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AB0555

POTENTIAL ROLE OF PAROTID ELASTOGRAPHY IN DIAGNOSIS AND CLASSIFICATION OF PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

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Background: Despite the improvements in classifying patients with primary Sjögren's syndrome with usage of the new 2016 ACR/EULAR classification criteria, there remains to be a need for improvement and investigating the value of new modalities in diagnosing as well as classifying these patients.

Objectives: to investigate potential role of parotid elastography in diagnosis and classification of patients with primary Sjögren's syndrome (pSS)

Methods: This is a cross sectional analysis of patients with primary Sjögren's syndrome followed up in our out-patient Rheumatology clinic. We performed chart reviews and retrospectively investigated the available data on files to search whether or not our clinically diagnosed patients satisfied the 2002 AEG and/or 2016 ACR/EULAR criteria sets. Ultrasonographic and elastographic evaluation of parotid and submandibular glands bilaterally were performed on consecutive patients with clinical diagnosis of pSS and contributions of these findings to classification criteria sets were interpreted

Results: There were 95 pSS patients and 30 healthy gender and age matched controls. Strain ratio, shearwave velocity and Pascal values of the glands were examined. Parotid strain ratio, submandibular velocity and submandibular pascal values were statistically significantly different compared to healthy controls (Table).%86 of patients considered clinically as Sjögren syndrome satisfied 2016 ACR/EULAR (criteria patients) and% 84 satisfied 2002 AER classification criteria. We grouped patients with respect to parotid strain ratio taking 1.0875 as the cut-off value. Those patients who did not satisfy 2016 ACR/EULAR criteria, but clinically diagnosed as pSS (non criteria pSS patients), also had significantly higher parotid strain ratio and submandibular velocity compared to healthy controls (p:0,016 and p<0,001 respectively). Interestingly, both criteria and non-criteria pSS patients had similar parotid strain ratio and submandibular velocity value (p:0,892 and p:0,260, respectively)

Conclusion: Parotid shear elastography is an easy and noninvasive method and can be a useful tool for the diagnosis and classification of patients with pSS (1).

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AB0556

PARTICULARITIES OF PULMONARY HYPERTENSION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease that primarily affects young women. It is characterized by the production of autoantibodies and immune complexes. Vascular pulmonary involvement has long been considered rare, a consequence of thromboembolic events. It is in fact a proper entity, often of multifactorial mechanism, with spontaneous evolution to pulmonary arterial hypertension (PAH), which makes its gravity

Objectives: The objective of our study is to determine the particularities of PAH during SLE.

Methods: We conducted a mono-centric, retrospective and descriptive study of the follow up of patients in the internal medicine department of the Military Hospital of Tunis for LES (diagnosis according to the ARA criteria) between January 2010 and December 2015.

All patients underwent external echocardiography or during their stay in the department

Results: We collected 87 patients diagnosed with SLE. PAH was recorded in 16 patients (38%) including 6 men and 10 women with a F/M sex ratio of 1.66. The average age was 37.23 years with extremes ranging from 16 to 70 years old. Clinically, we observed dyspnea in 10 patients (62%), chest pain in 7 cases (43%), dry cough in 2 cases (12%), palpitations in 1 case (6%), and right heart failure in 1 case (6%). At cardiac auscultation, 5 patients were tachycardic (31%), 5 had a tricuspid systolic murmur and 1 had an irregular rhythm. A burst of B2 in the pulmonary focus was noted in 3 patients (18%). Nine of the 16 patients with PAH had electrical signs: five had sinus tachycardia (31%), two had signs of right ventricular hypertrophy. A complete arrhythmia with atrial fibrillation was noted in one patient. The chest X-ray showed cardiomegaly in 6 patients (37%). Among the 16 patients, there was a tricuspid valve insufficiency associated with PAH in 7 patients (43%), 2 had mitral valve insufficiency (12%), 6 patients had pericarditis, one patient had endocarditis (6%) and myocarditis was found in another one (6%). PAH was isolated in 12% of cases. In Immunological tests, NAAs were positive in all patients. Three quarters of the patients (12) had native anti-DNA positive (75%) and ¼ of the patients (4) had anti-Sm positive and anti-RNP positive antibodies (25%). The complement was consumed in 5 cases (31.2%). Anti-phospholipid antibodies were noted in 4 cases (25%). Added to non-specific measures (smoking cessation, elimination of intense physical effort ...) adopted for all patients, oxygen therapy was indicated in four patients. Diltiazem 180 mg/day vasodilator therapy was prescribed in 3 patients. Effective anti-vitamin K anticoagulation was prescribed in a patient with severe PAH at 80 mmHg.

