AB0305

ALLERGIC SYMPTOMS IN PATIENTS WITH RHEUMATOID ARTHRITIS

Olga Brzezińska¹, Anna Lewandowska-Polak¹, Marek Kowalski², Joanna Makowska¹. ¹Medical University of Lodz, Department of Rheumatology, Łódź, Poland; ²Medical university of Lodz, Department of Immunology and Allergy, Łódź, Poland

Background: One of the hypothesis of RA pathogenesis is that autoimmune process in rheumatoid arthritis starts within the airways. The factors leading to increased antiCCP antibodies formation within the airways are not fully understood. People with allergies to inhaled allergens suffer from chronic inflammation within upper and lower airways.

Objectives: The aim of this study was to assess the prevalence of symptoms of upper and lower airways allergic diseases in patients with rheumatoid arthritis as compared to general population prevalence.

Methods: The study group consisted of 96 patients with RA (age years – 46,69±15,70 women-93%, men – 7%). Control group consist 1685 subjects from Lodz population (47,89±15,11 women-55%, men-45%). All responders completed a screening test for allergy symptoms, 60 of RA and all controls were asked to complete a detailed survey consisting of 30 questionnaires based on GA²LEN Global Allergy and Asthma Network protocol include diagnoses and separate symptoms of allergic diseases.

Results: In screening questionnaire 16,84% of RA patients and 7,24% control declare that suffer from asthma ($p<0,001$). The incidence of wheezing in both groups was statistically insignificant (30,00% RA vs 20,65% control; $p>0,05$), however the coexistence of dyspnoea and wheezing was more frequent in the group of patients with RA (44,83% vs 14,01%; $p<0,001$) as well as wheezing without symptoms of infection (55,56% vs 15,37% $p<0,001$). The frequency of waking up at night due to dyspnea or coughing did not differ significantly between the study and control group (respectively 18,67% vs 12,82 and 33,33% vs 33,35%). The symptoms of upper airway chronic inflammation were also more prevalent in patients with RA as compared to controls. Chronic sinusitis was declared by 26,67% of patients and 10,62% controls ($p<0,001$), as well as the symptom of post-nasal drip was significantly twice more frequent than in the study group (20,00% vs 9,08%; $p<0,005$). Symptoms of a nasal allergy are insignificantly more often in RA group (38,33 vs 33,06%).

Conclusion: Increased prevalence of symptoms of upper and lower allergic diseases in patients with RA requires further investigation as chronic inflammation within airways can lead to posttranslational modification of proteins and autoantigen formation.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.8032

AB0306

DISEASE ACTIVITY AND PREVALENCE OF CAROTID PLAQUE ARE INCREASED IN SEDENTARY RHEUMATOID ARTHRITIS PATIENTS

Dionicio Ángel Galarza-Delgado¹, José Ramón Azpiri-López², Iris Jazmin Colunga-Pedraza¹, Marielva Castro-González¹, Karla Paola Cuéllar-Calderón¹, Ileana Cecilia Reynosa-Silva¹, Carolina Marlene Martínez-Flores². ¹Hospital Universitario "Dr. José Eleuterio González", UANL, Rheumatology, Monterrey, Mexico; ²Hospital Universitario "Dr. José Eleuterio González", UANL, Cardiology, Monterrey, Mexico

Background: Multiple benefits from physical activity (PA) in rheumatoid arthritis (RA) patients have been described; exercise in RA is associated with a cardiovascular (CV) protective role, resulting in lower waist-hip ratio, vascular stiffness and hypertension (1). Other important advantage of PA in RA is the impact observed in disease activity; regular PA is associated with reduced DAS28 (2). There are no previous studies evaluating the effect of exercise on disease activity and carotid Ultrasound (US) findings in Mexican-mestizo RA patients.

Objectives: To compare clinical characteristics and carotid US findings of Mexican-mestizo RA patients who perform PA to sedentary RA patients.

Methods: Cross-sectional, observational, comparative study. We included RA patients aged 40 to 75 years that fulfilled the 2010 EULAR criteria. Patients with prior atherosclerotic CV diseases and overlap syndromes were excluded. Clinical history, blood samples, physical exam and carotid US were performed. Carotid plaque (CP) was defined as a focal narrowing ≥ 0.5 mm of the surrounding lumen or a carotid intima media thickness (cIMT) ≥ 1.2 mm, and increased cIMT was defined as ≥ 0.9 mm. Patients were classified in two groups: those who are sedentary and those who regularly perform PA (defined as ≥ 120 min/week). The Kolmogorov-Smirnov test was used to determine normal distribution. Categorical variables are expressed as total number (%), and numerical variables as

median (q25-q75). Chi square and Mann-Whitney U-test were used to compare groups and considered significant if $p<0.05$.

