

**Objectives:** To describe the clinical features and outcomes of septic spondylodiscitis and to identify factors associated with an unfavourable clinical outcome.

**Methods:** Retrospective study including 107 patients followed up in our department between 1999 and 2019. Clinical, radiological and microbiological data were collected.

We divided patients into two groups: patients with unfavourable clinical outcome (defined as death, drug toxicity, neurological complication, sepsis or persistent pain) (group 1) and patients with a favourable one (Group 2).

**Results:** We included 107 patients (49 women and 58 men), with a mean age of 55 years old [16 - 86]. The median delay of consultation was 3 months. Predisposing factors were found in 59 patients (55.1%). Inflammatory back pain was seen in 78.5% of cases. Neurologic deficiency was noticed in 16.82% of cases: motor deficit in 1.8% of cases, spinal cord compression in 1.8% of cases and Cauda equina syndrome in 2.8% of cases. An inflammatory biological syndrome was found in 90.6% of cases. The lumbar spine was involved in 55%. The spondylitis was multifocal in 19.6% and multi-stage in 15.8% of cases. CT and Spinal MRI was performed respectively in 60% and 78.8% of cases and showed paravertebral abscess in 63.5%, epiduritis in 54.2%, intra-discal abscess in 4.67%, spinal cord compression 9.3%, and vertebral osteolysis in 8.4% of cases. The causative microorganism was mycobacterium tuberculosis in 59.8%, brucella in 20.56%, and pyogenic germs in 16.8% of cases. 34.5% of patients had an unfavourable clinical outcome: persistent pain was noticed in 18.7%, drug toxicity occurred in 13% of cases, neurological complication occurred in 10.2% of cases, sepsis occurred 3.7% of cases and 3.7% of patients were dead.

In the group1 the frequency of diabetes, impairment of the general state and clinical evidence of neurological impairment at presentation was higher, but with no statistically significant difference. Similarly, the presence of paravertebral abscess, epiduritis or spinal cord compression was slightly more frequent, with no significant difference.

There was no statically significant difference in the age ( $p=0.15$ ), the localisation and the causative microorganism ( $p=0.68$ ).

**Conclusion:** Spondylodiscitis is a rare but serious condition that leads to significant long-term morbidity. In our study, unfavourable clinical outcomes was found in the presence of diabetes, neurological impairment at presentation and the presence of paravertebral abscess, epiduritis or spinal cord compression in MRI but with no statically significant difference.

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#### AB1248 MALHEUR PROJECT CONFIRMS SPECIFIC CHARACTERISTICS OF MALIGNANCIES IN PATIENTS WITH RHEUMATIC AND MUSCULOSKELETAL DISEASES

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**Background:** Both rheumatic and musculoskeletal diseases (RMDs) and malignancies are frequent in the population and the probability of simultaneous occurrence in one individual is accordingly high. However, the interrelation of malignancies in patients with RMDs is still a blind spot in rheumatology. Since both disorders present two extremes of a dysregulated immune response, their interdependencies are undoubtedly complex. There is very little reliable data on cancer and relapse risk due to a certain disease entity as well as particular disease modifying therapies.

**Objectives:** The MalheuR project is a registry-based study that has been initiated at the university hospital Heidelberg, Germany to close this gap.

**Methods:** In three subregistries, we address the specific situation of patients suffering from concomitant RMD and malignancy (RheuMal registry), paraneoplastic rheumatic disorders due to a malignancy (ParaRheuMa registry) and rheumatic immune-related adverse events (irAE) due to cancer immunotherapy (TRheuma registry). Herein, we present first data from RheuMal registry.

