Results: The two groups were similar in terms of age, gender, history of diabetes and type of joint affected. SA patients had higher whole blood white blood cell counts ($p=0.03$) but similar C-reactive protein levels. Synovial fluid was more frequently turbid in septic cases than in non-septic ones.

Serum TIMP-1 ($p=0.003$), synovial MMP-9 ($p=0.002$), serum ($p=0.03$) and synovial CTX-II ($p=0.004$), and serum ($p=0.04$) and synovial CALP ($p=0.03$) were significantly higher in the septic group than in the non-septic group. The AUCs for diagnosing SA of synovial MMP-9, serum TIMP-1, synovial CTX-II, and serum and synovial CALP were, respectively, 0.84, 0.79, 0.81, 0.7 and 0.72.

A combination of serum TIMP-1 and synovial CTX-II led to 75% sensitivity and 94% specificity for diagnosing SA (AUC 0.89) and correctly classified patients in 86% of cases.

Serum TIMP-1 and synovial CTX-II did not correlate with each other ($r=0.1$) and did not correlate with C-reactive protein ($r=0.4$ and $r=0.25$, respectively) or synovial white blood count ($r=-0.04$ and $r=0.27$, respectively).

Conclusions: The combination of two laboratory measurements, serum TIMP-1 and synovial CTX-II, may make it possible to differentiate SA from other forms of arthritis in 86% of cases. These results need to be confirmed in larger samples of patients.

Disclosure of Interest: None declared

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AB1053 ADVERSE EFFECTS AND THEIR CONSEQUENCES IN PATIENTS WITH CHRONIC INFLAMMATORY ARTHROPATHIES IN TREATMENT WITH BIOLOGICAL THERAPY

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Background: The introduction of biological therapies (BT) for the treatment of chronic inflammatory arthropathies (CIA) has improved the prognosis of these diseases and the quality of life of patients. However, the safety of these drugs in the long term continues to be an aspect of interest.

Objectives: This study aims to review the safety of BT in patients with CIA and the consequences of these adverse effects for patients and the health system under daily clinical practice conditions.

Methods: A descriptive, observational and retrospective study was performed. All patients with CIA: rheumatoid arthritis (RA), ankylosing spondylitis (AS) and psoriatic arthritis (PsA) who started BT (abatacept, adalimumab, certolizumab, etanercept, golimumab, infliximab, tocilizumab and ustekinumab) from January 2009 to January 2017 in the Rheumatology Department of the Sanitary Area of Vigo (Spain) were included. Demographic variables (age, sex), variables related to CIA and their comorbidities: clinical and analytical data (CRP, ESR, haemoglobin, DAS and BASDAI) and years of disease evolution and variables about BT: concomitant treatment (glucocorticoids, methotrexate and leflunomide), persistence, adherence and number of lines were collected. Variables about the adverse effects (AEs) of BT: type and clinical consequence, requirement for additional visits to the Rheumatology clinic, visits to the Emergency Department or need for hospital admission was also collected.

Results: Three hundred sixty-two patients and 478 BT lines (250 lines in patients with RA, 119 with AS and 109 with PsA) were analysed (mean $\pm$ SD of BT lines: 1.7 ± 1.1 per patient). In 301 (63.0%) BT lines, some AEs occurred. In total, 683 AEs were detected (0.57 AEs per patient and year of treatment). The most frequent types of AEs were: bacterial infection (0.39 events per year of BT), viral infections (0.04 events per year of BT), fungal infections (0.04 events per year of BT), reactions related to the administration of BT (0.03 events per year of BT) and cardiovascular alterations (0.02 events per year of BT). Certolizumab and abatacept were the drugs that were more associated with bacterial infections: 0.82 and 0.69 per year of BT, respectively. Infliximab was the BT that was less associated with bacterial infections: 0.24 per year of BT. There were 7 deaths in probable relation with the AEs (4 bacterial infections, 1 cardiovascular event and 2 solid tumours). The AEs caused 71 hospital admissions (668 days of hospital stay), 113 hospital emergency room visits and 42 urgent visits to the Rheumatology Department. Sixty percent of the AE were managed from Primary Care without having to go to the hospital. The AEs caused a definitive interruption of BT in 51 episodes and a switch to a different BT in 52 episodes.

