

Conclusion: Even though management goal is directed at remission induction in the earliest stages of rheumatoid arthritis with molecular targeted therapies in most of the developed countries, in rural parts of the developing countries low rate of adherence to follow-up appointments and medications is still an important difficulty in management. Patients receiving biologic DMARDs have higher adherence to treatment. Awareness and education of patients in rheumatoid arthritis, as well as in all chronic diseases, is most important aspect of management.

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AB0351 ELDERLY-ONSET RHEUMATOID ARTHRITIS (EORA): DIFFERENCES ACCORDING TO CLINICAL DEBUT AND SEROLOGICAL POSITIVITY

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Background: In patients with Elderly-onset Rheumatoid Arthritis (EORA) has been described a clinical debut mimicking polymyalgia rheumatica with rhizomelic *pseudopolyarthritis*, in contrast with the classical profile of patients with Rheumatoid Arthritis similar to younger patients. We compare in our study these two profiles of the disease.

Objectives: To describe and compare the differences according to clinical debut, serological positivity and its implications in terms of treatment and prognostic factors in patients with Elderly-onset Rheumatoid Arthritis (EORA).

Methods: Patients with a diagnosis of RA over 65 years of age according to ACR/EULAR 2010 criteria were included. A database was created including the age of onset, the presence of polymyalgia-like symptoms (*rhizomelic pseudopolyarthritis*), the positivity of rheumatoid factor (RF) and anti-citrullinated protein antibodies (ACPAs), elevation of acute phase reactants (APR), the presence of erosions and the treatment required. Finally, data was analyzed according to clinical debut, serological positivity and prognostic factors.

Results: 83 patients diagnosed of EORA were included, with an average age of 73.8 years. 71.25% had positive RF (58.75% high titers) and 62.5% had positive ACPA (52.3% high titers). 24/83 patients (29%) debuted with a polymyalgia-like symptoms. 47.5% had persistent APR elevation during follow-up. Regarding treatment, 15% were treated only with corticosteroids, 81.5% required treatment with DMARDs and 15% were receiving biological treatment. 42/83 patients (50%) had erosions on plain X-rays. Of those patients with a polymyalgia-like profile, 52.2% (43/83) had positive RF but most of them had low titers (61%). On the other hand, patients without polymyalgia-like symptoms had positive RF in 78% of the cases and most of them at high titers (66%, $p = 0.01$). In the first group there was less positivity for ACPAs (26%, $p = 0.00004$) and half of them had low titers. Erosions were observed in only 30% of the patients with polymyalgia-like symptoms, while those without this profile had more erosions (58%, $p = 0.02$) and higher APR (50%, $p = 0.026$). Regarding treatment, in the group with polymyalgia-like symptoms only 34% were treated with corticosteroids, 65% required DMARDs and no patients had received biological treatment, whereas in the non-polymyalgic group, 88% required DMARDs and 21% required biologics ($p = 0.01$ for both results). Analyzing patients with positive RF and ACPAs at high titers, 93% received treatment with DMARDs and 24% required biological treatment. 65% had persistent elevation of APR and 48% presented erosions on plain X-rays. Only 2 patients with positive RF and ACPAs at high titers debuted with a polymyalgia-like symptoms.

Conclusion: Patients with EORA with polymyalgia-like symptoms tend to have less erosions and a higher prevalence of negative RF and ACPA or at low titers. These patients usually require less DMARDs and biological treatments to control the disease unlike patients with non-polymyalgia symptoms. On the other hand, patients with high RF and ACPA titers have more erosions and elevated APR during follow-up but do not usually experience polymyalgia-like symptoms.

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AB0352 HIGH PREVALENCE OF ANTICIPATORY AND ASSOCIATIVE SYMPTOMS OF METHOTREXATE INTOLERANCE IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Methotrexate (MTX) is the most widely used anti-rheumatic drug in the treatment of Rheumatoid Arthritis (RA) due to low costs, efficacy and an acceptable safety profile. However MTX has certain side effects. The most common side effects include the gastrointestinal tract not only after taking MTX, but also before MTX intake (anticipatory) and when thinking of MTX (associative).

Objectives: The aim of this study was to assess the prevalence of MTX intolerance and particularly the anticipatory and associative symptoms using the validated methotrexate intolerance Severity Score (MISS) (1).

Methods: We performed a cross-sectional descriptive study that involved patients with RA and treated by MTX for more than 3 months, compiled from Charles Nicolle hospital's rheumatologic department. The tolerance of MTX was assessed by the MISS questionnaire. The MISS Questionnaire includes five elements: abdominal pain, nausea, vomiting, fatigue, and behavioral symptoms of restlessness, crying, irritability and drug refusal. Each symptom is evaluated after intake of MTX, before taking MTX (anticipatory) and on thinking about MTX (associative). MTX intolerance was defined as ≥ 6 points on the MISS, with at least 1 point on anticipatory, associative or behavioral adverse effects.