**Results:** We analyzed 55 patients with concomitant RMDs and malignancies. The mean onset of the RMD was 58.9 years in females ( $n=33$ ) and 54.2 years in males ( $n=22$ ), the mean onset of the malignancy was 59.9 years and 56.3 years respectively. In patients first suffering from a RMD ( $n=38$ ), the average time to malignancy diagnosis was 10.3 years [1-33 years]. Only 13 patients were diagnosed with a malignancy before RMD. 4 were diagnosed for both disorders simultaneously. Solid tumors were present in 54%, hematologic neoplasms in 17%, non-melanoma skin cancer in 21% and melanoma in 8%. 13 patients suffered from more

than one neoplasm with 1 patient showing a secondary neoplasm, 4 patients with recurring skin cancer and 4 with additional benign neoplasms. Out of 6 patients pre-treated with cyclophosphamide, lymphoma, bladder and prostate cancer were diagnosed in one case each. 16 patients were pre-treated with TNFa-inhibitors, 2 cases of melanoma, 4 cases of non-melanoma skin cancer and 2 cases of hematologic neoplasms occurred. Among 7 patients with azathioprine intake, two developed non-melanoma skin cancer, but no melanoma was diagnosed.

A comparison with the German cancer registry of the Robert Koch Institute suggests an earlier onset of gender specific cancers in our patients with mean onset of breast cancer ( $n=5$ ) 5.2 years and prostate cancer ( $n=8$ ) 7.0 years earlier. Furthermore, in males with RMDs melanoma occurred 8.4 years earlier ( $n=5$ ), but squamous cell skin cancer was diagnosed 12.2 years later than in the reference cohort.

**Conclusion:** Overall, our data show specific characteristics of malignancies in RMD patients suggesting a different cancer epidemiology compared to overall population.

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#### AB1249 HOSPITAL ADMISSIONS IN PATIENTS WITH CHRONIC RHEUMATIC DISEASES RECEIVING ADALIMUMAB. DESCRIPTIVE STUDY OF A COHORT

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**Background:** Patients with chronic rheumatic diseases (CRD) treated with biological DMARDs may increase the risk of complications and hospitalizations for serious adverse reactions (SAR). Concomitant treatment with conventional DMARDs and corticosteroids may increase the risk of complications.

**Objectives:** To describe the prevalence and characteristics of hospital admissions among patients with CRD who are currently receiving Adalimumab (ADL) in a hospital setting.

**Methods:** Cross-sectional, retrospective, unicentric study. Data obtained from a cross-sectional study to determine levels of ADL and antidrug antibodies in patients currently receiving ADL. We clustered the income in SAR and income not related to bDMARD, describe the clinical and therapeutic data. Groups were compared using Student's t-test and Chi-squared test.

**Results:** We included 103 patients on ADL treatment, 54.4% (56) men, 45.6% (47) women. The mean age was 54.6 years ( $SD \pm 13.04$ ). 38.8% diagnosed of rheumatoid arthritis, 42.7% spondyloarthritis, 15.5% psoriatic arthritis and 2.9% juvenile idiopathic arthritis.

33% (34) had at least one income, mean 2.29  $SD \pm 2.93$  (1-17). Within this group, the mean age was 62.3 years ( $SD \pm 9.93$ ), the mean time of exposure to ADL was 98.9 months  $SD \pm 43.68$  (3.48-151.49). 44.1% (15) had a standard dose of ADL and 55.9% (19) had a minimum effective dose. 55.9% (19) also received scDMARD and 47.1% (16) oral corticosteroids with a mean dose of prednisone of 3.4 mg ( $SD \pm 4.6$ ). 78 incomes were produced, 7 (9%) by SAR and 71 (91%) not related to bDMARD. The average income per SAR was 0.50  $SD \pm 1.48$ .

The mean time of exposure to ADL in the group of patients with SAR was 101.97 months  $SD \pm 33.8$ , in contrast to patients without hospital admissions that was 65.02 months  $SD \pm 50.17$  ( $p < 0.01$ ). Patients without incomes received a mean daily dose of prednisone of 2.45 mg/day  $SD \pm 3.71$  while those with SAR admission of 4.58 mg/day  $SD \pm 4.00$  ( $p < 0.05$ ).

