Conclusions: MBDA score may be of additional value in predicting DAS28 flares but not in predicting medication escalations or physician-reported flares in RA patients on TNFi in stable low disease activity.
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AB0264 THE PERFORIN A91V GENE AND CLINICAL FEATURES ANALYSIS IN CHINESE SO-JIA CASES WITH MACROPHAGE ACTIVATION SYNDROME

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Objectives: Macrophage activation syndrome (MAS) is a severe, potentially fatal complication of rheumatoid disease, especially in the systemic onset juvenile idiopathic arthritis (SoJIA). we aimed to investigate the clinical characteristics of 31 SOJIA cases with MAS and the perforin A91V gene were detected in part cases
Methods: gene-specific polymerase chain reaction (PCR) primers were used to analyze the perforin A91Vgene polymorphism.
Results: 31 soJIA cases were associated with MAS.25 out of 31 cases (83%) had infections prior to MAS. Serum ferritin was significantly increased in 27 cases (87.10%). High concentrations of triglycerides (23cases, 74.19%) and lactic dehydrogenase (27cases, 87.10%) are observed. What is more, Creatine Kinase (CK) increased in all cases that had been checked. Well-differentiated macrophages phagocytosing hematopoietic elements were found in all cases (100%).6 cases (19.35%) merged with multiple organ dysfunctions (MODS). The perforin A91V (NCBI: SNP rs35947132) variant gene was detected in twenty cases, but no mutation was found. Corticosteroids, immunosuppressant, cell cycle inhibitors, immunoglobulin, Tumor necrosis factor (TNF) antagonist and plasmapheresis were effective. After treatment, 28cases (90.32%) children were in remission, while 3 out of 31 cases died with mortality of 9.68%.
Conclusions: MAS is a life-threatening complication of systemic onset juvenile idiopathic arthritis. Most cases were preceded by infection. Unremitted fever, progressive hepatosplenomegaly, lymphadenopathy, cytopenias, elevated serum liver enzymes significantly increased serum ferritin are the main feature. Early diagnosis and treatment is the key to improve prognosis. The perforin gene mutations in our patients have not found yet.
Disclosure of Interest: None declared
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AB0265 THE SIGNIFICANCE OF EARLY DIAGNOSIS AND PROGNOSTIC EVALUATION OF FOUR KINDS OF ANTI-CCP ANTIBODIES IN VARIOUS TYPES OF JUVENILE IDIOPATHIC ARTHRITIS

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Objectives: To investigate the relationship between immunological parameters AKA, anti - CCP, the RF- IGG, RF-IGM and the early diagnosis and prognosis in sub- JIA patients.
Methods: Collection of 76 JIA patients in our hospital with system treatment and adhere to the follow-up treatment for at least six months, detect the immunological parameters of AKA, anti- CCP, RF-IGG, RF-IGM in the early diagnosis, compare the Positive rate in different subtypes and prognosis, and make the statistical analysis of sensitivity, specificity and relevant risk, compare to the normal control group of blood of 49 healthy children.
Results: There is a significant difference between polyarticular group and normal control group in positive rate of AKA, anti-CCP, RF-IGG, RF-IGM, there is no significant difference between the type of systemic, oligoarticular, enthesitis and the normal control group in autoantibody-positive detection rate. Polyarticular group's sensitivity AKA > anti-CCP, RF-IGG > RF-IGM and four kinds of joint detection, specificity RF-IGM, four kinds of joint detection > AKA > RFIGG > anti-CCP. There is a significantly different between refractory JIA and general JIA patients in AKA positive rate, relative risk OR is 3.514%.
Conclusions: The effect of AKA, anti-CCP, RF- IGG, RF-IGM in the different subtypes of JIA about early diagnosis are different, it is found that AKA, anti-CCP has good sensitivity and specificity in polyarticular JIA, AKA appears relate with refractory JIA, it is a large sample of the study to be confirmed that whether it can be a serological marker in the early diagnosis and prognosis of Polyarticular JIA.
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AB0266 EFFECTS OF PERIODONTAL BASIC TREATMENT ON PERIODONTAL CONDITION,CLINICAL RESPONSE AND SERUM INFLAMMATORY PARAMETERS IN RHEUMATOID ARTHRITIS (RA) PATIENTS WITH MODERATE TO SEVERE PERIODONTITIS

