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POS1182 EPIDEMIOLOGICAL, CLINICAL AND THERAPEUTIC ASPECTS OF TABETIC ARTHROPATHY IN A POPULATION OF SOUTHERN MOROCCO

P. C. Mouele Mboussi[1], F. E. Bennani[1], S. Belouaham[1], H. Bara[1], A. Mougui[1], I. El Bouchti[1]. [1]*centre Hospitalo-Universitaire Mohammed Vi Marrakech, Rheumatology, Marrakech, Morocco*

Background: Tabetic arthropathies (TA) are a destructive neurogenic disease complicating 10% of syphilis at the tertiary stage. Although they have become exceptional due to early and appropriate treatment of syphilis, they are still relevant in undeveloped countries and remain difficult to manage due to the severity of the handicap and the absence of a specific treatment.
Objectives: We described épidemiological, clinical, biological, radiographic, and therapeutic characteristics of TA.
Methods: Retrospective study, from 2004 to 2021 includind patients with tabetic arthropathy, whose diagnosis was retained on clinical criteria (discordance between the importance of joint deformities and indolence), radiological (lesions destructive and constructive), biological (positive syphilitic serology in joint fluid, blood and/or cerebrospinal fluid).
Results: A total of 21 cases were collected, 15 men and 6 women, the mean age was 52.14 years. The history of syphilitic chancre was found in 9 patients, sexual risk behavior was noted in 8 patients, no other STI was found. Joint swelling with painless deformation was the main mode revealing the disease (76.1%), followed by pathological fracture in 3 cases and then mechanical arthralgia with neuropathic pain in 2 patients. The delay diagnosis was 6.8 years. TA concerned lower limb in 81,5%. The knee was the most affected site in 15 cases (71.4%),followed by the hip,ankles, MTP, in respectively 4(19%), 3(14%), 2(9,5%) cases. The upper limb was involved in 4 cases, with MCP involvement in one patient. TA was bilateral in 29% and multifocal in 19%. Joint instability was found in 16 patients. Involvement of the thoracolumbar spine was noted in one case. Tabetic neurological involvement was found in 16 patients (76.1%) with an Argyll Robertson sign noted in 6 cases (28.6%), a radiculocordonal posterior syndrome in 10 cases (47.6%). TPHA and VDRL were positive in blood in 21 patients, in cerebrospinal fluid in 11 patients and in synovial fluid in 9 cases. Radiological exams showed destructive and constructive lesions with the presence of intraosseous and periarticular fragments, damage to small joints was noted in two patients, bilateral talocrural involvement in one patient, a fracture with dislocation and calcification of the soft tissues was noted in two cases. Axial tabetic involvement made of vertebral compression D12, L1 L2 L3 was found in one case (4.8%). Nineteen patients (90.4%) were treated with Penicillin G and two patients with C3G. Orthopedic immobilization with weight-bearing was prescribed to all patients, the surgical indication was posed in 11 patients, 4 of whom benefited from surgery: total hip prosthesis in 3 cases, knee arthrodesis in one case. The serological evolution at the end of treatment showed a decrease in the VRDL titer in the blood, CSF, synovial fluid in 10 patients and negativity in 4 patients.
Conclusion: Tabetic arthropathy, one of the exceptional complications of neurosyphilis, is still relevant. Its diagnosis must reffered to any destructive and painless joint damage. Given the difficulty of treating this articular form, prevention based on the management of syphilis at an early stage before the occurrence of joint and neurological complications is essential.
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POS1183 RISK FACTORS FOR CYTOMEGALOVIRUS INFECTION IN PATIENTS WITH RHEUMATIC DISEASE; SINGLE-CENTER PROSPECTIVE COHORT STUDY.

Y. Ota[1], Y. Kondo[1], S. Saito[1], J. Kikuchi[1], H. Hanaoka[1], Y. Kaneko[1]. [1]*Keio University School of Medicine, Division of Rheumatology, Department of Internal Medicine, Tokyo, Japan*