**Conclusion:** 33% (34) of patients had at least one admission, they were older (62.3 years  $SD \pm 9.93$ ) than those without incomes. The mean of income was 2.29  $SD \pm 2.93$  (1-17). 55.9% of patients also had a scDMARD prescribed and 47.1% oral corticosteroids. 9% of the admissions were by SAR with an average ADL exposure of 101.97 months  $SD \pm 33.8$  compared to patients without hospital admissions, mean 65.02 months  $SD \pm 50.17$  with statistically differences ( $p < 0.01$ ). In addition, differences were found regarding the dose of prednisone, patients with admissions by SAR received 4.58 mg/day  $SD \pm 4.00$  unlike those without incomes who received 2.45 mg/day  $SD \pm 3.71$  ( $p > 0.05$ ).

Weakness of the study is a selection bias since we include the data of patients with current ADL treatment, losing information of those in whom

ADL was suspended. These results suggest a direct relationship between the time of exposure to ADL and concomitant use with DMARDs and corticosteroids at dose >2.5 mg, similar findings are also described in other studies.

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## AB1250 SLE AND SEXUAL FUNCTION: ARE WE FORGETTING MEN?

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**Background:** Whereas SLE is uncommon in men, the disease is usually more severe and requires more aggressive immunosuppression in male patients. There are multiple studies regarding sexual aspects in women with SLE, but information about sexual function in male patients is quite scant.

**Objectives:** To determine the relationship between SLE and sexual function alterations in men, through the application of validated questionnaires.

**Methods:** We performed a longitudinal study in a third-level referral center in Mexico City. We included men aged  $\geq 16$  years who fulfilled ACR criteria for SLE and who were sexually active. All subjects answered the International Index of Erectile Function-15 (IIEF-15), the SF-36 and the HAQ in two visits. Other clinical, serological and demographic variables were measured. Oxidized LDL was quantified by ELISA.

**Results:** We included 108 male SLE patients. Mean age was  $37.2 \pm 1.1$  years and most patients (87%) were taking immunosuppressive therapy. Comorbidities were present in 58% of subjects, with dyslipidemia and hypertension being the most prevalent (34% and 28%, respectively). The prevalence of sexual dysfunction (SD) was 53%. In the basal visit, the only significant differences between the patients with SD and those without SD were a lower education degree ( $p=0.007$ ) and persistent lymphopenia ( $p=0.01$ ). There was a positive correlation between global IIEF-15 score and SF-36 score ( $r=0.46$ ,  $p=0.001$ ). The physical function domain had the highest correlation ( $r=0.50$ ,  $p=0.001$ ). Likewise, there was a weak negative correlation between IIEF-15 and HAQ score ( $r=-0.25$ ,  $p=0.012$ ). Also, the IIEF-15 had a weak correlation with the absolute lymphocyte count ( $r=0.27$ ,  $p=0.005$ ) and oxidized LDL ( $r=0.31$ ,  $p=0.04$ ). In the follow-up visit the only significant differences between the patients with SD when compared with subjects without SD was a low absolute lymphocyte count ( $1031 \pm 89$  vs  $1458 \pm 119$ ,  $p=0.005$ ); the correlations mentioned in the baseline visit remained significant. Regarding erectile function, 44% of the subjects had some degree of dysfunction. The rest of the variables are shown in Table 1.