Conclusions: In our setting, patients with CIA on BT have an incidence of 0.57 AE per patient and year of BT. Infection (particularly bacterial) is the most frequent AE. Although more than 50% of these AEs are managed from Primary Care, they imply a high consumption of hospital resources.

Disclosure of Interest: None declared

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AB1054 FACTORS ASSOCIATED WITH TUBERCULOSIS IN RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is associated with infections that are favoured by the disease itself or by its treatments. Tuberculosis (TB) is a severe infection that can occur in patients with RA, especially with the use of anti TNF.

Objectives: We aimed to estimate the incidence of TB in RA patients and identify factors associated with TB during RA.

Methods: This is a retrospective study of RA patients according to ACR/^{EULAR} criteria 2010 collected in rheumatology department during the period from April 2010 to April 2015. Diagnosis of latent or patent TB was made as part of the pretreatment screening (biotherapy) or if signs of infection occurred.

Results: During the study period, 150 RA patients (124 women and 26 men) were enrolled. The mean age was 57.09 years.²⁵⁻⁸⁵ Mean disease duration was 7.52 years.¹⁻²⁶ Rheumatoid Factor was positive in 79% of cases. Eighty eight per cent of patients received corticosteroids with a mean dose of 10 mg/day.⁵⁻²⁰ All patients were treated with at least one conventional synthetic disease-modifying antirheumatic drug (methotrexate, sulfasalazine and leflunomide in respectively 87%, 37% and 7% cases) and only 36 (24%) patients received biotherapy. A history of patent TB treated appropriately and prior to RA, was found in 5 patients (3%): 3 pulmonary TB and 2 lymph node forms. The pretreatment test showed 11 cases of latent TB (30%). No relapsed TB was reported on RA treatment. Nine cases (25%) of new active TB were noted during biotherapy: 5 pulmonary TB (under infliximab, adalimumab and tocilizumab), 2 lymph nodes TB (under infliximab) and 2 urogenital TB (under infliximab). In our study, factors associated to TB infection were an advanced age, high level of C-reactive protein, a history of diabetes, dose of steroids ≥ 7.5 mg/day and dose of Infliximab > 3 mg/kg (table 1).

Abstract AB1054 – Table 1. Factors associated to TB in RA patients

Factors	Odds ratio	P
Age	1.7	0.02
Sex: male/female	0.3	0.5
Diabetes	1.6	0.04
Erythrocyte sedimentation rate (mm)	0.6	0.7
C reactive protein(mg/l)	1.5	0.03
RA duration	0.95	0.31
Corticosteroid duration	0.9	0.45
Dose of steroid ≥ 7.5 mg/day	1.1	0.01
Dose of methotrexate	0.5	0.64
Dose of Infliximab > 3 mg/kg	1.7	0.04
Infliximab	0.95	0.34
Adalimumab	0.9	0.72
Tocilizumab	0.8	0.25

Conclusions: Our study showed that RA patients were exposed to a higher risk of TB, especially when using anti TNF therapy with increased incidence of extra pulmonary TB. Understanding associated factors with TB may lead to establish a continuous monitoring in order to improve the quality of care.

Disclosure of Interest: None declared

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AB1055 BRUCCELLAR SPONDYLODISCITIS: DO MRI SIGNS OF SEVERITY INFLUENCE THE DURATION OF THE TREATMENT

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Background: Brucellar spondylodiscitis is rarely associated with neurological involvement. Magnetic resonance imaging has high sensitivity for detecting the paravertebral and epidural extension

Objectives: The purpose of this study was to determine the influence of the MRI severity signs on the treatment duration

Methods: A retrospective study of 27 patients with Brucellar spondylodiscitis during a period of 17 years [2000–2016] was performed. Diagnosis was made on clinical presentation, laboratory findings, radiographic evidence and Brucellar seroagglutination tests. Three patients underwent CT scans and a spinal MRI was carried out for 24 patients. All of them received antibiotic treatment based on a combination of Rifampicin and Doxycycline of varying duration