Background: Cytomegalovirus (CMV) infection is one of serious opportunistic infections for immunosuppressed patients, therefore, identifying patients at risk for CMV infection is of importance. However, no prospective study about CMV infection in systemic rheumatic disease has been reported.
Objectives: To identify risk factors relevant with CMV infection in patients with systemic rheumatic disease during intensive remission induction therapy.
Methods: Consecutive systemic rheumatic disease cases who started intensive immunosuppressive therapy from February 2017 until February 2019 were enrolled. Serum CMV-IgG was measured before the induction therapy, and subsequently, CMV pp65 antigen was monitored weekly. Patients were divided into 2 groups according to the presence or absence of CMV infection, and risk factors for CMV infection were analyzed.
Results: 157 patients consisting of 136 CMV-IgG positive and 21 CMV-IgG negative patients were enrolled in the study. Mean age was 60.8 ± 17.4 y/o, and female was 70.7%. The underlying diseases were following; vasculitides 54, systemic lupus erythematosus 27, polymyositis/dermatomyositis 25, rheumatoid arthritis 14, IgG4-related disease 13, mixed connected tissue disease 6, Behçet disease 5, adult-onset Still's disease 4, and others 9. The initial dose of glucocorticoid (GC) was 48.4 ± 11.5 mg/day (0.91 ± 0.16 mg/kg/day) as prednisolone (PSL) with additional methylprednisolone (mPSL) pulse therapy being conducted in 44 (28.0%). Concomitant immunosuppressive therapies were intravenous cyclophosphamide (IVCY) in 55, calcineurin inhibitor 27, mycophenolate mofetil 16, hydroxychloroquine 5, and methotrexate 4. Concomitant biological agents were rituximab 12, tocilizumab 6, infliximab 2, golimumab 1, and abatacept 1. CMV infection occurred in 52 patients (33.1%), and all of them were CMV-IgG positive before induction therapy (38.2% in the CMV-IgG positive patients). Univariable analysis revealed initial PSL dose >0.91 mg/kg/day (odds ratio [OR] 5.2, p<0.01), IVCY (OR 3.4, p<0.01), diabetes mellitus (OR 5.2, p<0.01), and a history of malignancy (OR 2.9, p=0.02) were independent risk factors for CMV infection. CMV antiviral drugs were administered in 22 patients (42.3%). At the first detection of CMV pp65 antigen, PSL dose ≥37.5 mg/day (OR 5294.8, p<0.01), CMV pp65 antigen-positive cells ≥2 cells/2 slides (OR 16.0, p = 0.04), and serum albumin levels <3.0 g/dL (OR 26.3, p=0.01) were associated with subsequent CMV antiviral drug administration.
Conclusion: CMV infection occurred only in CMV-IgG positive patients with systemic rheumatic diseases who were undergoing intensive remission induction therapy. CMV infection was related with treatment regimen and comorbidities, and the necessity of CMV antiviral treatment was predicted with prednisolone dose, the number of CMV pp65 antigen positive cells, and albumin levels at the first detection of CMV pp65 antigen.
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POS1184 EPIDEMIOLOGICAL CHARACTERISTICS OF VIRAL HEPATITIS IN PATIENTS WITH RHEUMATIC DISEASES – IMPLICATIONS FROM TREASURE DATABASE

D. Ersözlü[1], M. Ekici[2], B. N. Coşkun[3], S. Ö. Badak[1], E. Bilgin[2], U. Kalyoncu[2], B. Yağız[3], Y. Pehlivan[3], O. Küçükşahin[4], A. Erden[4], D. Solmaz[5], P. Atagündüz[6], G. Kimyon[7], C. Bes[8], S. Colak[9], R. Mercan[10], T. Kaşifoğlu[11], H. Emmungil[12], N. A. Kanıtez[13], A. Ateş[14], S. S. Koca[15], S. Kiraz[2], A. İ. Ertenli[2]. [1]*Adana City Hospital, Rheumatology, Adana, Turkey;* [2]*Hacettepe University, Rheumatology, Ankara, Turkey;* [3]*Uludağ University, Rheumatology, Bursa, Turkey;* [4]*Yıldırım Beyazit University, Rheumatology, Ankara, Turkey;* [5]*Katip Çelebi University, Rheumatology, İzmir, Turkey;* [6]*Marmara University, Rheumatology, İstanbul, Turkey;* [7]*Mustafa Kemal University, Rheumatology, Hatay, Turkey;* [8]*Başakşehir Çam and Sakura Hospital, Rheumatology, İstanbul, Turkey;* [9]*Gülhane Research and Training Hospital, Rheumatology, Ankara, Turkey;* [10]*Namık Kemal University, Rheumatology, Tekirdağ, Turkey;* [11]*Osmangazi University, Rheumatology, Eskişehir, Turkey;* [12]*Trakya University, Rheumatology, Edirne, Turkey;* [13]*Koç University, Rheumatology, İstanbul, Turkey;* [14]*Ankara University, Rheumatology, Ankara, Turkey;* [15]*Fırat University, Rheumatology, Elazığ, Turkey*

