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 cell counts (p<0.003) 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<0.003) and synovial CTX-II (p<0.004), 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


AB1054
FACTORS ASSOCIATED WITH TUBERCULOSIS IN RHEUMATOID ARTHRITIS
O. Saidane, I. Oueslati, R. Tekaya, A. Ben Tekaya, I. Mahmoud, L. Abdedmuloua.
Rheumatology department, Charles Nicolle hospital, Tunis, Tunisia

Background: Rheumatoid arthritis (RA) is associated with infections that are fav-oured 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, 25-65 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. 2-28 All patients were treated with at least one conventional synthetic disease-modifying antirheumatic drug (methotrexate, sulfasalazine and lefunomide 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 inflixi-amb 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 dia- betes, 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

<table>
<thead>
<tr>
<th>Factors</th>
<th>Odds ratio</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.7</td>
<td>0.02</td>
</tr>
<tr>
<td>Sex: male/female</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1.6</td>
<td>0.04</td>
</tr>
<tr>
<td>Erythrocyte sedimentation rate</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>C reactive protein(mg/l)</td>
<td>1.5</td>
<td>0.03</td>
</tr>
<tr>
<td>RA duration</td>
<td>0.95</td>
<td>0.31</td>
</tr>
<tr>
<td>Corticosteroid duration</td>
<td>0.9</td>
<td>0.45</td>
</tr>
<tr>
<td>Dose of steroid:7.5 mg/day</td>
<td>11</td>
<td>0.01</td>
</tr>
<tr>
<td>Dose of methotrexate</td>
<td>0.5</td>
<td>0.64</td>
</tr>
<tr>
<td>Dose of Infliximab&gt;3 mg/kg</td>
<td>1.7</td>
<td>0.04</td>
</tr>
<tr>
<td>Infliximab</td>
<td>0.95</td>
<td>0.34</td>
</tr>
<tr>
<td>Adalimumab</td>
<td>0.9</td>
<td>0.72</td>
</tr>
<tr>
<td>Tocilizumab</td>
<td>0.8</td>
<td>0.25</td>
</tr>
</tbody>
</table>

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


AB1055
BRUCELLAR SPONDYLODISCITIS: DO MRI SIGNS OF SEVERITY INFLUENCE THE DURATION OF THE TREATMENT
O. Saidane, I. Oueslati, R. Tekaya, A. Ben Tekaya, I. Mahmoud, L. Abdedmuloua.
Rheumatology department, Charles Nicolle hospital, Tunis, Tunisia

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 radicul- algia (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=0.925, 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


AB1056

DIAGNOSIS VALUE OF PERCUTANEOUS SPINAL NEEDLE BIOPSY IN BRUCELLAR SPONDYLODISCITIS

O. Saidane, I. Oueslati, I. Mahmoud, A. Ben Tekaya, R. Tekaya, L. Abdelmoulla
Rheumatology department, Charles Nicolle hospital, Tunis, Tunisia

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 cytobacteriological 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 lombosacralgia (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. Culture results involved the lumbar spine (59.3%), the dorsal spine (18.5%) and less frequently the cervical spine (11.1%).

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

Disclosure of Interest: None declared


AB1057

BRUCELLAR SPONDYLODISCITIS: THE IMAGING FINDINGS

O. Saidane, I. Oueslati, R. Tekaya, A. Ben Tekaya, I. Mahmoud, L. Abdelmoula
Rheumatology department, Charles Nicolle hospital, Tunis, Tunisia

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 Brucella 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 seventy 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 vertebral 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 recognize early bone infection, allowing complete lesion topography and identifying the complications.

Disclosure of Interest: None declared


AB1058

IS HB S AG ENOUGH ALONE AS A SCREENING TEST FOR HBV INFECTION IN RHEUMATIC DISEASE PATIENTS BEFORE STARTING IMMUNOSUPPRESSIVE THERAPIES?

R.A. Abdel Noor1, M. Watany2, S. Abd-Elsalam3, W. Elkhalawany3, S. Soliman4, R. Badawi3
1internal medicine and rheumatology; 2clinical pathology; 3Tropical Medicine, Faculty of Medicine, Tanta University, Tanta; 4public health and community medicine, Faculty of Medicine, Menofia university, Menofia, Egypt

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 patients with rheumatic diseases 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. They were 96.1% males and 96.1% females. We found that HBsAg was positive in two patients (2%) and negative in 100 patients (98%). HBeAb 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 HBe Ab. 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

<table>
<thead>
<tr>
<th>Test</th>
<th>Negative No%</th>
<th>Positive No%</th>
<th>Total (n=102) No%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Hbc</td>
<td>78.76</td>
<td>24.23</td>
<td>102.00</td>
</tr>
<tr>
<td>HBs Ag</td>
<td>100.98</td>
<td>2.0</td>
<td>102.00</td>
</tr>
<tr>
<td>PCR</td>
<td>100.98</td>
<td>2.0</td>
<td>102.00</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Specificity</th>
<th>PPV</th>
<th>NPV</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>99.0%</td>
</tr>
</tbody>
</table>

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