Results: A total of 100 RA patients (87 women and 13 men) with a mean age of 53,5 years. The MTX was administrated by oral route in 91% of patients; the other 9% received it by intramuscular way. The average MTX weekly dose was 15,4mg. The average MTX duration was 76,7 months. All patients received folic acid with an average of 7,6 mg a week. MTX intolerance was found in 36% of patients. Abdominal pain was the most common symptom occurring in 55% of patients and up to 91,66% in MTX-intolerant patients, followed by nausea in 51% of patients and in 86,11% of MTX-intolerant patients and vomiting in 16% of patients and in 44,44% of MTX intolerant-patients. Anticipatory and associative abdominal pain affected 72,2% and 69,4 of intolerant-patients respectively. Anticipatory and associative nausea were found in 58,3% and 59% of intolerant-patients respectively. Anticipatory vomiting occurred in 16,6% of intolerant-patients. Overall, behavioral symptoms occurred in 75% of intolerant-patients, of whom 19,4% refused MTX. Older age was significantly correlated with better tolerance to MTX ($p=0,02$). There was no correlation between the dose of MTX, the duration of MTX intake and the route of MTX and the MISS score (respectively $p=0,7$, $p=0,07$ and $p=0,2$). Also, the use of other disease modifying drugs didn't worsen the tolerance of MTX.

Conclusion: To conclude intolerance to MTX is frequently seen in RA. In addition to gastrointestinal symptoms after taking MTX, RA patients can suffer from anticipatory and associative gastrointestinal symptoms. We should screen these symptoms earlier using MISS questionnaire in order to improve MTX compliance.

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AB0353 WORSE OFFICE AND 24-HOUR BRACHIAL AND CENTRAL AORTIC BLOOD PRESSURE MONITORING PROFILE IN PATIENTS WITH RHEUMATOID ARTHRITIS COMPARED TO CONTROLS

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Background: Hypertension (HTN) contributes to increased cardio-vascular (CV) morbidity and mortality in RA. Recent European guidelines on the management of HTN encourage wider use of ambulatory blood pressure

(BP) monitoring (ABPM) that provides more accurate information about BP control compared to conventional BP measurement. Central blood pressure (CBP) may be a better predictor of CV risk compared to brachial BP

Objectives: To evaluate office and ambulatory brachial and central BP levels in patients with RA compared to the controls.

Methods: Study group included 85 patients with RA (77.6% females, age 59.7±14.3 years, HTN 65%, median HTN duration 6.6 years, RA duration - 7 years, seropositive RA 65%, DAS-28(CRP) 3.7±1.1, median hsCRP 10 mg/dl, RF 51.3 IU/ml, all received DMARDs) and control group (40 patients matched by gender, age and risk factors). All hypertensives received antihypertensive therapy. Office CBP was measured with applanation tonometry. CBP elevation was assessed according to individual reference values by gender and age. 24-hour ABPM of peripheral and central BP was performed with BPLab Vasotens. $p < 0.05$ was considered significant.

Results: In patients without HTN mean office brachial and central BP levels were similar in RA and control groups. In patients with HTN corresponding BP levels were: 138±17/82±10 vs 130±16/74±11 mmHg ($p = 0.04$ for SBP; $p < 0.001$ for DBP) and 132±20/82±10 vs 120±17/74±12 mmHg ($p = 0.01$ for SBP; $p = 0.001$ for DBP). Rate of BP control was 58% in RA and 67% in the controls ($p = 0.48$). CBP elevation was observed in 42.4% of RA patients and 17.5% controls ($\chi^2 = 14.9, p = 0.0001$): 16.7% vs 0% in the normotensive group ($\chi^2 = 6.0, p = 0.01$) and 56.4% vs 29.2% in HTN group ($\chi^2 = 9.9, p = 0.002$), respectively. In the normotensives mean daytime, nighttime and 24-h BP levels were similar in RA and control groups. In HTN 24-h brachial SBP levels for RA and control group were 134±17 vs 125±9 mmHg for daytime ($p = 0.02$); 128±17 vs 113±10 mmHg for nighttime ($p = 0.01$) and 131±16 vs 123±9 mmHg for 24-h BP ($p = 0.02$), respectively. The 24-h central BP levels were 124±14 vs 115±14 mmHg for daytime ($p = 0.02$), 121±16 vs 111±10 mmHg for the nighttime ($p = 0.02$) and 123±15 vs 115±8 mmHg for 24-h BP ($p = 0.02$), respectively. Group with RA had higher incidence of masked and isolated nocturnal HTN compared to controls (35.3 vs 17.5% ($\chi^2 = 3.7, p = 0.05$) and 29.4 vs 12.5% ($\chi^2 = 4.3, p = 0.04$). In normotensives corresponding frequencies of masked and isolated nocturnal HTN were 33.3 vs 12.5% ($p > 0.05$) and 26.7 vs 6.3% ($\chi^2 = 3.3, p = 0.04$), respectively. In HTN group rate of masked uncontrolled HTN was 36.3 vs 2.5%, respectively, rate of uncontrolled night HTN-30.9 vs 20.8% ($p > 0.05$).