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Background: Periodontal disease (PD) shares several clinical and pathogenic characteristics with Rheumatoid Arthritis (RA). Some intervention studies have suggested that periodontal treatment can reduce serum inflammatory biomarkers such as C-reactive protein, or erythrocyte sedimentation rate. Periodontal diseases are not only a threat to dentition, but may also be an aggravating factor in patients with RA, its treatment may improve the RA outcomes.In this study we assessed the effect of periodontal basic therapy in relieving the PD symptoms and the clinical signs of RA in order to evaluate the importance of periodontal treatment in the control of inflammation.
Objectives: To evaluate the effects of periodontal basic treatment on periodontal condition, clinical response and serum inflammatory parameters in RA patients with moderate to severe periodontitis.
Methods: A total of 46 subjects with confirmed diagnosis of RA and moderate to severe periodontitis were included in the study. 18 subjects completing the study received periodontal basic treatment consisting of scaling/root planing and oral hygiene instruction at baseline and at 6 weeks; 28 subjects completing the study received no treatment as control group. Participants continued their usual disease-modifying medications for RA without any changes in DMARD therapy during the study period. Periodontal indices and RA measurements, such as probing depth (Pd), clinical attachment level (CAL), bleeding on probing (BOP), high-sensitivity C-reactive protein (hsCRP), erythrocyte sedimentation rate (ESR), disease activity score in 28 joints (DAS28) and subjective symptom were recorded at baseline, 6 and 12 weeks for each participant.
Results: After periodontal basic treatment,significantly lower Pd, CAL and BOP were observed in the treatment group ($P<0.01$),hsCRP,ESR,DAS28 and patients' subjective symptom improved significantly ($p<0.05$).Besides,the Pd and BOP were statistically significant between treatment subjects after therapy and controls ($P<0.001$).Although hsCRP was significantly lower in the treatment group after therapy than controls ($P<0.01$),there was no significant difference in the DAS 28 level between the two groups after periodontal basic therapy ($P>0.05$). Visual analog scale (VAS)was used to evalue patients' subjective symptom,the results show that the improvement was much better in patients received periodontal therapy than controls ($P<0.001$).
Conclusions: Periodontal basic treatment can effectively improve periodontal status, patients' subjective symptom and circulating inflammatory status.
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AB0267 TREATMENT PARADIGMS IN REAL-WORLD PRACTICE: BIOLOGIC AGENT USE PRIOR TO AND AFTER DISCONTINUATION OF ABATACEPT IN THE ACTION STUDY

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Background: ACTION is a 2-year, observational study of patients (pts) with moderate-to-severe RA who initiated IV abatacept (ABA) in Canada and Europe (NCT02109666).
Objectives: To determine pt biologic (b)DMARD use prior to initiation and after discontinuation of ABA overall and by treatment line in ACTION.
Methods: Pts with RA initiated IV ABA as first- or second-/further-line therapy. Biologic-naïve and biologic-failure pts were enrolled during three periods between May 2008 and December 2013. Pts could switch administration routes (IV to SC) during treatment. Crude retention rates (Kaplan–Meier) were compared by log-rank test.
Results: Of the 2364 pts enrolled, 2350 were evaluable for analysis: 673 (28.6%) were biologic naïve and 1677 (71.4%) biologic failures. Baseline characteristics differed: biologic-failure pts had longer RA duration, higher CRP levels and prevalence of radiographic erosions, and lower rates of chronic obstructive

pulmonary disease and neoplasms vs biologic-naïve pts. Most biologic-failure pts (96.7%) had previously received ≥1 TNF inhibitor (TNFi): 48.7% had received 1 and 48.0% ≥2 TNFi; 56.6% had received ≥2 bDMARDs. The overall 2-year retention rate was 47.9% and was higher for biologic-naïve vs biologic-failure pts (54.5 vs 45.2%; p<0.001); the most common reasons for ABA discontinuation were inefficacy (61.4 vs 67.7%) and safety (21.3 vs 21.2%). In pts who discontinued ABA, 83.0% started a bDMARD ≤6 months after discontinuation (Table), most commonly ABA IV. Mean (SD) days from stopping ABA to starting a bDMARD was similar for biologic-naïve (93.4 [51.3]) and biologic-failure pts (93.6 [48.0]). Among pts who restarted ABA, 62 (80.5%) biologic-naïve and 158 (85.0%) biologic-failure pts were considered to have discontinued as the time from last dose was >84 (IV) or >28 (SC) days, and thus were no longer temporary discontinuations, as predefined in the protocol. Three pts discontinued for bad compliance, 3 for lack of efficacy, 3 for remission/major improvement, 12 for safety and 15 for surgery. A good/moderate EULAR response was achieved by 76.7% of pts at the last follow-up before ABA discontinuation and 58.3% at ABA restart; mean (SD) DAS28 (CRP) was 3.2 (1.1) and 3.8 (1.4), respectively.

