Abstract AB1286 – Table 1

Disorder	Male (%)	Mean age (Range) years	Prevalence (95% confidence interval)
Spondyloarthritis	44.8	43 (19–80)	0.24 (0.20–0.29)
Ankylosing	72.2	39 (19–65)	0.03 (0.02–0.06)
Spondylitis			
Psoriatic Arthritis	64	54 (40–80)	0.02 (0.00–0.03)
Undifferentiated	38.4	42 (21–80)	0.19 (0.16–0.23)
SpA

Abstract AB1286 – Figure 1

Conclusions: The burden of SpA in India (1.2 billion population) is enormous. Compared to global statistics, the prevalence of clinical AS and psoriatic arthritis in the Indian population appears low.

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AB1287 A POPULATION-BASED STUDY ON THE PREVALENCE AND INCIDENCE OF VASCULAR PRIMARY ANTIPHOSPHOLIPID SYNDROME: A NEW RARE DISEASE

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Background: Antiphospholipid Syndrome (APS) is a systemic autoimmune disease characterised by the presence of thrombotic and/or obstetrical manifestations and antiphospholipid antibodies (aPL). In 2006 the updated Sapporo criteria for APS were published but by now no epidemiological study on this disease were performed. Incidence and prevalence of primary APS (PAPS) in the general population are still unknown.

Objectives: The aim of this study was to evaluate the prevalence during the year 2013 and incidence for the period 2011–2015 of vascular PAPS in the adult population of a defined area, Valtrompia valley, using multiple sources. Valtrompia is a 40 kilometers-long prealpine valley in northern Italy. The population in 2013 was 101,477 inhabitants. The only easy access to the valley is from Brescia, the main city of the province. This valley is a cul-de-sac area without any other comfortable and practicable access. Therefore, this valley is ideal for epidemiological studies. In addition, the only Rheumatology referral tertiary Centre of the province is located in Brescia. This project was approved by the local Ethical Committee.

Methods: We identified adult subjects of 18–50 years old living in Valtrompia. Patients with thrombotic events were identified by two sources: 1) hospital

discharge code using keywords (deep vein thrombosis, pulmonary embolism, myocardial infarction, ischaemic stroke); 2) patients with defined diagnosis of vascular PAPS already followed by the Rheumatology tertiary Centre in Brescia.

Results: The prevalence of PAPS in 2013 was calculated to be 35.4 (CI 95% 20.6–59.6) per 100,000 inhabitants. Table 1 shows the incidence rates of vascular PAPS. We identified 47 patients with venous events during 2011–2015. 27/47 (57%) were tested for aPL, 4/27 (15%) positive. Regarding arterial events, 36 patients had stroke and 33/36 (92%) were tested for aPL, 4/33 (12%) positive. Finally, 64 patients with myocardial infarction (IMA): only 14/64 (22%) were tested for aPL, 2/14 (14%) positive.

Table 1 Incidence rates of antiphospholipid antibody syndrome per 100,000 inhabitants in Valtrompia in adult population (18–49 years) between 2011 and 2015. The 95% confidence intervals (CIs) are reported in parenthesis.

	INCIDENCE	
	Number of cases	Incidence (95% CI) per 100,000
OVERALL		
Males + Females	9	3.7 (1.7-7.1)
Males	5	4.0 (1.3-9.4)
Females	4	3.4 (0.9-8.8)
VENOUS THROMBOSIS		
Males + Females	4	1.7 (0.5-4.3)
Males	1	0.8 (0.0-4.5)
Females	3	2.6 (0.5-7.5)
STROKE/ICTUS		
Males + Females	4	1.7 (0.5-4.3)
Males	3	2.4 (0.5-7.1)
Females	1	0.9 (0.0-4.8)
IMA		
Males + Females	1	0.4 (0.0-2.3)
Males	1	0.8 (0.0-4.5)
Females	0	-

Abstract AB1287 – Figure 1

Conclusions: Preliminary results of this population-based study showed that PAPS is a rare disease. A critical point emerged from this study is that aPL were not routinely tested in young subjects with vascular events, especially in patients with myocardial infarction. The study will be implemented by contacting patients who never tested for aPL during the hospital admission.