Conclusion: Despite similar BP control rate, patients with RA were characterized by significantly higher levels of office brachial and central BP, worse control of CBP and higher frequency of masked and isolated nocturnal HTN compared to controls. Hypertensive RA patients had higher 24-h brachial and central SBP. This indicates the importance of 24-h ABPM in RA.

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AB0354

CAN CANCER TRIGGER AUTOIMMUNITY DISEASE? FEATURES OF AUTOIMMUNE DISORDER OF CANCER PATIENTS

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Background: Association between cancer and autoimmune diseases are reconsidered by frequent use of immune checkpoint inhibitor and its

adverse effects. In addition, the childhood cancer patients have the higher possibility of developing autoimmune disease than general population in previous research, though this may be related to cancer therapy. Furthermore the development of scleroderma in cancer patients harboring the rPOLAR3A cancer mutation suggests that cancer may directly induce autoimmune disease.

Objectives: We examine the features of autoimmune diseases in the patient with pre-existing cancer.

Methods: Data on clinical characteristics, laboratory features, and treatment response from patients with autoimmune disease in our hospital were analyzed retrospectively. We excluded patients who had diagnosed cancer more than 5 years ago, who use immune checkpoint inhibitor, whose symptom became clear by the drug toxicities and endocrine disease, and who had no symptoms but only test abnormalities.

Results: 149 patients consulted our department and 111 patients were included; their median duration of follow-up was 39 months. The median period of diagnosing cancer from autoimmune disease was 17 months, and median age of the patients with autoimmune diseases at diagnosis was 68 years. Baseline manifestations included rheumatoid arthritis (RA) 42%, polymyalgia rheumatica (PMR) 20%, systemic scleroderma (SSc) 10%, Sjogren syndrome (SjS) 7.3%, IgG4-related disease 6.3%, vasculitis 5.5%, polymyositis and dermatomyositis 5.5%, interstitial pneumonia 2.7%.

In patients with RA, 53% were positive for both rheumatoid factor (RF) and anti-CCP antibody (median RF 155IU/mL, anti-CCP antibody 380U/mL). The median age of diagnosis was 68 years, and 52% were female. The average serum C-reactive protein (CRP) was 1.7mg/dL. Patients who experienced only operation for previous cancer therapy was 44%. 39% patients developed RA symptoms within half year. As a treatment, MTX were used in 44%, SASP in 26%, PSL alone in 11%. The response to therapy was 70% overall. One patient who used MTX developed MTX-LPD (DLBCL) after 10 months.

In PMR, all cases were seronegative. The median age of diagnosis was 71 years, and 63% were female. The average CRP was 5.4mg/dL. 41% of patients had operation for previous cancer therapy and 32% had operation and chemotherapy. All cases started using PSL (15-40mg) and responded to treatment. They all tapered PSL.

In SSc, all cases were female and mean age was 63 year old. 33% of them had breast cancer. 82% had centromere antibody and the median titer of the antibody were 1280. Interestingly, even in SjS patients, the same antibody was positive in 38%.

In myositis, 4 out of 6 patients had ARS antibodies and their main symptom was interstitial pneumonia. No patients were positive for TIF-1 γ . Seeing from cancer side, 18% had colorectal cancer, 17% had breast cancer, 11% had lung cancer, 9% had gastric and uterine cancer.

Conclusion: Patients with cancer developed autoimmune diseases, and had different characteristics from primary autoimmune disease. This suggests that cancer itself and its therapy somehow influence to our immune systems.

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AB0355

CAROTID ULTRASOUND IS MORE EFFECTIVE THAN CORONARY CALCIFICATION ASSESSMENT FOR DETECTING INDICATIONS TO STATIN THERAPY IN RHEUMATOID ARTHRITIS PATIENTS

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Objectives: To compare the significance of the carotid ultrasound and the MDCT assessment of coronary calcification in the stratification of cardiovascular risk and the detection of indications for lipid-lowering therapy in patients with RA.

Methods: Ninety two patients with RA are included (ACR/EULAR, 2010), 74% are women, the median of age is 54 [41.5; 60] years, median of disease duration - 6 [5; 21] months, median of DAS28 (ESR) - 5.2 [5.0; 6.0], without cardiovascular diseases and diabetes mellitus, severe chronic renal failure (GFR <60 ml/min x 1.73m²). Arterial hypertension was detected in 57% of patients, dyslipidemia - in 50%, 63% of women were in postmenopause. Initially, the cardiovascular risk was assessed using the mSCORE scale, and then again, taking into account the results of carotid ultrasound and MDCT assessment of coronary calcification.

Results: After assessing the cardiovascular risk on the mSCORE scale 41.3% of patients with RA were classified as low risk (n = 38), medium risk - 38% (n = 35), high risk - 15.2% (n = 14), very high risk- 5.5%