabetes, renal glucose reabsorption was increased, thus further sustaining hyperglycemia in patients.

Conclusions: Serum urate has causal effects on renal dysfunction in either female or individuals of under 65, or normal eGFR, or high level of fasting glucose, or current smokers.

References:

[1] Pasalic D, Marinkovic N, Feher-Turkovic L. *Biochem Medica* 2012;22(1):63–75.
[2] Sakhaee K. *J Nephrol* 2014;27(3):241–5.

Acknowledgements: National Natural Science Foundation of China (31521003), Science and Technology Committee of Shanghai Municipality (11DJ1400102), International S&T Cooperation Program of China (2013DFA30870), Ministry of Science and Technology (2011BAI09B00), 111 Project (B13016), and Program for 2012 Outstanding Medical Academic Leader for Hejian Zou. Computational support was provided by the High-End Computing Center located at Fudan University.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5601

AB1211-HPR THE USE OF SUBCUTANEOUS METHOTREXATE IN POLISH PATIENTS WITH RHEUMATOID ARTHRITIS

M. Przygodzka¹, K. Sikorska-Siudek¹, R. Radomski², S. Bojanowski².

¹Mazovian Centre of Rheumatology and Osteoporosis; ²IEHR.eu, Warsaw, Poland

Background: Methotrexate (Mtx) should be the drug of the first choice in rheumatoid arthritis (RA) if there are no contraindications to use it. The efficacy of Mtx is measured by remission or low disease activity and depends on the dose taken. Higher doses (25–30 mg/week) are more effective, but intolerance is the main cause of discontinuation of oral treatment. Subcutaneous Mtx is efficient alternative in those cases.

Objectives: The aim of this study was to evaluate subcutaneous Mtx use frequency in Polish patients and change oral form for subcutaneous as well.

Methods: The disease activity was assessed by Disease Activity Score 28 (DAS 28) during the first visit (V1) and after 3 months therapy (V2) and compliance with therapy as well.

Results: There were 194 RA patients diagnosed by the ACR and 1997 and/or ACR/EULAR 2010 criteria. 144 patients were treated by oral Mtx (group A) and 50 patients (group B) by subcutaneous Mtx at the time of study enrolment (V1). 37 patients of group A (26%) required changes in therapy during V2, 24 (17%) were switched to subcutaneous Mtx (group A1). 6 patients of group B (12%) required change of treatment during V2, including 2 patients (4%) with subcutaneous Mtx, who were switched to oral Mtx. The main cause of changing therapy from oral to subcutaneous was gastrointestinal intolerance of high dose of Mtx. 69 patients (12%) of group A required additional steroid therapy compared to 18 (36%) of group B. Average DAS 28 decreased by 0.58 in group A1 in oral treatment and during the subcutaneous treatment time decreased by next 0.23. In group A1 during oral treatment 14 (58%) patients used 25 mg/week and 20 patients (83%) used 25 mg/week during subcutaneous treatment time.

Conclusions: Patients treatment by oral Mtx often require modification of therapy in comparison to patients treated by subcutaneous Mtx, including more frequent use of steroids

The main cause of oral intolerance are ailments of the digestive system.

Change of oral to subcutaneous therapy allows administration of higher doses of Mtx and results in decrease of DAS28 in comparison to the patients continuing their oral treatment.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6963

AB1212-HPR DYNAMICS OF ARTICULAR SYNDROME IN RHEUMATOID ARTHRITIS AGAINST CORRECTION OF PROGESTERONE INSUFFICIENCY

M. Salokhiddinov, A. Ahmedov. *Rheumatology and Osteopathy, Tashkent Medical Academy, Tashkent, Uzbekistan*

Background: According to the literature, sex hormones manifest themselves as immune modulators that inhibit the ones and stimulate other immune functions. Studies have shown that patients with RA, decrease of estradiol and particularly