Disclosure of Interest: None declared

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AB1288 PREDICTION OF AMENORRHEA IN FEMALE RHEUMATOID ARTHRITIS PATIENTS WITH TRIPTERYGIUM WILFORDII HOOK F

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Background: The Chinese anti-inflammatory and immunosuppressive herbal remedy *Tripterygium wilfordii* Hook F (TwHF) is a widely used and effective treatment for rheumatoid arthritis (RA). Ovarian failure is one of the most important adverse effects among pre-menopausal women with TwHF therapy.

Objectives: To construct a statistical model for pre-treatment prediction of amenorrhea after TwHF therapy.

Methods: In this retrospective study, potential predictors of amenorrhea including demographic and clinical data were retrieved. Multivariate logistic regression models were used to evaluate the association between pre-treatment variables and amenorrhea. The probability of amenorrhea was calculated for combinations of pre-treatment variables.

Results: Post-TwHF therapy amenorrhea rate was 10.9% (70 of 641). The mean age was 36.2±5.5 years, mean body mass index 22.5±7.5 kg/m². Age was the

strongest determinant of this adverse effect. In the final model, age >36 years, cumulative dose >4000 mg, and WBC <4.1 × 10⁹/L, were predictive of amenorrhea with adjusted odds ratios of 1.7 for TwHF therapy vs disease modifying anti-rheumatic drug (95% CI, 1.2–3.2, p=0.017), 3.1 age >40 years (95% CI, 1.8–4.7, p<0.001), 2.8 cumulative dose >6000 mg (95% CI, 1.6–4.3, p<0.001), and 2.7 for WBC <3.5 × 10⁹/L (95% CI, 1.4–6.3, p=0.012). The probability of amenorrhea can be as high as 76% or as low as 9% depending on the age, cumulative dose, WBC and the type of combination treatments employed.

Conclusions: This is first study to identify pre-treatment factors predictive of amenorrhea following TwHF therapy. Our model allows for optimum patient counselling and will help clarify expectations for the probability of amenorrhea following TwHF therapy.

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AB1289

SYSTEMIC FACTORS THAT AFFECT THE PROGRESSION OF PERIODONTAL DISEASE IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS

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Background: An association between Rheumatoid arthritis (RA) and Periodontal Disease (PD) has been reported. However, predicting factors of PD progression in patients with eRA are lacking

Objectives: To establish the predictive factors for progression of PD in patients with eRA including clinical and serological active scores of RA and status of PD

Methods: This cohort study evaluated the progression of PD at 280 inter-proximal dental sites in 28 patients within 2 years of diagnosis with eRA and they were evaluated to establish their progression through one year of follow-up. Adult patients were classified according to the 2010 ACR and the EULAR criteria. Periodontal diagnosis was established based on the AAP and the CDC and Prevention criteria. Serum markers of RA (rheumatoid factor, erythrocyte sedimentation rate (ESR), C reactive protein (CRP), and anticitrullinated protein antibodies (APCAs) were evaluated, disease activity was assessed by disease activity score (DAS28-ESR) AND the simplified disease activity index (SDAI). Plaque index, gingival index, pocket depth, and clinical attachment loss (CAL) were evaluated at baseline and at one year follow-up. Data were analysed to establish predictive generalised linear mixed models (GLMM) for clinical attachment loss progression at each site with ≥2 or ≥3 mm CAL

Results: The patients included had an average age of 47.5±12.69 and 75% were women. The comorbidity given by the habit of smoking actively occurred only in 1% of patients. The 35.71% had levels of ESR >20 mm3/h and 39% APCA positive while in 60.71% had CRP ≥3 mg/L and 67.86% of patients had a positive FR. Regarding the indices of activity of the disease, DAS28-PCR >2.6 was found in 67.86% of the patients and SDAI scale >3.3 in 75%. 71.43% of the patients were being treated with DMARD and corticoid therapy. 71.43% of patients had a diagnosis of periodontitis. CAL ≥2 mm and ≥3 mm was observed at 15% and 7.5% of dental sites, respectively. Factors associated with CAL in dental sites were: age, ESR, RF, DAS28, treatment with DMARD-Corticoids, periodontal pocket, CAL and percentage of CAL >5 mm, plaque index, gingival index and haemorrhage. Variables RA associated with activity such as CRP, DAS28, and SDAI showed a similar behaviour and they were more frequently associated in periodontal progressive sites. The principal predictive periodontal factors were the percentage of sites with CAL >5 mm and high gingival inflammation at baseline. Patients receiving combined treatment with disease-modifying antirheumatic drugs (DMARD) and corticosteroids exhibited less CAL. The predictive values of the GLMM for CAL of ≥3 and ≥2 mm were 98% and 82%, respectively