	bDMARD ≤6 months after ABA discontinuation		bDMARD prior to initial ABA treatment in pts who restarted ABA
	Biologic naïve n=186	Biologic failure n=526	Biologic failure n=186
None	35 (18.8)	86 (16.3)	
Abatacept	77 (41.4)	186 (35.4)	–
IV	71 (38.2)	170 (32.3)	
SC	6 (3.2)	16 (3.0)	
TNFi	41 (22.0)	74 (14.1)	181 (97.3)
Adalimumab	10 (5.4)	12 (2.3)	108 (58.1)
Etanercept	13 (7.0)	21 (4.0)	125 (67.2)
Infliximab	7 (3.8)	13 (2.5)	55 (29.6)
Certolizumab	7 (3.8)	17 (3.2)	5 (2.7)
Golimumab	4 (2.2)	11 (2.1)	2 (1.1)
Other bDMARD	33 (17.7)	180 (34.2)	51 (27.4)
Anakinra	1 (0.5)	4 (0.8)	5 (2.7)
Rituximab	6 (3.2)	58 (11.0)	30 (16.1)
Tocilizumab	26 (14.0)	118 (22.4)	21 (11.3)
		Data are n (%)	

Conclusions: Prior to abatacept treatment, over half of biologic-failure pts had received ≥2 bDMARDs and most had received a TNFi. After initial discontinuation (protocol defined), over one-third of pts restarted abatacept.

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AB0268 ACPA SEROPOSITIVITY AND PERIPHERAL NATURAL KILLER CELLS AS PREDICTIVE MARKERS OF CLINICAL RESPONSE TO RITUXIMAB IN RHEUMATOID ARTHRITIS PATIENTS

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Background: The efficacy of B cell-depletion therapy confirms the importance of B lymphocytes in rheumatoid arthritis's (RA) pathogenesis. Rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA) are prognostic factors for a more severe disease. Others immune elements, namely natural killer (NK) cells, seems to influence RA clinical response to rituximab (RTX), but data are lacking.

Objectives: To analyze the influence of baseline status/levels of RF, ACPA and serum immunoglobulin G (IgG) level in RTX treatment. To study the effect of RTX on NK and CD19+ cells in RA patients and their association with clinical response at 6, 12 and 18 months (M).

Methods: An observational retrospective study was conducted, including all the consecutive patients with diagnosis of RA under rituximab, followed at our Rheumatology department. Demographic and clinical data were obtained by consulting the national database (Reuma.pt) and the analysis was limited until december 2016. RF, ACPA and IgG titres were evaluated at baseline. NK (CD56+CD16+) and B lymphocytes (CD19+) absolute counts were assessed by flow cytometry prior to the first RTX cycle and 6 M after. Clinical responses were assessed by DAS28 and EULAR criteria at 6, 12 and 18 M. Correlations were studied using Spearman coefficient analysis (SPSS 20.0). Significance level was set as 0.05.

