DAA and reached complete viral eradication, at 3 time points: before starting DAA (pre-DAA), after completing DAA (post-DAA), 52 weeks after completing DAA (52w). Additionally, a population of 9 patients with the same disease (mean age 65 yrs, female 77%, mean disease duration 9 yrs) but treated with one or more cycles of RTX prior receiving DAA, was analysed at the same timepoints and additionally before starting RTX(pre-RTX). At each time point clinical data (presence/absence of purpura, neuropathic manifestations, arthralgia, fatigue, nephritis) and biochemical parameters (% cryoglobulins, C3, C4 and RF) were recorded. The change in clinical and biochemical parameters at different timepoints were evaluated.

Results: Among patients treated with DAA only, the prevalence of clinical manifestations before starting treatment was the following: purpura 31%, neuropathic manifestations 52%, arthralgia 28%, fatigue 14%, nephritis 3%. We observed a significant reduction in purpura after treatment (pre-DAA vs post-DAA=31% vs 13%, $p=0.044$) that persisted at 52w (pre-DAA vs 52w=31% vs 0%, $p=0.004$). This in parallel with a significant reduction in the level of cryoglobulins (pre-DAA vs 52w=3.99±5.28 vs 1.6 ±1.7, $p=0.029$ and pre-DAA vs 52w=3.99 ± 5.28 vs 0.92 ± 1.75, $p=0.008$). Among patients pre-treated with RTX, the prevalence of clinical manifestations before starting RTX was: purpura 78%, neuropathic manifestations 100%, arthralgia 44%, fatigue 50%, nephritis 22%; and before starting DAA was: purpura 22%, neuropathic manifestations 100%, arthralgia 0%, fatigue 0%, nephritis 0%. A significant reduction in the rate of purpura (pre-RTX vs pre-DAA=78% vs 22%, $p=0.009$) and arthralgia (44% vs 0%, $p=0.012$) after RTX treatment was observed, but no difference in any clinical parameter when comparing pre-RTX with post-DAA and 52w. No significant change in any of the serological parameter was observed.

Conclusion: DAA treatment is associated with rapid and sustained decrease in the level of cryoglobulins and related clinical improvement, specifically purpura. Patients who had been pre-treated with RTX showed clinical improvement in terms of purpura and arthralgia, albeit transient; subsequent treatment with DAA did not result in any immediate or long term additional clinical benefit.

REFERENCES

- [1] Mazzaro C. Clin Exp Rheum 2017.

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SAT0461

VERTEBRAL OSTEOMYELITIS IN THE IMMUNOSUPPRESSED PATIENTS

Jorge Juan Frago-Gil¹, Roxana Gonzalez Mazario¹, Jose Ivorra Cortés¹, Francisco Miguel Ortiz Sanjuan¹, Elena Grau Garcia¹, Cristobal Pavez Perales¹, Marta De la Rubia Navarro¹, Inmaculada Chalmeta Verdejo¹, Luis Gonzalez Puig¹, Isabel Martínez Cordellat¹, Rosa Neguerolos Albuixech¹, Cristina Alcañiz Escandell¹, Jose Eloy Oller Rodríguez¹, Elvira Vicens Bernabeu¹, Carmen Nájera Herranz¹, Inés Cánovas Olmos¹, María Tasisas Pitarch², Eva Calabuig Muñoz², Miguel Salavert Lletí², Jose Andrés Román Ivorra¹. ¹Rheumatology Department. HUP La Fe, Valencia, Spain; ²Infectious Diseases Unit. HUP La Fe, Valencia, Spain

Background: Vertebral Osteomyelitis (VO) is an infectious disease that could involve intervertebral space (discitis). Its incidence is raising for several reasons, such as the increasing number of patients on immunosuppressive therapy. The treatment includes long term antibiotic, that should be initiated after biopsy (if possible) and sometimes, further surgery is needed¹.

Objectives: To analyze the influence on prognosis of detection of OV in immunosuppressed (IS) patients.

Methods: Single center retrospective observational study including IS adult patients diagnosed of VO based on the combination of clinical presentation with either a definitive bacteriologic diagnosis or pathological and/or imaging studies from January 2010 to January 2019. Demographic features, concurrent diseases, clinical history (length of pain and fever prior to admission), laboratory findings, microbiological diagnosis and radiological data were compiled. We considered as IS patients those who had rheumatic or inflammatory bowel disease undertaking immunomodulatory drugs, solid organ transplantation receptors, patients with an active

malignancy or Human Immunodeficiency Virus (HIV) infected. Clinical and radiological history of lumbar stenosis or disc herniation was considered as prior spine pathology. Surgical infections were excluded. We considered deaths attributable to PVO those which were directly caused by the infectious picture and/or its complications during the next year after diagnosis.

