Acknowledgements: We would acknowledge Dr. Noran Alhashmi, Dr. Roaa Jodah, and Dr. Lamis Ramadan for their assistance in data collection.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1617

POS1154

CHARACTERISTICS OF SURGICALLY TREATED TUBERCULOUS AND BRUCELLAR SPONDYLODISCITIS

D. Khalifa¹, N. El Fani², R. Moncer², E. Toulgui², W. Ouanes², S. Jemni³. ¹Farhat hached hospital, rheumatology, sousse, Tunisia; ²sahloul hospital, physical therapy and rehabilitation, sousse, Tunisia; ³sahloul hospital, physical therapy and rehabilitation, sousse, Tunisia

Background: Although rare in most developed countries, tuberculous and brucellar spondylodiscitis are still frequent in the mediterranean countries. Management of spondylodiscitis may require a surgical intervention in cases of spinal cord or root compression, bone destructions and deformities, unsuccessful medical treatment or large abscesses.

Objectives: To study characteristics and outcome of surgically treated tuberculous and brucellar spondylodiscitis.

Methods: Medical records of patients who were admitted into the physical therapy and rehabilitation ward immediately post surgery of the spine were retrospectively studied. The study included records from January 2010 to December 2020.

Results: Twenty patients were diagnosed with tuberculous or brucellar spondylodiscitis for which they underwent surgery. The mean age of diagnosis was 49.7± 11.9 years. The sex ratio was 1:1. The diagnosis was delayed in 60% of the cases due to atypical presentations. Fatigue was reported in 45% of the patients, back pain in 60% of the cases, radicular pain in 15% of the cases, fever in 20% of the patients and abnormal gait in 60% of the cases. Tuberculosis was identified in 75% of cases and brucellar infection in 25% of the cases. On biology, elevated inflammatory markers were noted in 60% of the cases. Intra-dermal reaction for tuberculosis was positive in 9 patients while cultures allowed the diagnosis of tuberculosis in 1 patient. Wright serology test confirmed the diagnosis of brucellar infection in all 5 cases. In the remaining ones, vertebral biopsy or intraoperative samples allowed the diagnosis of the tuberculous spondylodiscitis. Cervical spine involvement was noted in 5% of cases, lumbar spine in 25% and dorsal spine in 30% of the cases. All patients received antibiotics and spinal immobilization. Surgery was indicated in 78.6% of cases for spinal cord decompression and in 21.4% of the cases for voluminous abscesses. Anterior approach was used in 7.1% of the cases and posterior approach in 92.9% of cases. 23.1% of the patients benefited concomitantly with spinal fusion surgery. Post operative success was immediately confirmed by recovery of normal gait in 15.4% of the patients. Complications after surgery were reported in 35.7% of the cases. They consisted in spinal instability in 60% of the cases, abscesses in 20% of the cases and the emergence of secondary articular localizations in 20% of the cases. 28.6% of the patients underwent a second surgery mainly to stabilize the spine. Before surgery, walking was impossible for 65% of the patients and 12 months after surgery only 30% of the patients couldn't walk (p=0.001). 15.8% of the patients developed later on pressure ulcers and 45% of the patients were prescribed appropriate wheelchairs.

Conclusion: Spinal surgery in tuberculous or brucellar spondylitis may be indicated if medical treatment is insufficient and especially if neurological complications occur. Surgery may be invasive with various complications but sometimes it could be the only option to treat a neurological deficit.

REFERENCES:

- [1] Guerado E, Cerván AM. Surgical treatment of spondylodiscitis. An update. *Int Orthop* 2012; 36: 413–420.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1932

POS1155

INFECTIOUS RISK DURING BIOLOGIC THERAPY FOR INFLAMMATORY RHEUMATIC DISEASES: DATA FROM THE TUNISIAN BINAR REGISTRY

S. Boussaid¹, R. Ben Aissa², S. Kochbat², M. Elleuch¹, L. Abdelmoula³, A. Laatar⁴, W. Hamdi⁵, I. Gharsallah⁶, E. Bouagina⁷, S. Baklouti⁸, N. Bergaoui⁹, M. Younes¹⁰. ¹Rabta Hospital, Department of Rheumatology, Tunis, Tunisia; ²Habib Thameur Hospital, Department of Internal Medicine, Tunis, Tunisia; ³Charles Nicolle Hospital, Department of Rheumatology, Tunis, Tunisia; ⁴Mongi Slim Hospital, Department of Rheumatology, Marsa, Tunisia; ⁵Med Taieb Kassab Institute, Department of Rheumatology, Mannouba, Tunisia; ⁶Military Hospital, Department of Internal Medicine, Tunis, Tunisia; ⁷Farhat Hached Hospital, Department of Rheumatology, Sousse, Tunisia; ⁸Hedi Chaker Hospital, Department of Rheumatology, Sfax, Tunisia; ⁹Fattouma Bourguiba Hospital, Department of Rheumatology, Monastir, Tunisia; ¹⁰Tahar Sfar Hospital, Department of Internal Medicine, Mahdia, Tunisia

Background: The development of biologics for the treatment of systemic rheumatic diseases increased the risk of infections. The management of this complication deserves particular attention since it remains a major cause of morbidity and mortality.

