Objectives: To analyze the incidence and trend of hospital admissions for CVDs in patients with RA in Spain during the period between 1999 and 2015.

Methods: We performed an observational retrospective population study analyzing the spanish administrative database that includes a Minimum Basic Data Set (MBDS) of hospital admissions of patients with RA 1999-2015. We selected the MBDSs for CVDs, myocardial infarction (MI), ischemic heart disease (IHD), congestive heart failure (CHF), cerebrovascular disease (CeVD) and aortic aneurysm (AA). Cases were identified by the presence in primary and secondary diagnosis of ICD9 codes. The population at risk was estimated through the population census with an estimated prevalence of RA of 0.5% (0.8% women, 0.2% men). Crude and adjusted rates were calculated, and the trend was analyzed using the Generalized Linear Model (GLM) with the year as the analysis variable. SPSS statistical package version 20 (SPSS Inc, Chicago, IL) was used.

Results: 338,343 RA hospital admissions were detected in the period, being 207,597 (61,3%) due to CVDs. table1 summarizes the data of the six subgroups of CVDs.

Conclusions: CVDs were the first cause of hospital admissions in Spain in RA patients during the period 1999-2015. Moreover, in that period there was an increasing incidence of hospital admissions due to CVDs in all the studied subgroups, being strikingly higher in men after age-adjusted rates. An annual rate increase is estimated in all the different studied subgroups oscilating between 5 and 9% annual increasing.

	Cardiovascular disease	Myocardial infarction	Ischemic heart disease	Congestive heart failure	Cerebrovascular disease	Aortic aneurysm
Total admissions	207597	12274	37691	31765	18445	2144
Men (%)	71724 (34.5)	6809 (55.4)	19845 (52.6)	9970 (31.4)	6509 (35.3)	1492 (69.6)
Women (%)	135873 (65.5)	5465 (44.6)	17846 (47.4)	21795 (68.6)	11936 (64.7)	652 (30.4)
Mean age (SD)	72.6 (12.3)	72.24 (15.38)	72.38 (15.38)	72.4 (15.3)	72.8 (15.3)	74.52 (10.6)
Deaths (%)	14649 (7.1)	1166 (9.5)	2918 (7.5)	4224 (13.3)	2282 (12.4)	204 (9.5)
Diabetes mellitus (%)	39639 (19.1)	2971 (24.2)	9404 (25)	6681 (21)	3746 (20.3)	258 (12)
Age-adjusted rate	7497.36	440.02	1348.95	1151.25	664.11	322.89
Men	13275.48	1266.00	3685.64	1873.95	1221.71	1425.31
Women	5830.59	237.46	772.92	950.36	516.58	116.13
Age-adjusted rate increase 1999-2015	3795.03 → 9070.71	212.71 → 553.56	600.76 → 1776.24	542.62 → 1739.70	356.13 → 934.61	30.13 → 139.06
Men	6489.91 → 18200.19	598.73 → 1527.08	1704.03 → 4769.61	868.77 → 2889.88	619.66 → 1710.68	115.07 → 437.35
Women	3078.71 → 7093.63	118.21 → 312.01	425.61 → 1032.64	446.93 → 1431.47	276.31 → 721.72	10.10 → 46.83
Annual increase % estimation (CI 95%)	5.48 (1.04-9.94)	5.02 (1.01-9.03)	5.48 (1.04-9.92)	6.8 (1.05-10.62)	6.3 (1.05-10.72)	9.3 (1.07-16.107)
Relative risk men : women	2.28	5.33	4.7	1.97	2.36	12.27

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SAT0130 IMPROVEMENT OF NUTRITIONAL CONDITIONS IN PATIENTS WITH RHEUMATOID ARTHRITIS STARTING FIRST DISEASE MODIFYING ANTI-RHEUMATIC DRUGS

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Background: Rheumatoid arthritis(RA) is a chronic inflammatory condition, and has been associated with adecreased life expectancy. Although life expectancy has improved in many RA patients recently, the reason for this is not entirely clear.

Objectives: We hypothesized that better disease activity control of RA led to relief from chronic inflammation, which resulted in better nutritional conditions, and contributed to a longer life expectancy. The aim of this analysis was to examine the relationship between RA disease control and the improvement of nutritional conditions.

Methods: We analyzed data obtained from 111 patients with RA (male 44, female 67) who were referred to our hospital and received first disease modifying anti-rheumatic drugs (DMARD) in 2016 and 2017, retrospectively. The patient data were obtained retrospectively from medical records for a 6-month period starting at the date DMARDs were initiated. We chose serum albumin (Alb), total lymphocyte count(TLC), and hemoglobin (Hb) concentration, as the indicators of the nutritional condition. Furthermore, D-values and nutrition index 40 (N.I.40), indicators of anastomotic leakage after gastrointestinal surgery were also analyzed. Comparisons between the two groups were performed using Mann-Whitney U test. Comparisons between the parameters at different time points were performed using Wilcoxon signed-rank test. The association among the ordered European League Against Rheumatism (EULAR) response rate and the magnitude of improvement in the nutritional condition were analyzed by using the Jonckheere-Terpstratetest. Data on each patient's age and duration of RA were calculated as median(IQR_{1/4-3/4}) values.