Results: A total of 334 RA patients were included. Clinical characteristics are shown in table 1. Patients who exercised had lower disease activity and BMI. Carotid US was performed in 127 patients (Table 2). There was a higher prevalence of CP, bilateral CP and increased cIMT in sedentary patients. Sedentary RA patients had an increased risk of CP (OR 3.1 [IC95% 1.0-9.7, $p=0.04$]).

Table 1. Clinical characteristics

Variables	Physically active (n=80)	Sedentary (n=254)	p
Age (years), median (q25-q75)	55.3 (46-58.7)	55.7 (49-61.6)	NS
Women, n (%)	72 (90)	236 (92.9)	NS
Disease duration (years), median (q25-q75)	5 (2-11.3)	9 (3.7-15.5)	0.002
Past or current smoker, n (%)	16 (20)	63 (24.8)	NS
BMI (kg/m ²), median (q25-q75)	26.4 (24.7-29.1)	28 (25.2-31.8)	0.004
Diabetes Mellitus, n (%)	10 (12.5)	38 (15)	NS
Dyslipidemia, n (%)	27 (33.8)	67 (26.4)	NS
Hypertension, n (%)	16 (20)	77 (30.3)	NS
DAS28-CRP, median (q25-q75)	2.6 (1.8-3.8)	3.4 (2.3-4.4)	0.001
CDAI, median (q25-q75)	6 (2-16)	11 (3.7-20.2)	0.005
SDAI, median (q25-q75)	7 (2.5-17.3)	12.5 (4.5-22)	0.004

Table 2. Carotid US

Carotid US findings n (%)	Physically active (n=28)	Sedentary (n=99)	P
CP	4 (14.3)	34 (34.3)	0.041
Increased cIMT	9 (32.1)	55 (55.6)	0.029
Unilateral CP	3 (10.7)	15 (15.2)	NS
Bilateral CP	1 (3.6)	19 (19.2)	0.045

Conclusion: Patients who perform PA had significantly lower disease activity and BMI. A higher prevalence of CP, increased cIMT and bilateral CP was found in sedentary patients. Sedentary RA patients had an increased risk of CP. These results are similar to previously described in other populations and may be indicators of the protective effect of PA in RA patients. Rheumatologists should encourage their patients to exercise regularly.

REFERENCES

- [1] Byram KW. et al. Exercise is associated with increased small HDL particle concentration and decreased vascular stiffness in RA. *Journal of Clinical Rheumatology*. 2018;00(00):1-5
- [2] Sandberg ME. et al. Patients with regular physical activity before onset of RA present with milder disease. *Ann Rheum Dis*. 2014;73:1541-1544

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7528

AB0307

A.P.R.A.N. ASSESSMENTS OF TENDER AND SWOLLEN JOINTS COUNT SCORE PERFORMED BY A RHEUMATOLOGIST AND RHEUMATOLOGY NURSES IN PATIENTS WITH RHEUMATOID ARTHRITIS AND PSORIATIC ARTHRITIS

Isabelle Fortin^{1,2}, Nabil Chaker¹, Frederic Banville³, Faye Wetherall¹. ¹CREQ, Rimouski, Canada; ²CISSS BSL, Rheumatology, RIMOUSKI, Canada; ³UQAR, Nursing, RIMOUSKI, Canada

Background: Rheumatoid arthritis (RA) is a multisystem and debilitating disease. Fortunately, there is now a wide range of available treatments for these patients². Also, guidelines recommend a « treat to target »¹ involving strict follow-up of the patients. The recommended target is remission. But, in Canada, especially in rural areas, there are few rheumatologists facing a growing number of RA patients. Innovative solutions are needed in order to face this challenge. One solution is to work with a nurse assistant performing the joint count evaluation between the rheumatologist's visits. The consistency of examinations and disease activity evaluation is therefore.