Objectives: The aim of our study was to determine infection frequency under biological treatment and consequences on the therapeutic management.

Methods: Patients included in the Biological National Registry (BINAR) from 2016 to 2020. Data related to the disease, biological agents, and infections occurring under biologic disease-modifying antirheumatic drugs (bDMARDs) were collected.

Results: The study included 298 patients with a mean age of 49.2 years [18-79] 175 patients with rheumatoid arthritis and 123 with spondyloarthritis (Axial Spondyloarthritis=48, Enteropathic Arthritis=41, Psoriatic Arthritis=34). Anti Tumor necrosis factor-alpha (Anti-TNF) agents were the most prescribed bDMARDs in 87.9% (n=263) of patients: Infliximab 20.4% (n=61), Etanercept 23.1% (n=69), Adalimumab 24.6% (n=74) and Certolizumab (n=79). No patients were treated with Golimumab. Tocilizumab and Rituximab were prescribed respectively in 10.4% (n=31) and 5% (n=15) of patients. Infections occurred in 9 patients (3.1%) with a total of 13 infectious episodes 12 bacterial and a viral one. The site of infections was: respiratory (38%), urinary (15%), cutaneous (23%), ORL (8%), infective endocarditis (8%), and other (8%). The infectious agent was identified in only 3 patients. The outcomes were favorable in most cases except in one patient where there was a definitive interruption of bDMARDs. The patient was hospitalized for sepsis complicating a cutaneous infection with favorable outcomes under antibiotics within a week. The biological agent with higher risk of infections was Tocilizumab (p = 0.056), unlike Rituximab (p = 0.483) and Anti-TNF (p = 0.082). All patients who had an infectious episode were under corticosteroids.

Conclusion: Our results confirm that bDMARDs are predisposing to infections, but data from BINAR showed that most infections were trivial with no serious outcomes. Therefore, infections should be assessed in patients under bDMARDs for an early therapeutic intervention.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.3000

POS1156

INFECTIONS AND OTHER ADVERSE EFFECTS WITH BIOLOGICAL THERAPIES OVER THE PAST 10 YEARS

G. Alvarez¹, A. Perez Jaen¹, A. Uribe Luna¹, M. Rexach Fumana¹, L. Peries Reverter², C. Diez Vallejo³, L. Viñas Sague³, A. Castro Guardiola¹. ¹Hospital Universitario de Girona Doctor Josep Trueta, Internal Medicine, Girona, Spain; ²Hospital Universitario de Girona Doctor Josep Trueta, Gastroenterology, Girona, Spain; ³Hospital Universitario de Girona Doctor Josep Trueta, Pharmacology, Girona, Spain

Background: Biological therapies have marked a difference in the treatment of many autoimmune conditions. As all treatments, they have their side effects although little evidence of long-term effects has been reported.

Objectives: Analyze retrospectively the appearance of infections that required hospitalization and other side effects in patients treated with biological therapies over the past 10 years.

Methods: Biological drugs dispensed in our center to non-cancer patients from 2008 to 2018 were reviewed. Health records were collected from our database and all statistical analyzes were performed with the SPSS program.

Results: 24 different biological drugs applied to 34 medical conditions; 847 treatments were dispensed over a total of 555 patients. The median age was 44 years with a mean duration of 3.6 years of treatment. The most commonly used drug were adalimumab (n = 280, 33%), infliximab (n = 119, 12%), etanercept (n = 97.13%), rituximab (n = 63, 7%), vedolizumab (n = 47, 5.5%) and omalizumab (n = 43.5%). The rest of the drugs were administered <30 times each (ustekinumab, golimumab, certolizumab, tocilizumab, secukinumab and abatacept), representing <4% of the total sample.

The underlying conditions included Crohn's Disease (n = 262, 31%), rheumatoid arthritis (n = 133, 16%), ulcerative colitis (n = 118, 14%), spondyloarthropathies (n = 86, 10%), psoriatic arthritis (n = 56, 7%), psoriasis (n = 49, 6%), asthma (n = 34, 4%), nephropathies (n = 19, 2%) and vasculitis (n = 13, 1.5%). The rest were pathologies with <10 cases.