Results: The patient age was 64.0 (54.0-74.5) years, and the duration of RA was 3.0 (1.0-7.0) months. Oral prednisolone (PSL) was used in 51 patients. Other drugs administered to patients over the 6-month period included: methotrexate (63 patients), iguratimod (42 patients), bucillamine (29 patients), sulfasalazine (25patients), tacrolimus (6 patients), and bDMARD (13 patients). The level of C-reactiveprotein (CRP) and the disease activity score for 28 joints based on theerythrocyte sedimentation rate (DAS28-ESR) before and 6 months after the initiation of DMARD treatment improved from 0.50 (0.12-1.7) mg/dL to 0.10 (0.010-0.20), p<0.001, and from 4.62 (3.51-5.52) to 2.52 (1.53-3.13), p<0.001, respectively. The EULAR good response was achieved in 59 patients, and moderate response was

achieved in 31 patients. Serum Alb level, Hb concentration, D-value, and N.I.40 showed significant improvement 6 months after the starting of DMARD [3.9 (3.6-4.3) vs 4.2 (4.0-4.5) mg/dL, p<0.001; 12.5 (11.7-13.4) vs 12.6 (11.8-13.6) g/dL, p=0.0164; 0.155 (-0.47- 0.91) vs -0.26 (-0.72-0.18), p<0.001; 47.2 (41.8-51.1) vs 49.8(46.1-52.2), p<0.001, respectively]. Furthermore, we found a significant trend towards improvement of serum Alb level, Hb concentration, D-value, and N.I. 40 in patients with a better EULAR response (p value for trend=0.0124, 0.033, 0.0057, and 0.0040, respectively).

Conclusions: There was a statistically significant trend towards better nutritional improvement in patients with a better EULAR response. Control of RA may contribute not only to joint deterioration prevention, but may also help to improve the nutritional condition of patients.

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SAT0131 THE ROLE OF ULTRASOUND FOR THE ASSESSMENT OF PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis(RA) a chronic systemic connective tissue disease, one of the main symptoms is inflammation that is mainly present in hands and feet. The evaluation and follow-up of disease activity relies on composite indexes with clinical outcomes. However, many studies have shown there are differences between disease activity measured by clinical examination and ultrasound findings(1).

Objectives: The aim of this study was to evaluate the utility of ultrasound in patients with RA stratified as moderate or severe disease activity based on DAS28.

Methods: We performed across-sectional study including patients with RA; patients were followed-up under T2T standards and a multidisciplinary approach. Clinical follow-up was designed by the authors according to DAS28 as follows: every 3-5 weeks (DAS28 >5.1), every 7-9 weeks (DAS28 ≥3.1 and ≤5.1), and every 11-13 weeks (DAS28 <3.1). Additionally the patient was evaluated by a rheumatologist expert in ultrasound; US studies were carried out with a Esaote MyLab Seven® US equipment (Biomedica, Genoa,Italy) equipped with a 10-18 MHz linear transducer; PD was adjusted according to the following parameters: frequency, 8.0, PRF, 0.500, wall filter 3, gain between 50 and 70. The rheumatologist reported erosions, synovitis, osteophytes and power Doppler; we defined as active disease when patients had synovitis or positive power Doppler. We calculated means, and standard deviations for continuous variables and categorical variables were presented as rates. We performed a bivariate analysis using Pearson's Chi²

Results: 272 patients meet the inclusion criteria; most of patients were woman 87%, mean age were 57 years±11, mean DAS was 4.45±1.1, 70% of patients were in moderate disease activity (MDA), and 30% in severe disease activity (SDA), 81% of patients were receiving conventional DMARDs therapy and 19% biological therapy. Regarding the findings of the ultrasound, the most prevalent elementary lesions in hands and feet were erosions, 75% and 6% see table 1. Active disease was found in 66% (11% of patients had only synovitis and 55% had synovitis plus Doppler) see table 2. Thus, in patients where we assumed that had MDA or SDA, by ultrasound we found that 34% did not have disease activity. We did not find statistical association between ultrasound and age, sex or type of pharmacological therapy.

	PRESENT		ABSENT	
VARIABLE	n	%	n	%
HANDS				
SYNOVITIS	181	67	91	33
POWER	152	56	120	44
DOPPLER				
EROSIONS	204	75	68	25
OSTEO	108	40	164	60
PHYTES				
FEET				
SYNOVITIS	9	4	263	96
POWER DOPPLER	5	2	267	98
EROSIONS	16	6	256	94
OSTEOPHYTES	19	7	253	7

Conclusions: In RA patients with moderate or severe disease activity ultrasonography can complement the clinical evaluation, since there are a third of patients without disease activity according to ultrasound findings; where by there is a need