Objectives: The primary objective is to validate the accuracy of the assessment of RA and Psoriatic arthritis disease activity by a nurse in comparison to assessments conducted by rheumatologists for CDAI and

DAS-28. The secondary objective is to validate the accuracy of different parts of the CDAI and DAS-28. Comparison with the patient's joint count is done as well.

Methods: The trial was conducted in a private clinic. The patient was examined at first by the physician and afterward by the nurse. The 2 nurses participating to the trial were trained for joint count during a 14 hours course. Finally, a brief training was given to the patient who performed a self-evaluation. The study consisted of one visit where all the different information was collected. The different data collected concerned: the patient's medical history, medication, diagnostic, joint count by the nurse and the physician, VAS by nurse and physician. The patient's self-joint count was done for a subgroup of the patients. The Rho of Spearman was used for the correlation analysis.

Results: The overall correlation between the patient DAS-28 and physician DAS-28 was good ($r=0,701$) and it was very good between the nurse and the physician ($r=0,846$). The correlation between the nurse CDAI and the physician CDAI was also very good ($r=0,765$). The correlation between the different parts of the DAS-28 was less impressive. But in the same way, the correlation was better between the nurse (nr) and the physician, than between the patient (pt) and the physician (MD) and the least between the patient and the nurse. Respectively the correlation for TJC pt-nr is $r=0,452$, pt-MD is $r=0,537$, nr-MD is $r=0,693$, for the SJC the correlation is with pt-nr= $0,390$, pt-MD= $0,414$, nr-MD= $0,699$. The VAS-pt correlates poorly with both the nurse and the doctor VAS, respectively $r=0,428$ and $r=0,392$. No significant difference was found between the two nurses.

Conclusion: The primary end point is attained. There is a very good correlation between the nurse and the physician's evaluation. These results are congruent with those of previous studies³. So, this study is another argument to work with a nurse assistant and to use DAS-28 or CDAI in order to save time as we can be confident that the results of the nurse examination is accurate and valuable. This team work is a way to improve patient care following the guidelines. Treat to Target is possible even in remote areas lacking of resources.

REFERENCES

- [1] Smolen JS, et al. Treating rheumatoid arthritis to target: recommendations of an international task force; Ann Rheum Dis 2010; 69: 631-637- Anderson, et al., Rheumatoid Arthritis Disease Activity Measures: American College of Rheumatology Recommendations for Use in Clinical Practice; Arthritis Care & Research, Vol. 64, No 5, May 2012, pp 640-6473-Cheung PP, Gossec L, Mak A, March L. Reliability of joint count assessment in rheumatoid arthritis: A systematic literature review. Semin Arthritis Rheum. 2014 Jun;43(6):721-9.

Acknowledgement: Investigator Initiated study supported by Janssen.

Disclosure of Interests: Isabelle Fortin Grant/research support from: ABBVIE, AMGEN, ASTRAZENCA, BMS, GSK, JANSSEN, PFIZER, SANOFI, UCB, Consultant for: LILLY, NOVARTIS, SANOFI, Speakers bureau: NOVARTIS, PFIZER, Nabil Chaker Grant/research support from: Janssen, UCB, AMGEN, ABBVIE, PFIZER, SANOFI, Frederic Banville: None declared, Faye Wetherall: None declared

DOI: 10.1136/annrheumdis-2019-eular.794

AB0308 THE ASSOCIATION OF PARKINSON DISEASE WITH RHEUMATOID ARTHRITIS

Fulya Cosan¹, Sena Arda¹, Nuri Onat Demirci². ¹Bahcesehir University, Faculty of Medicine, Internal Medicine, Istanbul, Turkey; ²Bahcesehir University, Faculty of Medicine, Neurology, Istanbul, Turkey

Background: Parkinson disease (PD) is a progressive neurological disease, characterised with tremor, spasticity, arthrosis, dementia, loss of mobility and generalised pain. PD affects mainly elderly population. Activity of PD patients is restricted because of spasticity and severe arthrosis. Rheumatoid arthritis (RA) is a chronic inflammatory autoimmune disease which can cause disability in elderly population. Patients with can admit to rheumatology clinics with generalised pain or restricted mobilisation. In contrast, in some PD patients with generalised pain on joints, RA may be overlooked

Objectives: We aimed in this study to evaluate the characteristics of patients with RA and Parkinson patients.