Background: Recent epidemiological data on HBV and HCV in Turkey revealed that the seroprevalence rates of hepatitis B surface antigen and antibody against HCV were 4% and 1%, respectively, and seropositivity rates for hepatitis B surface antibody and hepatitis B core antibody were 31.9% and 30.6%, respectively. A previous multicenter nationwide study conducted in Turkey reported that the HBsAg positivity was determined in 2.3% of patients with rheumatoid arthritis (RA) and 3% of patients with ankylosing spondylitis (AS), and the anti-HCV positivity was detected in 1.1% of patients in each group. Given these rates, viral hepatitis is still considered a potential threat to patients with rheumatic diseases, specifically for the treatment-related viral reactivation.
Objectives: This study aimed to evaluate the serologic HBV and HCV frequency and clinical characteristics among our patients with RA or SpA and receive biological treatments based on this background.
Methods: The prospective TReasure database, which observationally collects data of patients with rheumatic diseases from fifteen centers across Turkey, was analyzed for viral hepatitis, patient characteristics, and treatments used. TReasure registry study protocol, and the data collection was started on December 2017. At the time of the analysis for this study was performed, the registry database included 3147 patients with RA and 6071 patients with SpA. For hepatitis B; Hepatitis B surface antigen (HBsAg), anti-HBV core antibody (anti-HBc) and anti-HBV surface antibody (Anti-HBs) tests were evaluated. HBV-DNA was studied in HBsAg positive patients. Anti-HCV antibody has been studied for HCV. The clinical and serological HBV reactivation in the follow-up of the patients was evaluated by looking at the HBV-DNA viral loads.
Results: A total of 9218 patients (3147 RA and 6071 patients with SpA) were included in the analyses. The screening rate for HBV was 97% in RA and 94.2% in SpA groups. HBsAg positivity rates were 2.6% and 2%, anti-HBs positivity rates were 32.3% and 34%, anti-HBc positivity rates were 20.3% and 12.5%, HBV DNA positivity rates were 3.5% and 12.5%, and anti-HCV positivity rates were 0.8% and 0.3% in these groups, respectively (Table 1).

Table 1. Serological analyses in the study group

	RA		SpA		
	N	n (%)	N	n (%)	p
Hepatitis testing	2896	2809 (97.0)	5444	5130 (94.2)	<0.001
HBsAg positivity	2750	71 (2.6)	5017	99 (2)	0.080
Anti-HBs positivity	2708	876 (32.3)	4893	1663 (34)	0.147
Anti-HBc positivity	2362	480 (20.3)	4194	524 (12.5)	<0.001
HBV-DNA positivity	454	16 (3.5)	637	35 (5.5)	0.129
Anti-HCV positivity	2602	22 (0.8)	4627	16 (0.3)	0.005

The HBsAg (+) patients were older and had higher comorbidities, including hypertension, diabetes, and coronary artery disease. In addition, RF positivity was more in HBsAg(+) cases. The most frequently prescribed bDMARDS were adalimumab (28.5%), etanercept (27%), tofacitinib (23.4%), and tocilizumab (21.5%) in the RA group, whereas adalimumab (48.1%), etanercept (31.4%), infliximab (22.6%), and certolizumab (21.1%) in the SpA group. HBV reactivation was observed in one patient with during RA treatment, who received rituximab and prophylaxis with tenofovir.

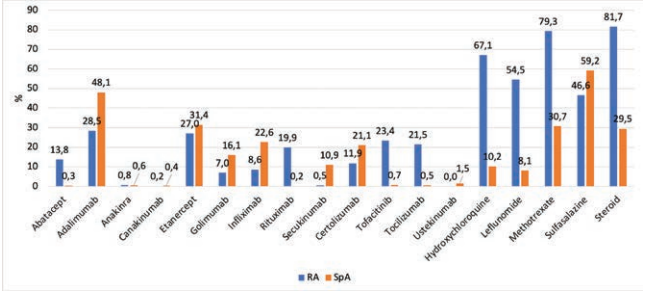

Figure 1. Prescription proportions of medications in the rheumatoid arthritis (RA) and spondyloarthritis (SpA) groups