Conclusion: Pulmonary arterial hypertension (PAH) is a rare complication of systemic lupus erythematosus, its prevalence varies from 0.5 to 17.5% depending on the series. SLE is the second leading cause of PAH in connective tissue disease after systemic sclerosis. This vascular involvement is essential for the prognosis and is an important evolutionary step in the management.

Disclosure of Interests: None declared

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AB0557

NON-CORONARY CARDIAC MANIFESTATIONS OF SYSTEMIC LUPUS ERYTHEMATOSUS IN ADULTS

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Background: Systemic lupus erythematosus (SLE) is a common chronic multi-system autoimmune disorder of unknown etiology causing injury to many organ Systems. It predominantly affects young women. Cardiac manifestations develop in the majority of patients with SLE at some time during the course of their disease.

Objectives: The aim of our study is to assess cardiac abnormalities in patients with systemic lupus erythematosus (SLE) by echocardiography and to compare the 2 groups of patients with and without cardiac manifestations.

Methods: We have performed a transversal, descriptive study of SLE patients hospitalized in the Internal Medicine department at the Military Hospital of Tunis between January 2016 and June 2018. Diagnosis of SLE was made according to the criteria of ACR. All patients underwent a cardiac ultrasound externally or during their stay in our department.

Results: The patients were 61 females and 19 males (sex-ratio=3) with a mean age of 38 years.

Forty two patients had cardiac involvement. They were 33 female and 9 male with a mean age of the disease of 31,8 years (16-80 years) at the beginning of the disease and 41 years at the time of the study.

83% of patients were symptomatic. The symptoms were dominated by objectified chest pain (43%). In Doppler echocardiography, pericarditis was found in 23 patients (55%) with a single case of cardiac tamponade. Libman Saks endocarditis and lupus myocarditis were found in one case each. Pulmonary hypertension (HTP) was observed in 16 patients (38%) and valvular disease in 22 patients (52%). Cardiomegaly was observed in 9 patients (21%). Electrical abnormalities were dominated by microvoltage found in 8 patients. The general symptoms (83%), skin lesions (76%) and musculoskeletal involvement (64%) were the most frequent events associated with the cardiac manifestations in group 1. ANA were positive in 97% of cases and antiphospholipid antibodies in 24%. Prednisone: 1mg/kg/day and immunosuppressive therapy were indicated respectively in 71% and 38% of patients.

Conclusion: Cardiac abnormalities are very common in lupus patients even when clinically asymptomatic. SLE is among systemic diseases most providers of heart disease. Echocardiography is an excellent non-invasive tool for cardiac evaluation. Their research must be systematic with echocardiography in order to reduce subsequent cardiac morbidity and mortality among the lupus patients.

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AB0558 TIME OF DIAGNOSTICS OF SJOGREN'S SYNDROME DEPENDING ON ITS FIRST MANIFESTATION

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Background: Sjogren's syndrome (SS) is a rare autoimmune disease with multisystem manifestations. Diagnostics of SS is intricate due to its low prevalence and need of invasive tests for diagnosis confirmation.

Objectives: To investigate influence of the first symptom of SS on the time of diagnosis establishment.

Methods: The study was conducted at Dnipropetrovsk Mechnikov Regional Hospital, Dnipro, Ukraine. 23 patients (1 male and 22 females, mean age 54 [47;61] years) with SS that received medical care at Rheumatology Department from 2007th to 2017th were enrolled to the study. Diagnosis of SS was provided according to American-European Consensus Group criteria (2002). We analyzed time from the first symptom appearance to diagnosis of SS establishment. Symptoms of the disease onset were classified into 4 groups: fever (body temperature >37 °C), arthritis (swelling and/or tenderness of ≥1 joints), signs of salivary glands injury (swelling of salivary glands, dry mouth syndrome) and other signs of autoimmune diseases (Rheumatoid's phenomenon, rash, myalgia).