Results: Ten women and 17 men were included. The mean age was 54 years. Twenty-six patients suffered from spinal pain (96.3%) and 12 patients had radiculalgia (44.4%). The lumbar spine was the most frequently involved region (59.3%), followed by the dorsal spine (18.5%) and the cervical spine (11.1%). The

neurological examination showed no abnormalities. Spinal MRI showed paravertebral abscess in 56.5% of cases. Seventeen patients (73.9%) had epiduritis and 9 patients (39.9%) had spinal cord compression on the MRI. An abnormal signal of the spinal cord was observed in 2 cases (8.7%). All patients received a combination of Rifampicin and Doxycycline. The mean duration of the antimicrobial treatment was 8 months. There was no statistically significant association between the occurrence of abscesses, epiduritis, spinal cord compression, abnormal signal of the spinal cord on the MRI and the duration of treatment ($p=0.935$, $p=0.929$, $p=0.379$, $p=0.889$ respectively).

Conclusions: MRI of the spine frequently revealed signs of severity in brucellar spondylodiscitis patients, although without clinical expression. Despite their severity these signs did not result in a longer period of antibiotic therapy

Disclosure of Interest: None declared

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AB1056 DIAGNOSIS VALUE OF PERCUTANEOUS SPINAL NEEDLE BIOPSY IN BRUCELLAR SPONDYLODISCITIS

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Background: spondylodiscitis is a serious condition with a large variety of infectious etiology. Vertebral biopsy is needed to perform the microbiologic diagnosis when no causative organism is identified. CT-guided percutaneous spinal biopsy (CTSB) may reduce the risk of contamination and complications.

Objectives: The aim of this study is to determine the contribution of CTSB to the diagnosis of Brucellar spondylodiscitis.

Methods: we conducted a retrospective study on 27 patients admitted for Brucellar spondylodiscitis over a 17 years period [2000 to 2016]. The etiological diagnosis was based on Brucella agglutination test which was positive for all patients. Twelve patients had a CTSB with cytbacteriological and histological tests.

Results: twenty seven patients (17 men and 10 women) with a mean age of 54 years were included. Twenty six patients (96.3%) reported a spinal pain. This pain involved the lumbar spine (59.3%), the dorsal spine (18.5%) and less frequently the cervical spine (11.1%). Eight patients reported lombosciatica (29.6%). An etiological doubt subsisted in 12 cases and a CTSB was performed. Culture results were negative for 11 biopsy samples and one culture was positive to Staphylococcus in a case of a co-infection. The results of the histological examination showed chronic non-specific inflammation in 92.3% of cases. An infectious etiology was suspected histologically in 53.8% of cases and particularly of a pyogenic germ (23.1%). The biopsy was no contributive in one case

Conclusions: Our results suggest that CT-guided spinal biopsy is not useful to diagnose Brucellar spondylodiscitis. However, the absence of tubercloid granuloma and caseous necrosis helped ruling out the tubercular origin

Disclosure of Interest: None declared

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AB1057 BRUCELLAR SPONDYLODISCITIS: THE IMAGING FINDINGS

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Background: Brucellar spondylodiscitis is an important complication of brucellosis that can cause neurologic involvement and spinal deformities if not appropriately treated. Imaging examination is a major key in diagnosis

Objectives: The aim of this study was to report the imaging findings in brucellar spondylodiscitis

Methods: We performed a retrospective study including 27 patients with Brucellar spondylodiscitis over a period of 17 years from 2000 to 2016. Diagnosis was made on clinical presentation, laboratory findings, radiographic evidence and Brucellar seroagglutination tests. All patients underwent X-rays of the involved spine levels. Spinal computed tomography (CT) was carried out in 13 cases and spinal MRI in 24 cases

