Conclusions: Sarcoidosis is associated with an increased risk for ischaemic heart disease and all-cause mortality. Patients with co-morbidity of sarcoidosis and ischaemic heart disease should be treated accordingly.

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SAT0691

ADHERENCE TO DISEASE-MODIFYING DRUGS IN CHRONIC INFLAMMATORY RHEUMATIC DISEASES: SEVERAL QUESTIONNAIRES, DIVERSE PATIENT CHARACTERISTICS AND SOME EFFICACIOUS INTERVENTIONS – A SYSTEMATIC LITERATURE REVIEW

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Background: In chronic inflammatory rheumatic diseases (CIRDs), adherence to disease-modifying drugs (DMD) is only moderate. Non-adherence may lead to complications, unnecessary treatment switches and heightened costs. Physicians are often at a loss when faced with non-adherence.

Objectives: To obtain an overview of how to measure adherence, who to screen particularly (risk factors of non adherence) and interventions to enhance medication adherence to DMD in patients with CIRDs.

Methods: A systematic literature review was performed in Pubmed, Cochrane, Embase and websites in 2017. All english and french studies related to methods to measure non-adherence, risk factors regrouped in 5 domains according to World Health Organisation (patient characteristics, health status, treatments, socio-economic conditions and relations with caregivers and the health system) and interventions for non-adherence regrouped in 5 modalities (educational, behavioural, cognitive behavioural, multicomponent interventions or others) were selected. The scope was limited to CIRDs (i.e., rheumatoid arthritis (RA), spondyloarthritis (SpA), psoriatic arthritis (PsA), crystal-induced arthritis (CIA), connective tissue diseases (CTD), vasculitis and auto-inflammatory diseases), and to DMD (i.e., mainly conventional DMARDs, biologics and targeted synthetic DMARDs).

Results: After screening 1131 publications and 194 other documents, 231 relevant papers were analysed for measuring adherence (60% in RA, 8% in SpA, 6% in PsA, 11% in CIA and 15% in CTD), 117 for predicting non-adherence (55% in RA, 9% in SpA, 14% in gout and 22% in CTD) and 22 for improving adherence (72% in RA, 8% in SpA, 16% in systemic lupus and 4% in gout). Objective measurements of non-adherence included: delivery data (total number of use: n=92), pill counts (n=8), medication event monitoring system (n=9), blood level assessments (n=7). Subjective measurements included: patient global assessment (n=57), and 4 questionnaires. The most used questionnaire was the Morisky Medication Adherence Scale and the most widely validated in rheumatology were the Compliance Questionnaire on Rheumatology and the Medication Adherence Self-report Inventory. Around 100 predictive factors were identified. Polymedication, mood disorders, lack of information and poor physician-patient relationship were associated with lower adherence. Regarding management options for non-adherence, 13/22 studies were randomised controlled trials (1535 patients) and only 5 (38%) were positive (774 patients). Educational interventions were the most represented with the highest level of evidence: 8/13 trials (1017 patients) with 4/8 yielding positive results.

Conclusions: Despite the importance of medication adherence in CIRDs, this review revealed limitations in methods to measure non-adherence, a multiplicity of non-adherence risk factors and a relative lack of evidence on interventions to improve medication adherence. It's important to improve the assessment and optimisation of adherence in CIRDs.

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SAT0692

BREASTFEEDING IS NOT ASSOCIATED WITH ANTI-CITRULLINATED ANTIBODIES DEVELOPMENT IN INDIVIDUALS AT RISK FOR RHEUMATOID ARTHRITIS

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Background: 'Systemic autoimmunity associated with rheumatoid arthritis' (RA), is a pre-clinical stage preceding the onset of clinical RA, characterised by the presence of autoantibodies, such as anti-citrullinated protein antibodies (ACPA) or anti-carbamylated protein antibodies (antiCarP). Breastfeeding has been proposed as a protective factor for RA development,¹ but there are some controversies.² To establish the causal role of a putative risk factor, longitudinal studies are needed, in particular in the pre-stages of RA development.

Objectives: To study the association between breastfeeding and the development of systemic autoimmunity associated with RA.

Methods: This ongoing prospective study includes individuals genetically at risk of developing RA, namely first-degree relatives of RA patients (RA-FDR). Individuals without clinical evidence of RA were enrolled, and assessed yearly clinically and biologically. We included all RA-FDR women with available ACPA status (anti-CCP 2, 3.1 or 3.0) and information about breastfeeding. The primary outcome was ACPA positivity. The exposure of interest was breastfeeding and duration of breastfeeding (categorised as 0, 1–7 and ≥7 months). The presence of antiCarP was a secondary outcome. We used logistic regression to analyse univariable and multivariable associations.

Results: A total of 882 women were included, of which 57 (6%) were ACPA positive. The characteristics of ACPA positive and negative participants were balanced, except for an older age in ACPA positives (median 52 versus 45 years; table 1). In the univariable analysis, ACPA positivity was not significantly associated with breastfeeding (OR 1.5, p=0.16) or with breastfeeding duration (OR=1.8, p=0.14). In the multivariable analysis adjusted by age, smoking, number of pregnancies and years of education, there was a weak, but not significant, association between breastfeeding for more than 7 months and ACPA positivity (OR 2.16, p=0.10). Among 728 women with available antiCarP results, 70 (10%) were positive, of which 27 (40%) breastfed. Breastfeeding for more than 7 months was not significantly associated with antiCarP in univariable or multivariable analyses (OR 1.3, p=0.52 and OR 1.9, p=0.16, respectively).