Results: Eighteen of 122 patients with VO (21.96%) were IS. Basal demographic and clinical features are exposed in table 1. Detailed data about the cause of the IS is provided separately in table 2. Duration of pain prior to diagnosis had a median of 30 days (15.5, 55). C reactive protein showed a median value of 65.2mg/L (19.32, 153.9) and Erythrocyte Sedimentation Rate mean value was 80.57mm/H (31.75). MRI was the imaging technique most often used for diagnosis (83.33%), followed by CT-scan (16.67%). The region most frequently affected was lumbosacral spine (44.44), then dorsal (33.33%) and finally cervical (22.22%). Some abscess (epidural or paravertebral) was detected in 16 patients (88.89%) close to non-IS patients (90.38%). Worst data concerning vertebral destruction was observed (66.67% in IS group against 49.04 in non-IS, $p=0.3$) and cord compression (61.11% versus 26.92% respectively, $p=0.05$). Fifteen patients underwent CT guided biopsy (83.33%) with prior antibiotic exposure in 11 of them. Median exposure was 4.5 days (3, 8.75). Delay from admission to procedure had a median value of 6 days (3.5, 9). Culture was positive in 53.33% of cases. In 10 patients, the picture was attributed to Gram+ (55.56%), in other 2 cases Gram- (11.11) and 1 case of tuberculosis (5.56). In 5 cases (27.78%) final pathogen was unknown. Four patients (22.22%) required further surgery and 2 patients (11.11) died, similar than non-IS group, 11.54%.

Conclusion: In general terms, data about imaging is worse in IS patients and higher proportion of cervical spine involvement was also noted. Although, early intervention (diagnosis, puncture guided biopsy and treatment) seems to be protective against a bad outcome, since IS patients showed similar prognosis (further surgical procedures and death) than non IS patients. To sum up, new onset back pain in a IS patient, should be thoroughly studied so as to consider a VO as soon as possible.

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SAT0462

INTEREST OF FOLLOW-UP IMAGING EXAMINATIONS IN PATIENTS WITH PYOGENIC VERTEBRAL OSTEOMYELITIS: A RETROSPECTIVE STUDY

Sophie Hecquet, Kevin Bouiller, Frank Verhoeven, Clément Prati, Daniel Wendling, Catherine Chirouze. Centre hospitalier régional universitaire de Besançon, Besançon, France

Background: Systematic follow-up imaging in patients with pyogenic vertebral osteomyelitis (PVO) is widespread. However, it is discussed, and there is no recommendation.

Objectives: Evaluate the interest of follow-up imaging examinations in patients with pyogenic vertebral osteomyelitis

Methods: We conducted a retrospective cohort analysis of patients with PVO who had both baseline and follow-up imaging results available in a French university hospital during the period of 2010-2018. We have classified the follow-up images into two groups, improvement/stability and deterioration, compared with the baseline findings. For each patient, we compared their imaging follow-up to their clinical-biological condition assessed at the same time.

Results: We have collected 80 patients. The median age was 71 years [32-89], 46 men, 13 patients had a history of spinal surgery. The most frequently reported germ was methicillin-sensitive staphylococci and the level of spinal involvement was predominantly lumbar. A Computerized Tomography (CT) was performed in 64% and a Magnetic Resonance Imaging (MRI) in 85% at the time of diagnosis. We identified 89 follow-up images, 58 MRIs, 31 CTs. The median delay of realisation was 85 days [11-364]. Soft tissue infiltration was observed in 50 patients compared to 26 on follow-up images but 3 were new. Similarly, 24% of the initial images had epiduritis compared to 16% during follow-up, 3% had appeared secondarily. There were 12% initial erosions described compared to 25% at follow-up. Of the 33 patients with clinical and biological recovery, 67% of follow-up images were classified as improving/stable and 33% as worsening (new abscesses (n=3), extension of soft tissue infiltration (n=2) and/or epiduritis (n=2) or appearance of new locations (n=2)). Among the 37 patients considered as unhealed, 87% of follow-up images were classified as improving/stable and 13% as worsening (new abscesses (n=1), extension of soft tissue infiltration (n=1) and/or epiduritis (n=1) or appearance of new locations (n=1)).