Results: seventeen men and 10 women aged from 33 to 75 years were included. Plain radiographs showed a disc space narrowing for 26 patients (96.3%) and an irregularity of the vertebral end plate in 16 cases (59.3%). A paravertebral abscess formation was detected for 3 patients. No obvious abnormalities were found in one case. CT scans of most patients revealed signs of spondylodiscitis (92.3%). This examination showed an erosion of the vertebral end plates (69.2%), intervertebral disc space narrowing (61.5%) and bone destruction (38.5%). The severity signs detected on the CTs were the soft tissue thickening (46.2%), abscesses formations (7.4%), epiduritis (30.8%) and one patient had a spinal cord compression. The 24 MRIs realised exhibited a signal abnormality of the vertebral body (95.7%) and the intervertebral disc (47.8%) in addition to disc space narrowing (73.9%) with erosions of the vertebral end plates (56.0%). The contrast enhanced T1-

weighted images showed marked enhancement of affected vertebrae and disc (78.3%). Thirteen patients had abscesses formations (56.5%), 17 had epiduritis (73.9%) and 9 patients (31.9%) presented a spinal cord compression on MRI. Brucellar spondylodiscitis involved one spinal level in 23 cases whereas multilevel involvement was found in the 4 others

Conclusions: plain radiographs and spinal CT scans lack sensitivity in diagnosing brucellar spondylodiscitis and spinal MRI remains the referential imaging modality to recognise early bone infection, allowing complete lesion topography and identifying the complications.

Disclosure of Interest: None declared

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AB1058 IS HEPATITIS B SURFACE ANTIGEN (HB S AG) ENOUGH ALONE AS A SCREENING TEST FOR HBV INFECTION IN RHEUMATIC DISEASE PATIENTS BEFORE STARTING IMMUNOSUPPRESSIVE THERAPIES?

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Background: Prevalence of hepatitis B virus in patients with rheumatic diseases has been reported differently among studies. The loss of immune control in these patients may result in the reactivation of HBV replication within hepatocytes. Considering the lifelong use of multiple anti-rheumatic drugs, screening for HBV is recommended before starting immunosuppressive or immunomodulatory therapy.

Objectives: The aim of this study was to select the best and simplest test for screening of HBV in rheumatic patients in Egypt.

Methods: This cross sectional study was carried out on 102 patients with different rheumatic diseases. Screening to all patients by hepatitis B surface antigen (HBsAg), hepatitis C virus (HCV) and human immune deficiency virus antibodies (HIV) were done. HBV core antibodies and real time PCR to detect HBV DNA were done.

Results: The mean age of the patients was 37.18 ± 12.37 . 3.9% of them were males and 96.1% were females. We found that HBsAg was positive in two patients (2%) and negative in 100 patients (98%). HBcAb was positive in 24 patients (23.5%) and negative in 78 patients. however PCR for hepatitis B DNA was positive in 2 patients (2.0%) only who were positive for both HBsAg and HBcAb. HBsAg had 100% Sensitivity, 100% Specificity, 100% PPV, 100% NPV and 99.0% accuracy. While antiHBc had 100% Sensitivity, 78% Specificity, 8% PPV, 100% NPV and 78% accuracy in screening of HBV.

Abstract AB1058 – Table 1. Serological diagnosis of HBV in rheumatic disease patients

	Negative No%	Positive No%	Total (n=102) No%
Anti-HBc:	78 76.5	24 23.5	102 100.0
HBs Ag	100 98.0	2 2.0	102 100.0
PCR	100 98.0	2 2.0	102 100.0

Abstract AB1058 – Table 2. The validity of HBsAg and HBcAb in relation to HBV DNA by PCR

validity of HBs-Ag in relation to PCR in diagnosis of HBV				
Sensitivity	Specificity	PPV	NPV	Accuracy
100.0%	100.0%	100.0%	100.0%	99.0%
validity of AntiHBc Ab in relation to PCR in diagnosis of HBV				
Sensitivity	Specificity	PPV	NPV	Accuracy
100.0%	78.0%	8.0%	100.0%	78.0%

Abstract AB1058 – Figure 1. Receiver operating characteristic (ROC) plot for "HBs Ag in relation to PCR in diagnosing HBV" on the left side & "HB c Ab in relation to PCR" on the right side.