Conclusions: Systemic factors as disease activity score and serum biomarkers such as baseline periodontal status are associated with periodontal disease progression in early RA patients. It is known that the very low daily dose prednisolone in combination DMARD therapy substantially decreased radiographic progression and it could influence periodontal disease progression too in patients with RA in early stages of the disease

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AB1290

ANTI CARBAMYLATED PROTEIN IN HEALTHY SYSTEMIC FIRST-DEGREE RELATIVES OF RHEUMATOID ARTHRITIS INDIVIDUALS: RELATION WITH CLINICAL SIGNS OF ARTHRITIS

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Background: Association studies in rheumatoid arthritis (RA) have been focused in the pre-clinical phases of the disease in asymptomatic individuals with higher risk to develop RA such as first-degree relatives (FDR). A new group of autoantibodies directed against carbamylated proteins (anti-Carp) have been discovered in RA.

Objectives: To investigate the levels of anti-Carp in FDR and establish their association with the state of rheumatic condition and compare these variables with a control group of healthy individuals from general population

Methods: In total, 118 FDR and 118 healthy controls matched by age and gender were included. Rheumatologic (clinical and markers) and periodontal assessment was performed. Individuals selected were over 18 and less than 65 years old were studied in Bogotá-Colombia. A complete medical history related to RA was obtained by rheumatologist. They were assessed by two periodontists calibrated. Cancer, autoimmune disease, recent infection, lactation or pregnancy, use of antibiotics in the last three months, diabetes, edentulous, periodontal and orthodontic treatment in the last six months, were exclusion criteria. Anti-carbamylated-fetal calf serum protein by ELISA (RUO, Inova Diagnostics, San Diego), RF (Rheumatoid Factor, Spinreact), APCAs IgG/IgA (Inova, Diagnosis), Enzyme-linked immunosorbent assay for leptin, Adiponectin based on Luminox xMAP technology, high-sensitivity CRP and IL-6 (Siemens) by chemiluminescence and ESR were evaluated. An association analysis was performed to evaluate the relationship between anti-Carp levels and rheumatologic conditions using Chi square and Fisher test. Logistic regression model was performed to confirm these associations. All the analyses were performed with a level of significance of 95%

Results: In the FDR-group, seventy three percent were female with a mean age of 40.19±12.47 years, 22.2% were current smoker, leptin high in 26.27% and 4.23% and 16.9%, had positive RF and APCAs respectively. Anti-Carp in 26.3%; Among the controls, 70.97% were women, with an average age of 41.0±12.2 years, leptin high in 12.7% (p=0.004), positive RF in 2.5% (p=0.71), ACPA 6.8% (p=0.013) and anti-Carp 15.3% (p=0.027); in the general group 20.8% were positive (49/236) for anti-Carp, of which 63.3% are FDR (OR=2.02 IC 95% 1.03–3.96, p=0.04). Likewise, a greater frequency of painful joint (62.2%) p=0.008 and swollen joint (79.2%) (OR=4.35 CI 95% 1.5–12.36, p=0.006) were observed. The model designed for FDR showed a significant association between anti-Carp positive with or of at least 1 swollen joint adjusted to the presence of leptin levels above the moderate range (OR=2.84, CI 95% 1.20–6.71, p=0.017)

Conclusions: The Research effort aimed at the "risk" phases of RA has increased. That is, before the development of clinical signs of arthritis, to identify those individuals and modify environmental factors and pharmacological intervention. The findings show us a significantly higher frequency of anti-Carp in a cohort of FDR of RA patients compared to healthy controls no associations were found with other autoantibodies but a very interesting way with signs of early inflammation

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