Abstract AB1250 Table 1. Demographic, clinical and laboratory features

Variable	Mean $\pm$ SEM
Demographic	
Age (years)	37.2 $\pm$ 1.1
Body mass index (kg/m <sup>2</sup> )	26.5 $\pm$ 0.4
Less than 10 years of schooling (n,%)	21/108 (19.4)
Time since SLE diagnosis (years)	9.1 $\pm$ 0.6

Clinical Features	
Total score IIEF-15	58.7 $\pm$ 1.3
Erectile function	23.9 $\pm$ 0.6
Intercourse satisfaction	10.9 $\pm$ 0.3
Orgasmic function	8.1 $\pm$ 0.2
Sexual desire	7.5 $\pm$ 0.1
Overall satisfaction	8.1 $\pm$ 0.1
Total score SF-36	69.2 $\pm$ 1.3
Secondary antiphospholipid syndrome (n,%)	16/108 (14.8)
SLEDAI score (points)	4.2 $\pm$ 0.4
Others comorbidities (n,%)	63/108 (58.3)
Laboratory features	
Hemoglobin (mg/dl)	15.3 $\pm$ 0.2
Leukocytes (mm <sup>3</sup> ) (x10 <sup>3</sup> )	5.9 $\pm$ 0.2
Absolute lymphocyte count (mm <sup>3</sup> )	1362.6 $\pm$ 76.0
Serum creatinine (mg/dl)	1.4 $\pm$ 0.1
C3 levels	104.1 $\pm$ 3.2
C4 levels	19.7 $\pm$ 1.2
Anti-dsDNA antibodies	208.2 $\pm$ 70.4
Use of immunosuppressive treatment (n,%)	95/108 (87.9)
Prednisone (n,%)	58/108 (53.7)
Azathioprine (n,%)	31/108 (28.7)
Antimalarial (n,%)	73/108 (67.5)
Mycophenolate mofetil (n,%)	42/108 (38.8)
Cyclophosphamide exposure previous 6 months (n,%)	7/108 (6.4)
Anticoagulation (n,%)	18/108 (16.6)
Non-immunosuppressive treatment (n,%)	85/108 (78.7)

**Conclusion:** Sexual function is affected in men with lupus, regardless of comorbidities and treatment. Interestingly, lymphopenia is persistently associated with an impaired sexual function, which could be related to the role it plays in endothelial dysfunction and atherosclerosis. The patients' disease perception, which is influenced by their academic level and physical role in their daily activities, seems to affect their sexual performance and quality of life.

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## AB1251 ASSOCIATION BETWEEN VITAMIN D DEFICIENCY AND A HIGHER RATE OF DISEASE ACTIVITY IN PATIENTS WITH SPONDYLOARTHRITIS

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**Background:** Spondyloarthritis is a group of chronic inflammatory diseases with involvement of the axial skeleton (mainly), and also of peripheral joints. Patients with spondyloarthritis have a significant prevalence of vitamin D levels below normal and that would correlate with the degree of activity of the disease.

**Objectives:** To determine the association between vitamin D deficiency and the degree of activity of the disease (inflammatory activity) in a cohort of patients with spondyloarthritis.

**Methods:** Observational, extensive and transversal study. We propose a retrospective review of the database of patients with spondyloarthritis who were treated in the outpatient clinics of the Rheumatology Service of the General University Hospital of Ciudad Real during September 2016 to September 2018. Patients with the data will be selected. necessary for the analysis of the variables under study. The variables evaluated will be described using measures of frequency and measures of central tendency/dispersion as appropriate. To assess the association between vitamin D deficit and activity index, the odds ratio (OR) will be calculated. All analyzes were performed with a confidence level of 95% using SPSS 21.0.

**Results:** The first advances of the results of the study are presented. 101 patients were analyzed, of which 58 were men and 43 women, with an average age of 46.33 years (+/- 13.05 DE). 15 (14.85%) were non-radiographic axial spondyloarthritis, 48 (47.52%) ankylosing spondylitis, 24 (23.76%) psoriatic arthropathy, 3 (2.97%) spondyloarthropathy associated with inflammatory bowel disease, and 11 (10, 89%) were other types of spondyloarthritis. The average of the activity was a BASDAI of 4.355 (+/- 2.376 SD), 64 patients were in activity (BASDAI > or = 4) and 31 patients (30.69%) with an elevation of acute phase reactants. Vitamin D levels were 24.52 (+/- 9.21 SD). 77 patients (76.24%) presented figures