During treatment, infection requiring hospitalization occurred in 10.2% (n = 86). The most frequent focus of infection was respiratory (n = 23, 27%), abdominal (n = 19, 22%), soft tissue-bone (n = 17 cases, 20%), urinary (n = 7, 8%) and tuberculosis (n = 4, 5%). No case of hepatitis reactivation was observed. At the time of hospital admission, 46% of patients were only under biological therapy, 21% had another non-corticosteroid immunosuppressant, 17% were associated with corticosteroid, and 15% had triple therapy (corticosteroids, another immunosuppressant and the biological drug). The drugs associated with more infections were: abatacept 20%, rituximab 16% and adalimumab 13%.

During the study period, 14 deaths (1.7%) were observed; being the cause cancer-related (n=5), infection (n=5), the disease itself for which was receiving biological treatment (n=2), and endocrine metabolic causes (n=2).

At the end of the review, 48% of the treatments were still in use, while 52% had stopped for various reasons: 20% ineffectiveness, 12% side effects, 12% maintained complete remission. The remaining low percentage was due to death, pregnancy, or study entry.

The side effects that led to a change in treatment was: non-immune hematological disorders in 4.1% (14% of tocilizumab, 7% of rituximab and 6% of vedolizumab), immune disorders in 3.8% (6% of secukinumab, 5% of tocilizumab and 4.5% of certolizumab), nervous system involvement in 2.4% (11.5% of golimumab, 10% of abatacept, 5% of tocilizumab), debut or worsening of heart failure in 1.4% (9, 5% of tocilizumab, 2.5% of etanercept and 1.4% of adalimumab) and cancer-related in 0.7% (2% of infliximab, 1.7% of etanercept).

Conclusion: In these 10 years of follow-up and evaluating 847 treatments, there were 10% hospitalizations due to infections ($n = 86$) causing death in 5 patients. In light of these results, and pending an exhaustive statistical analysis, we did not find high frequencies of serious side effects in our series. Very little long-term evidence exists on the safety of these drugs.

REFERENCES:

- [1] Singh JA, Wells GA, Christensen R, et al. Adverse effects of biologics: a network meta-analysis and Cochrane overview. *Cochrane Database Syst Rev*. 2011;2011(2):CD008794. Published 2011 Feb 16.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.3130

POS1157

CONCORDANCE BETWEEN THE QUANTIFERON-TB GOLD IN-TUBE AND TUBERCULIN TEST FOR THE DIAGNOSIS OF LATENT TUBERCULOSIS INFECTION IN PATIENTS WITH RHEUMATIC DISEASES

C. Páez Perales¹, A. Quiles Roger², E. Grau García¹, M. De la Rubia Navarro¹, S. Leal Rodríguez¹, R. Gonzalez Mazarío¹, J. J. Frágio Gil¹, C. Alcañiz Escandell¹, J. Ivorra Cortés¹, I. Chalmeta Verdejo¹, L. Gonzalez Puig¹, I. Martínez Cordellat¹, R. Neguerolles Albuixech¹, F. M. Ortiz Sanjuan¹, J. E. Oller Rodríguez¹, E. Vicens Bernabeu¹, C. Nájera Herranz¹, I. Cánovas Olmos¹, J. A. Román Ivorra¹. ¹HUP La Fe, Rheumatology Department, Valencia, Spain; ²UCV, Medical School, Valencia, Spain

Background: Patients with rheumatic diseases (RD) are at higher risk of latent tuberculosis infection (LTBI) reactivation. To detect and treat it before starting treatment, especially with biological therapies, decrease the reactivation risk. Diagnosis is carried out by the tuberculin skin test (TST) or interferon-gamma release assays (IGRAs), IGRAs might be more specific and sensitive.

Objectives: We aim to analyze the concordance between QuantiFERON-TB Gold In-Tube (QTF) and TST for the diagnosis of LTBI in patients with rheumatic diseases.

Methods: A retrospective observational study was conducted including patients diagnosed with RD screened for LTBI with both TST and QTF (2014-2018). Demographical and clinical variables at screening and at follow-up were collected. The concordance between both tests has been estimated as categorical variables using Cohen's Kappa test, considering "poor" if it is ≤ 0.20 ; "low" if $0.20 < k \leq 0.40$, "moderate" if $0.40 < k \leq 0.60$, "substantial" if $0.60 < k \leq 0.80$ and "optimal" if $k > 0.80$.

Results: 167 patients were included (57% women) with a mean age of 52 ± 16 years. 42% of them had systemic autoimmune diseases, 22% spondyloarthropathies and 36% other RD. 2 had history of past active tuberculosis (TB). At the time of screening, 46.11% were treated with GC.

LTBI was diagnosed in 35 patients: 15 had both QTF and TST positive, 16 only QTF positive and 4 only TST positive. 12 from 31 QTF positive patients were treated with GC at the time of screening. 3 from 19 TST positive patients were treated with GC at the time of screening.