Conclusion: Our study showed that there was no correlation between the clinical condition of patients and their follow-up imaging in the context of PVO. Clinical and biological evaluation seems sufficient to determine whether or not the patient is cured. Many images are made during the follow-up with a questionable cost/effectiveness ratio. A standard radiograph may be sufficient to provide a basic structural condition at the end of antibiotic therapy.

Disclosure of Interests: None declared

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SAT0463 BRUCELLAR SPONDYLODISCITIS: CLINICAL, RADIOLOGICAL AND THERAPEUTIC FEATURES

Aicha Ben Tekaya¹, Khaoula Zouaoui¹, Ines Mahmoud¹, Olfa Saidane¹, Mohamed Ben Hammamia², Rawdha Tekaya¹, Leila Abdelmoula^{1,1}. ¹Charles Nicolle Hospital, Tunis, Tunisia; ²la rabta hospital, Tunis, Tunisia

Background: Brucellosis is an endemic disease around the Mediterranean and especially in Tunisia and Brucellar spondylodiscitis is the most common osteoarticular localization.

Objectives: The aim of our study is to study the clinical, radiological and therapeutic characteristics of Brucellar spondylodiscitis.

Methods: This is a retrospective descriptive study, conducted over 20 years (1999-2019) at a Rheumatology Department. We collected cases of Brucellar spondylodiscitis. We studied the clinical, radiological features and therapeutics outcomes.

Results: We included 23 patients, 15 men and 8 women, with a mean age of 53.21 years [31,79].

Contact with livestock or consumption of raw milk was noted in 16 cases. The diagnosis time was, on average, 3.8 months [1,9]. Spine pain was present in all cases, with lumbar seat in 16 cases and was inflammatory in 20 cases. At the examination, 19 patients had a limitation of spinal mobility and 4 had neurological abnormalities. A motor deficit with a horseshoe syndrome was objectified in one case. We noted a biological inflammatory syndrome in 19 cases. Wright's serology was positive in 21 cases. Standard radiographs showed disc narrowing in 10 cases. 21 patients had spinal magnetic resonance imaging showing the abnormalities of the disc and adjacent vertebrae. We found abscess in four patients and epiduritis associated with the abscess in six patients. MRI showed spinal compression in 2 patients. Disco-vertebral biopsy was performed in 11 cases and helped to make the diagnosis in 3 cases. The patients had received antibiotic therapy with a combination of doxycycline and rifampicin with a mean total duration of 4.9 months [2,12]. Evolution was favorable in 19 cases. Complications were mainly neurological (n=3) or related to the toxicity of the treatment (n=3).

Conclusion: Brucellar spondylodiscitis can be serious because of the neurological complications that it can cause. At the slightest diagnostic doubt, we should perform an MRI. And antibiotic treatment must be urgent and well-adapted with careful monitoring of patients.

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SAT0464 HEPATITIC SAFETY OF ANTI-TUBERCULOUS TREATMENT IN SPONDYLODISCITIS

Aicha Ben Tekaya¹, Khaoula Zouaoui¹, Rawdha Tekaya¹, Olfa Saidane¹, Mohamed Ben Hammamia², Ines Mahmoud¹, Leila Abdelmoula^{1,1}. ¹Charles Nicolle Hospital, Tunis, Tunisia; ²la rabta hospital, Tunis, Tunisia

Background: Tunisia is considered as a country with high tuberculosis endemicity. The anti-tuberculous treatment is quite long and binding and requires close hepatic monitoring.

Objectives: The purpose of this study was to highlight the hepatic safety of anti-tuberculous treatment in tuberculous spondylodiscitis.

Methods: This is a retrospective descriptive study, over 20 years (1999-2019) collating cases of tuberculous spondylodiscitis in a rheumatology department. We studied the epidemiological, clinical, radiological and therapeutic aspects.

Results: Our study included 62 patients, 35 women and 27 men. Mean age was 56 years [16-86]. The diagnosis delay averaged 5.59 months [0.23-24]. Tuberculous contact was noted in 11.3% of the cases. Neurological abnormalities were noted in 16.1% of cases with spine compression in 3.22%. The tuberculin skin test was positive in 29 cases and the Koch bacillus investigations in the sputum and the urine were positive in only 3 patients. Magnetic resonance imaging was performed in 71% of the patients, and mainly showed images of disc destruction with images of abscess, epiduritis and epidural extension. Infectious spondylodiscitis affected the lumbar spine in 66.1% of the cases, the dorsal spine in 14.51% of the cases and the cervical spine in 6.55% of the cases. It

was bi-staged in 19.35% of the cases and bifocal in 17.74% of the cases.