Methods: 842 RA patients screened retrospective for PD from the patient files. 10 patients with both RA and Parkinson disease were included to study. 3 female and 7 male patients with mean age 76,4 (with a standard deviation 5,4) were evaluated. The characteristics of patients are evaluated from the patient files.

Results: All patients were older than 75 years. Mean RA duration time was 14 months and PD duration time was 34 months. All patients admitted outpatient clinic with leg pain and inability to walk. 4 of 10 patients had mild dementia. Median ESR was 36 mm/h and median CRP value was 0,68 mg/dl. 6 of 10 patients had positive ANA result with 1/100 ratio, but rheumatoid factor and anti CCP were negative.

Conclusion: PD is one of the disorder that may cause severe disability in very old ages. RA may be an additional factor for pain and loss of function in PD patients. Patients with generalised pain and difficulties with walking should be evaluated for PD especially in old ages. PD patients with generalised pain on joints should be evaluated for inflammatory arthritis.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7995

AB0309 THE FREQUENCY OF HEMATOLOGICAL MALIGNANCIES IN AUTOIMMUNE RHEUMATIC DISEASES

Fulya Cosan¹, Ipek Geyikoglu¹, Ozgun Melike Gedar², Osman Kara³. ¹Bahcesehir University, Faculty of Medicine, Internal Medicine, Rheumatology, Istanbul, Turkey; ²Bahcesehir University, Faculty of Medicine, Ophthalmology, Istanbul, Turkey; ³Bahcesehir University, Faculty of Medicine, Internal Medicine, Hematology, Istanbul, Turkey

Background: Autoimmune rheumatic diseases are associated with increased risk of hematological malignancies. The pathogenesis of autoimmunity can cause of malignancies or immunosuppressive agents may increase the risk of malignancies.

Objectives: We aimed in this study to determine the frequency, type and characteristic of hematological malignancies in rheumatology practice.

Methods: 1640 rheumatology outpatient patient with autoimmune rheumatic diseases (Rheumatoid arthritis (RA), SLE, Sjogren's syndrome (SjS), myositis, systemic Sclerosis, undifferentiated connective tissue diseases (UCTD)) are screened for hematological malignancies. 16 patients are found with hematological diseases. The characteristics of these patients are reported retrospective from their outpatient clinic case files.

Results: The frequency of hematological diseases was found 0.04 in study group. 4 patients had myeloproliferative diseases (1 polycythemia vera (PV), 1 primary myelofibrosis (MyF), 2 patients with essential thrombocythemia (ET)). Patients with PV and MyF had severe rheumatoid arthritis and because of unresponsiveness of MTX, they used rituximab for severe disease activity. Patient with ET had only minimal arthralgia and are followed under HCQ therapy. As lymphoproliferative diseases 4 patients had chronic lymphoid leukemia (CLL). 3 of them had RA and 1 of them had (SjS). 2 patients had non-Hodgkin lymphoma and these patients are seen after autolog bone marrow transplantation because of arthralgia, but not detected arthritis. 1 patient had Hodgkin disease in her history, and had both RA and SjS, and receiving MTX therapy. 2 patients had multiple myeloma (MM). One of them is new diagnosis arthritis plus elevated sedimentation rate. Second one was seen with arthralgia after MM treatment and autologous bone marrow transplantation. 3 patients had mycosis fungoides, 1 of them had UCTD and received hydroxychloroquine. The other patient had RA under MTX therapy and one patient received rituximab therapy for severe RA activity.

Conclusion: Hematological malignancies are rare diseases in rheumatology practice, although expected high rate because of using immunosuppressive treatment and autoimmunity. The increased frequency of lymphoproliferative disorders are expected and associated with autoimmunity, but we don't found a high rate for lymphoproliferative malignancies. Myeloproliferative malignancies possibly not associated with the pathogenesis of autoimmune rheumatic diseases.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7626

AB0310 THE INCIDENCE OF EXTRA-ARTICULAR MANIFESTATIONS IN SOUTHERN CHINESE PATIENTS WITH INFLAMMATORY JOINT DISEASES

Siyan Yan, Yang Cui, Xiao Zhang. Guangdong General Hospital, Guangdong Academy of Medical Sciences, Guangzhou, China

Background: Inflammatory joint diseases (IJDs) are chronic arthritis, but frequently present with co-morbidities of other organs and systems, which is known as extra-articular manifestations (EAMs) ¹. It is still unclear which clinical characteristics or bio-markers can predict the development of EAMs².