Results: We included 63 RA patients (81% of women), with a mean (SD) age of 61 (10) years and a mean disease duration of 19 (10) years, 86% RF-positive and 87% ACPA-positive. Bone erosions were present in 86% of the patients. At baseline, the mean DAS28 was 5.79 (1.55). Combination therapy with methotrexate or with others cDMARDs was used in 48% and 30% of the patients, respectively; RTX monotherapy in 22% of our sample. Thirty three patients were previously exposed to other biologics. The magnitude of response was greater in ACPA-positive vs ACPA-negative patients in terms of DAS28 variation at 6, 12 and 18M (medians of 1.09 vs -0.08; 2.03 vs 0.35 and 2.10 vs 0.19; p=0.029, p=0.039 and p=0.004, respectively), without significant differences between groups in terms of initial DAS28 (5.91 (1.60) vs 5.00 (0.90), p=0.051). The presence of ACPA was also significantly associated with EULAR response at 6, 12 and 18 M (64%, 75% and 85% in ACPA-positive patients vs 25%, 16% and 25% in ACPA-negative patients; p=0.034, p=0.010 and p=0.001, respectively). Outcomes did not differ according FR status. There were no associations between the values of FR, ACPA and IgG at baseline with the clinical response (DAS28 variation). CD19+ cells depletion occurred in all patients (mean of 146.4/mm^3 at baseline vs 10.6/mm^3 at 6M). An increase of peripheral NK cells was seen at 6M (mean 231mm/3 at baseline vs 289/mm^3 at 6 M). We only have found a positive correlation between NK cells number at baseline and DAS28 variation at 6 M (r=0.35, p=0.023). There were no associations between, neither NK cells, nor CD19 cells variations at 6M with clinical response to RTX.

Conclusions: Our data suggest that ACPA seropositivity is associated with a better clinical response to RTX in RA patients. NK cells at baseline may be useful to identify early responders to RTX.

Disclosure of Interest: None declared

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AB0269 RAPID RADIOGRAPHIC PROGRESSION PROGNOSTIC FACTORS IN A LATIN AMERICAN COHORT OF RHEUMATOID ARTHRITIS

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Background: Rapid Radiographic Progression (RRP) in Rheumatoid Arthritis (RA) patients predicts long-term disability (1), high related economic costs (2) and loss of working time (3). Detection of RRP predictors as a necessary tool for aggressive therapeutic interventions has been proved, but in Latin-American cohorts, no available data had been reported.

Objectives: To determine independent risk factors associated with RRP in a cohort of RA patients

Methods: A prospective analysis of RA Almenara cohort (January 2015-April 2016), 500 patients followed up with annual evaluations (background clinical/epidemiology, clinimetric, laboratory, health questionnaires and X-rays) who meet ACR 87/ACR-EULAR 2010 criteria's, older than 16 years at diagnosis,sign informed consent. Patients with overlap (except Sjögren), with active infections and/or pregnancy are excluded. Patients with at least two radiographs (baseline/final) were included. The X-rays were taken in a standardized protocol (each hand and foot). Joint damage was measured by Sharp-VDH (erosions, decreased joint space, and total scores). Radiographic Progression (RP) as a annual difference in Sharp-VDH score and RRP (>5 units in RP) were determined. A blinded rheumatologist for the RA condition read all films. Associated factors were analyzed (gender, socioeconomic level, smoking, age at diagnosis, time disease, use of biological and non-biological DMARDs, DAS 28, current steroids, HAQ/functional capacity, RF and basal SharpVDH score). Diagnosis delay and CRP were included to analyze risk factors in the RRP group. Statistical analyzesTweedie regression models with logarithm link. SPSS v. 21.0 was used

Results: 153 patients, 90.8% women, middle low (37.9%) and middle (35.3%) the most prevalent socioeconomic status. Age at diagnosis was 46.06 (12.73) years, time disease 14.25 (10.26) years. DAS28 average: 4.51 (1.33). Basal Sharp VDH:104.53 (90.09), CRP: 9.77 (10.35) UI/L, RF: 352.49 (538.08) UI/L, ACPA: 563.64 (782.2)UI/dL. PR annual rate was 7.64 (2.4 years of follow up),94.8% increased damage and 74 patients (48.36%) had PRR. Most subjects (94.1%) were using DMARDs but only 15 (9.8%) biologicals. The mean dose of prednisone was 4.88 (3.33) mg/d. In the univariate analysis, only DMARDs was associated with RP (B=50.8; CI=40.13–51.48, p<0.001), remaining this association in the multivariate analysis (B=50.56;CI=49.80–51.33,p<0.001). In the multivariate analysis of RRP group, no variables was associated with risk and subjects with steroids use had less radiographic impairment (B=0.859; CI 0.759–0, 893,p=0.017).

Conclusions: In this prospective study of an established RA cohort, a large proportion of patients had RRP and there was few percentage of biologic use. In the RRP subset only steroids use was a protective factor.

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