Conclusion: The epidemiological characteristics of patients with rheumatic diseases and viral hepatitis are essential for effective patient management. This study provided the most recent epidemiological characteristics from the prospective TReasure database, one of the most comprehensive registries in rheumatology practice. According to the results of our study; It can be thought that there is no risk in the choice of treatment by the rheumatologist in patients who receive appropriate prophylaxis.
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POS1185 PERFORMANCE OF ADENOSIN DEAMINASE ACTIVITY IN SYNOVIAL FLUID FOR THE EARLY DIAGNOSIS OF TUBERCULOUS ARTHRITIS: A META-ANALYSIS

J. Ena[1], J. C. Cortés-Quiroz[2], J. A. Bernal[2], A. Pons[2], J. M. Senabre-Gallego[2], G. Santos Soler[2], C. Raya-Santos[2], J. Rosas[2]. [1]*Hospital Marina Baixa, Internal Medicine, Villajoyosa, Spain;* [2]*Hospital Marina Baixa, Rheumatology, Villajoyosa, Spain*

Background: Adenosin deaminase activity (ADA) has shown good performance in diagnosing pleural, peritoneal and meningeal tuberculosis. Still, the performance of ADA activity in synovial fluid for the diagnosis of tuberculous arthritis has received less attention.
Objectives: To analyze the performance of ADA in synovial fluid to diagnosis tuberculous artrhritis.
Methods: We research Medline and EMBASE from the inception to October 2021 and the American College of Rheumatology and European League Against Rheumatism for conference abstracts (2012-2021) to assess the accuracy of ADA activity in synovial fluid compared to a composite reference standard (necrotizing granulomas in a synovial biopsy; acid-fast stain, Mycobacterium culture or RT-PCR assay for tuberculosis and/or clinical response to tuberculosis treatment) to early diagnosis tuberculous arthritis. We performed meta-analysis using a random-effects model and evaluated the sources of heterogeneity via subgroup analysis and meta-regression.
Results: Seven independent studies (N= 307 subjects) that compared ADA activity in synovial fluid with the composite reference standard were included. The pooled sensitivity and specificity of ADA activity was 0.939 (95% confidence Interval [CI], 0,873-0,977; heterogeneity p=0.297; I2=17.4%) and 0.885 (95% confidence Interval [CI], 0.833-0.925; heterogeneity p=0.002; I2=85.3%) compared to the composite reference standard, respectively. The random-effects model for pooled diagnostic Odds Ratio was 74.582 (95% CI, 19.826-280.57; heterogeneity p=0.133; I2=38.8%). The receiver operating characteristic curve area was 0.9617 (95% CI, 0.925-1.000). Meta-regression did not identify the type of study (prospective or retrospective), country of publication, type de assay, or cut-off value as sources of heterogeneity.
Conclusion: Measuring adenosine deaminase activity in synovial fluid demonstrates good performance for the early diagnosis joint tuberculosis.
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POS1186 STUDY OF SPONDYLODISCITIS WITHOUT BACTERIOLOGICAL DOCUMENTATION FROM A COHORT OF 142 PATIENTS WITH SUSPECTED INFECTIOUS SPONDYLODISCITIS ON IMAGING

G. Aline[1], M. Desvaux[1], C. Delepine[1], M. Lanquetuit[1], C. Patenere[1], N. Sens[1], M. Kozyreff-Meurice[1], S. Pouplin[1], T. Lequerre[1], O. Vittecoq[1], G. Avenel[1]. [1]*Hospital Center University De Rouen, Rheumatology, Rouen, France*

Background: The incidence of infectious spondylodiscitis was estimated at 2.4/100,000 people in 2002. When faced with an image of spondylodiscitis on imaging, infectious spondylodiscitis is the most feared etiology. In recent years, several non-infectious spondylodiscitis etiologies have been described: Andersson lesion, crystal-induced discopathy, degenerative changes, etc (2). The identification of the germ by blood cultures or disc-vertebral puncture-biopsy allows the treatment to be best adapted antibiotic. Bacteriological investigation is inconclusive in about 30% (1). More and more undocumented spondylodiscitis are described.
Objectives: The aim of this study is to describe a cohort of spondylodiscitis without bacteriological documentation and to compare it to spondylodiscitis with bacteriological documentation.