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AB0794

CONTRIBUTION OF LABIAL SALIVARY GLAND BIOPSY: EXPERIENCE OF THE DEPARTMENT OF RHEUMATOLOGY OF THE UNIVERSITY HOSPITAL OF IBN ROCHD (ABOUT 57 CASES)

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Background: Labial salivary gland biopsy (LSGB) is a histological examination indicated for the diagnostic workup of systemic diseases such as Sjögren's syndrome, amyloidosis, or sarcoidosis.

Objectives: To study the contribution of LSGB to the diagnosis of Sjögren's syndrome, amyloidosis, and sarcoidosis.

Methods: We conducted a retrospective study of LSGB histopathological reports and clinical data of patient medical records collected in the Department of Rheumatology of the University Hospital of Ibn Rochd, Casablanca, between January 2019 and June 2020. Histology assessed Chisholm and Masson's sialadenitis score, looked for amyloidosis, and sarcoidotic granulomas.

Results: A total of 57 LSGBs were performed, of which 2 were excluded from our study because of lack of clinical data. The sex-ratio M/F was 0.1, and the median age was 53 (22 – 85). The indications were subjective eyes and mouth dryness in 40% of cases, the search for sarcoidosis and amyloidosis in 23.6% of cases, the assessment of a dryness syndrome in the context of chronic inflammatory rheumatism in 18.2% of cases, isolated dryness of the mouth in 14.5% of cases, and the search for amyloidosis in the context of a known primary Sjögren syndrome in 3.6% of cases. The stages of Chisholm and Masson for sialadenitis found were: stage I at 56.6%, stage II at 24.5%, stage III at 11.3%, and stage IV at 7.5%. Among the LSGBs performed for dryness syndrome, stages III and IV were found in 18.2% of cases among subjective eyes and mouth dryness, in 12.5% of cases among isolated mouth dryness, and in 20% of cases among chronic inflammatory rheumatism. Three cases of AA amyloidosis (5.5%) were diagnosed. No sarcoidosis granulomas were found.

Conclusion: LSGB is a simple and frequent investigation. The Chisholm stage most often found in our series was stage I, followed by stages II, III, and IV respectively. This is consistent with the results of the study of Baeteman et al (1). In addition, amyloidosis was only found in our series in 5.5% of cases, also matching with the results of Baeteman et al. (4.2%). Their study showed that LSGB has a great diagnostic interest in these two pathologies, with a sensitivity of 52-75% and a specificity of 90-100% for Sjögren's syndrome, and a sensitivity of 48-80% and a specificity of 93-100% for amyloidosis (2). LSGB remains a simple investigation test, contributing to the diagnosis of Sjögren's syndrome, amyloidosis, and sarcoidosis.

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DYNAMIC CHANGES IN QUANTITATIVE INDICES OF BODY COMPOSITION BY DUAL-ENERGY X-RAY ABSORPTOMETRY IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS ON DIFFERENT THERAPEUTIC REGIMENS

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Background: A redistribution of body fat (abdominal obesity) is quite common in RA patients. Such parameters as body mass index (BMI) and waist circumference do not distinguish or quantify fat and lean (muscle) mass. For that purpose, dual-energy X-ray absorptiometry (DXA) is usually used.

Objectives: to compare quantitative body composition in patients with early RA at baseline and after 24 weeks of therapy with different regimens.

Methods: The study included 37pts (31 women /6 men) with early RA (ACR/EULAR criteria, 2010), 57 [46.5, 62.0] years old, naïve to treatment with glucocorticoids and disease-modifying anti-rheumatics (DMARDs). Pts were seropositive for IgM RF (76%) and anti-CCP (92%), with highly active RA (DAS28 5.5 [5.1; 6.0]; SDAI 32.4 [22.4; 42], CDAI 29.0 [19.7; 39.5]) scores, and median disease duration of 6.0 [5.5;15.5] months. Methotrexate (MTX) 10 [10-15] mg/week subcutaneously

was initiated in all included patients as first line therapy for 12 weeks. By this time point therapy was reviewed in 19 patients (51%) due to MTX inefficacy and adalimumab (ADA) at 40mg once every 2 weeks was added on top of MTX. DXA scan (HOLOGIC, USA) was used to measure body composition at baseline and after 6mths of treatment with the protocol assessing total body, body fat and lean muscle mass.