Results: Median time between the first symptoms and SS diagnostics was 8 [2;17] years. Time to SS diagnostics depending on the first manifestation is in the table below.

Table 1. Time of SS diagnostics depending on the first symptom.

Symptom	Present	Absent	Log-rank test (p)
Fever	3 [1;8]	9,5 [2,2;17]	0,06
Arthritis	17 [6;22,5]	6,5 [2;11,5]	0,06
Salivary glands injury	11 [6;19,5]	4,5 [2;10]	0,15
Symptoms of autoimmune diseases	4 [2;8]	10,5 [2;18]	0,09

Presence of fever or symptoms of autoimmune diseases led to faster diagnostics of SS. Presence of salivary glands injury didn't influence time of SS diagnostics, while arthritis enlarged it (Figure 1).

Conclusion: Fever and signs of autoimmune diseases may be useful in diagnostics of SS. Greater alertness of symptoms of salivary glands injury is needed.

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AB0559 ASSOCIATED FACTORS AND PREVALENCE OF OSTEONECROSIS IN A COHORT STUDY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) FROM HOSPITAL DEL MAR/PARC DE SALUT MAR.

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Background: Although the pathophysiology of osteonecrosis (ON) is not completely well-understood, it is likely the result of multiple combined effects such as environment, metabolic or genetic factors.

Clinical presentation of ON may be silent or may appear in a variable range of gradual-onset pain. The prevalence of ON in patients with SLE varies according to whether the lesions are symptomatic or asymptomatic.

Corticosteroid therapy (CT) has been recognized as a main risk factor to develop ON. Nevertheless, it looks like ON is more frequent in patients with SLE than in any other disease requiring systemic CT, which suggests that the use of corticosteroids may not be the only risk factor in those patients.

Objectives: To evaluate the prevalence of ON and to determine the association between ON and other variables such as sociodemographic factors, cardiovascular risk factors, SLE symptoms, autoimmunity, treatment received and disease activity in patients with SLE from Hospital del Mar.

Methods: 177 medical records were reviewed. Inclusion criteria included patients with SLE that met at least 4 of 11 ACR-LUPUS criteria revised in 1982 and updated in 1997. We identified six ON cases. The ON variable was evaluated by nuclear magnetic resonance in symptomatic patients. Afterwards, we matched ON patients with controls according to age and gender in a 1:2 proportion.

A bivariate descriptive analysis between cases and controls was made including demographic and clinical variables, cardiovascular risk factors and treatment received. The association between ON and the previously mentioned variables was evaluated by Fisher's Exact test and Chi-square test.

Results: The prevalence of ON was 3.4% (CI 95%: 0.01% - 0.07%), lower than that described in other series. We found statistical significance association between ON and arterial hypertension (patients with ON and hypertension: 62.5% vs patients with ON without hypertension: 10%; p-value 0.043), as well as between ON and CT evaluated by its presence in the last hospital follow-up (patients with ON under CT: 100% vs patients with ON without CT: 20%; p-value 0.025). The association between ON and the use of corticosteroid pulse therapy (CPT) was also statistical significance (patients with ON who received CPT: 80% vs patients with ON who did not receive CPT: 15.3%; p-value 0.022). Finally, we found a marginal association, although relevant, between ON and the SLICC damage index (p-value 0.057) (Table/Fig-1).

Conclusion: We found a statistical significance association between ON and hypertension (classical known cardiovascular risk factor) as well as between ON and CT (in the last visit) and the use of CPT (risk factor known as an etiological agent in ON). We did not find a statistical significance association between ON and lupus disease activity (SLEDAI), but a trend to statistical significance was noticeable with respect to the accumulated irreversible damage on lupus disease (SLICC). In order to confirm the results obtained, it is necessary to carry out other studies, with a larger sample and a longer follow-up period.

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