After LTBI screening 62 patients received biological treatment, 4 of them had both test positive, 6 only QTF positive and 2 only TST positive. 11 received LTBI treatment according to the hospital protocol (isoniazid for 6 to 9 months). 10 completed treatment, 1 did not because of intolerance and did not receive other treatment. 1 patient with only TST positive was considered a false positive and did not receive treatment. During follow-up no TB reactivation was reported.

23 patients with LBTI received treatment other than biological therapy during follow-up, of them 8 received LBTI treatment. There was no TB reactivation during follow up.

The Kappa concordance between QTF and TST was estimated: moderated in the whole sample, poor in the patients treated with GC at screening, and substantial when the patients treated with GC at screening were excluded. Results are shown in Table 1.

Table 1. Kappa concordance between QTF and TST.

	TOTAL SAMPLE	PATIENTS WITH GC AT LTBI SCREENING	PATIENTS WITHOUT GC AT LTBI SCREENING
Number of coincidences (p1)	147 (88.02%)	64 (83.12%)	83 (92.22%)
Number of randomly expected coincidences (p _e)	124.1 (74.28%)	62.9 (81.73%)	61.8 (68.62%)
Kappa = p1- p_e / 1- p_e	0,534	0,117	0.752
IC 95%	(0.358- 0.710)	(-0.154- 0.305)	(0.579- 0.926)

Conclusion: QTF seems to be the most appropriate LTBI screening test in patients with RD treated with GC. Screening and treatment of LTBI in patients with RD treated with or without biological agents was effective in reducing TB reactivation.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.3157

POS1158

THE SPECTRUM OF NON-TUBERCULOUS OSTEOARTICULAR INFECTIONS IN A RHEUMATOLOGY DEPARTMENT DURING THE YEARS 2010-2020: A RETROSPECTIVE STUDY OF 102 CONSECUTIVE CASES IN A SINGLE CENTER

M. Chamakh¹, C. Bendahmane¹, F. Kemiche¹, I. Cerf-Payastre¹, E. Pertuiset¹. ¹Centre Hospitalier René Dubos, Rheumatology, Pontoise, France

Background: osteoarticular infections (OAI) are characterized by a large variety of sites, causative microorganisms, source and route of infection, risk factors and also by the fact that several medical specialties are involved in diagnosis and treatment. These characteristics are subject to changes over the time.

Objectives: to describe the spectrum of non-tuberculous OAI in the absence of OA material, including native septic arthritis (SA) and non-postoperative SA or infectious spondylodiscitis (SPDI) during the years 2010-2020. This includes demographics, comorbidities, site of infection, causative microorganisms, source of infection, diagnosis, treatment procedures and mortality.

Methods: medical records of patients aged 18 years old or above who were diagnosed with a non-tuberculous OAI in the Department of rheumatology of our hospital during the 2010-2020 period were selected and retrospectively reviewed. OAI with the following characteristics were excluded: SA on prosthetic joints, postoperative SA or SPDI, osteomyelitis, brucellosis, Lyme disease. Only proven cases where included on the basis of an isolated pathologic organism at the site of infection and/or in the blood (with typical clinical, biological and imaging features).

Results: There were 102 consecutive patients (males 62%), aged 62.5 ± 16.8 years, with an IMC of 25.1 ± 5.2 . Peripheral SA where observed in 52 cases, SPDI in 33 cases, non-peripheral SA in 10 cases (sacroiliitis 5, pubic symphysisitis 2, sternoclavicular 2, posterior interapophyseal 1); in 7 patients, there was an association of SPDI and peripheral SA. At least two non-contiguous sites were involved in 22 patients (21.5%). The sites of the positive sample where: osteo-articular (synovial fluid, vertebral biopsy) in 47 cases; blood in 28 cases; both of them in 27 cases.

In the 102 cases, 105 microorganisms grew in culture including one *Candida glabrata*. The following bacteria where responsible in the other cases: 42 *Staphylococcus aureus* (including 3 cases of methicillin resistant); 7 coagulase-negative *Staphylococcus* spp.; 6 Group A *Streptococcus*; 12 group B *Streptococcus agalactiae*; 8 groups C/G *Streptococcus*; 3 group D *Streptococcus gallolyticus*; 2 *Streptococcus pneumoniae*; 1 *Neisseria gonorrhoea*; 8 enterobacteria; 3 *Enterococcus faecalis*; 3 *Pseudomonas aeruginosa*; 3 *Haemophilus*; 6 others species (2 *Parvimonas micra*, 1 *aerococcus urinae*, 1 *Nesseiria bacilliformis*, 1 *bacteroides fragilis*, 1 *campylobacter fetus*).

The most frequent host risk factors were: diabetes (21%), inflammatory/auto-immune disease (10%; including 3 rheumatoid arthritis), chronic renal insufficiency