Disco-vertebral biopsy was performed for 72.5% of patients and helped to make the diagnosis in 33.87% of the cases. All patients have received anti-tuberculosis treatment based on rifampicin, pyrazinamide, ethambutol and Isoniazid for an average duration of 2.8 months. Following the initial 4-drug regimen, most patients continued to receive a two-drug regimen with RMP and INH for a mean duration of nine months. Hepatotoxicity was seen in 13% : 11.4% of the patients had a history of cholestasis due to TB treatment, Only 2% of the patients had cytolysis. We needed then to modify the treatment in 3.22%, and switch to triple anti-TB therapy based on Isoniazid, Rifampicin and ethambutol with a favorable evolution. No cases of hepatic insufficiency were noted.

Conclusion: In our study, we note 8 cases of hepatotoxicity. The diagnosis of tuberculous spondylodiscitis requires urgent treatment with anti-tuberculosis antibiotics. However, it should be kept in mind that this treatment can lead to severe and life-threatening hepatotoxicity. Thus a rigorous monitoring of the treatment will be required.

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SAT0465 VALUE OF SERUM PROCALCITONIN FOR THE DIAGNOSIS OF BACTERIAL SEPTIC ARTHRITIS IN DAILY PRACTICE IN RHEUMATOLOGY

Mickael Chouk¹, Frank Verhoeven¹, Maxime Sondag¹, Xavier Guillot², Clément Prati¹, Daniel Wendling¹. ¹Centre hospitalier régional universitaire de Besançon, Besançon, France; ²Hospital Center Félix Guyon, Saint-Denis, Reunion Island

Background: Septic arthritis is a diagnostic and therapeutic emergency because of a high morbidity and mortality. Nevertheless, the etiologic diagnosis is often difficult.

Objectives: The aim of our study was to determine if serum procalcitonin was a discriminatory biomarker in case of arthritis of undetermined etiology.

Methods: Patients were separated in 5 groups: gouty arthritis, calcium pyrophosphate deposition arthritis, osteoarthritis or post-traumatic arthritis ("mechanical" arthritis), chronic inflammatory rheumatic arthritis, and septic arthritis. Levels of serum with blood cells, C-Reactive Protein and procalcitonin were measured.

Results: 98 patients were included: 18 in the "gout" group, 26 in the "calcium pyrophosphate deposition arthritis" group, 16 in the "mechanical" group, 18 in the "chronic inflammatory rheumatic" group and 20 in the "sepsis" group. The area under the receiver operating characteristic curve of with blood cells, C-Reactive Protein and procalcitonin levels to diagnose a septic arthritis were 0.69 (IC95% 0.55-0.83), 0.82 (IC95% 0.73-0.91), and 0.87 (IC95% 0.76-0.98) respectively. For a cut-off of 0.5 ng/ml, procalcitonin sensitivity, specificity, positive predictive value, negative predictive value, positive likelihood ratio and negative likelihood ratio were 65%, 91%, 65%, 91%, 7.2 and 0.4, respectively. Serum C-Reactive Protein and procalcitonin levels were correlated, were not different in "sepsis" or "gout" groups and were higher in non-septic arthritis with poly-arthritis than with mono-arthritis (p<0.05).

Conclusion: Serum procalcitonin is a useful biomarker in arthritis management with diagnosis performances higher than those of other biomarkers (with blood cells, C-Reactive Protein).

Disclosure of Interests: None declared

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SAT0466 PNEUMOCOCCAL CELLULITIS AND FASCIITIS IN SYSTEMIC LUPUS ERYTHEMATOSUS: A SYSTEMATIC REVIEW

Martín Greco¹, Iñigo Rua-Figueroa¹, Antonio Naranjo¹, Sabrina Ghiglione², María Celia Erausquin¹, Juan Carlos Quevedo-Abeledo¹, Carlos Rodríguez-Lozano¹, Cristina Almeida¹, Paola León¹, Estibaliz Loza³. ¹Hospital Universitario de Gran Canaria Dr. Negrín, Las Palmas, Spain; ²Complejo Hospitalario Universitario Insular Materno Infantil – CHUIMI, Las Palmas, Spain; ³Instituto de Salud Musculoesquelética Inmusc, Madrid, Spain

Background: Streptococcus pneumoniae (SPN) is an encapsulated gram-positive bacterium that can be found in the nasopharynx as part of the normal flora. However, is the most common cause of community-acquired pneumonia in adults and can also cause invasive diseases such as bacteremia, meningitis, and otitis media. Pneumococcal cellulitis and fasciitis