Results: Based on therapeutic regimens at week 24 all study subjects were divided into 2 groups: Group I (n=18) receiving MTX monotherapy, Group II (n=19) – the combination of MTX and ADA (Table 1). Group I patients had lower body weight, lean and fat mass vs patients from Group II (62 kg vs. 73.7 kg; 40.6 kg vs. 49.7 kg; 21.0 kg vs. 25.8 kg, respectively (p<0.05 in all cases) at baseline. 24 weeks of combination therapy eventuated in body weight gain (73.7 kg vs. 75.8 kg), accumulation of fat (25.8 kg vs. 28.1 kg) and unchanged lean tissue mass. In contrast, patients on MTX monotherapy managed to increase their lean mass (40.6 kg vs. 41.6 kg) without gaining in total fat mass.

Table 1.

Indices	I group (n=18), monotherapy MT			II group (n=19), combination therapy (MTX, ADA)		
	baseline	24 weeks	Δ, %	baseline	24 weeks	Δ, %
Body fat mass, kg	21,0 [17,2;26,2]**	23,4 [17,5;29,7]	+11	25,8 [18,4;35,0]	28,1 [21,4;37,9]*	+9
Lean mass, kg	40,6 [37,3;44,7]**	41,6 [38,2;46,4]**	+2,5	49,7 [39,0;56,1]	49,9 [41,0;57,6]	0,4
Total mass, kg	62,0 [57,7;77,6]**	64,1 [59,5;81,6]**	+3,4	73,7 [64,5;97,9]	75,8 [66,8;102,1]*	+2,8

*p<0,05 reliability of differences in parameters before treatment and after 6mth (Wilcoxon); **p<0,05 differences in baseline values in groups I and II (Mann-Whitney test);***p<0,05 difference in the indices between the groups by the 6mth of therapy; Δ, % difference in indices between the groups by the 6mth of therapy.

Conclusion: In general, RA patients on treatment tend to gain weight by week 24. Patients who failed on MTX monotherapy by week 24 and were switched to combination therapy had higher fat mass at baseline. Mediations used for RA treatment produce multidirectional effects on quantitative parameters of body composition: MTX monotherapy triggers some increase of lean mass, while combination of MTX and bDMARD results in weight gain and increase of total and fat mass. These data need to be confirmed in large-scale studies with longer follow-up period.

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THE EVALUATION OF LUNG DIAGNOSTIC PROCEDURE AT THE ONSET OF INFLAMMATORY RHEUMATIC DISEASES WITH INTERSTITIAL LUNG DISEASE

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Background: Interstitial lung disease (ILD) in inflammatory rheumatic diseases (IRD) is associated with increased mortality. Moreover, the lung is one of the most effected organs on IRD. Consequently, screening methods were required to the detect ILD in IRD.

Objectives: The objective of the following study is to evaluate the diagnostic value of lung function test, chest x-ray and HR-CT of the lung in the detection of ILD at the onset of IRD.

Methods: The study is designed as a case-control study and includes 126 patients with a newly diagnosed IRD. It was matched by gender, age and the performance of lung function test and chest x-ray. The sensitivity and specificity were verified by crosstabs and receiver operating characteristic (ROC) curve analysis. The study cohort was divided in two groups (ILD group: n = 63 and control group: n = 63). If possible, all patients received a lung function test and optional a chest x-ray. Patients with pathological findings in the screening tests (chest x-ray or reduced diffusing capacity for carbon monoxide (DLCO) < 80 %) maintained a high-resolution computer tomography (HR-CT) of the lung. Additionally, an immunological bronchioalveolar lavage was performed in the ILD group as gold standard for the detection of ILD.

Results: The DLCO (< 80 %) revealed a sensitivity of 83.6 % and specificity of 45.8 % for the detection of ILD. Other examined parameter of lung function test showed no sufficient sensitivity as screening test (FVC = Forced Vital Capacity, FEV1 = Forced Expiratory Volume in 1 second, TLC = Total Lung Capacity, TLCO = Transfer factor of the Lung for carbon monoxide). Also, a combination of different parameter did not increase the sensitivity. The sensitivity and specificity of chest x-ray for the verification of ILD was 64.2 % versus 73.6 %. The combination of DLCO (< 80 %) and chest x-ray showed a sensitivity with 95.2 % and specificity with 38.7 %. The highest sensitivity (95.2 %) and specificity (77.4 %) was observed for the combination of DLCO (< 80 %) and HR-CT of the lung.