Abstract FRI0219 Table 1

	ANA	RF	Anti-Ro/SSA	Anti-La/SSB
Grade I (n = 5)	40%	60%	0%	0%
Grade II (n = 12)	50%	41,7%	11,1%	0%
Grade III (n = 58)	59,6%	33,9%	14,7%	8,8%
Grade IV (n = 45)	80%	65,9%	28,9%	15,8%
Sensitivity for a positive biopsy	47,5%	67,9%	22,2%	12,5%
Specificity for a positive biopsy	41,9%	43,3%	81,8%	86,3%

Conclusion In our PSS patients, auto-antibodies' profile did not differ between patients with different grades of infiltration in lip biopsy.

FRI0220 STABLE ANTI-RO AND ANTI-LA SEROLOGICAL PROFILE IN ANTI-RO AND ANTI-LA NEGATIVE SIALADENITIS AND SJÖGREN'S SYNDROME PATIENTS AS DISEASE PROGRESSES

MM Zandbelt, LB Van de Putte, FH Van den Hoogen. *Rheumatology, University Medical Center, Nijmegen, Netherlands*

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Background It is generally considered that more weight should be put on objective signs in the classification criteria for Sjögren's syndrome (SS). Such objective findings include the presence of anti-Ro- and anti-La-antibodies, as well as the sublabial gland histology expressed in focus-score (FS) and IgA containing plasmacells percentage (IgA%) score. So far, anti-Ro and/or anti-La autoantibodies in the patient's serum have been the most sensitive (40–80%) and specific serological markers for Sjögren's syndrome.

Objectives The aim of this study is to investigate whether seroconversion from anti-Ro- and anti-La antibodies negative to positive occurs in our SS and focal sialadenitis patients after disease has progressed for a minimum of five years since diagnosis.

Methods Blood samples were taken from 20 patients, and sera were measured for presence of anti-Ro- or anti-La antibodies using ELISA and counter immune electrophoresis (CIE). Twelve patients fulfilled the ESG criteria for Sjögren's syndrome. Five of them were diagnosed with primary SS and 7 were diagnosed with secondary SS. Histologic (FS > 1, IgA% < 70) underlined the diagnosis. The remainder 8 patients with sicca symptoms and FS > 1 did not meet the ESG criteria and were therefore diagnosed as having focal sialadenitis.

Results In the ELISA no anti-Ro or anti-La positive sera were detected. An initial CIE, performed as confirmation measurement technique, showed three possibly positive sera. However, in a second CIE these sera were identified as anti-RNP antibodies positive sera.

Conclusion These results confirm other observations that the serological profile in patients with Sjögren's syndrome is stable as disease progresses. There appears to be no need for repeated measurements of anti-Ro- or anti-La antibodies presence in anti-Ro- and anti-La negative patients' sera. Further investigations should point out whether measurement for presence of these autoantibodies in exocrine tissue itself or in exocrine glands products such as saliva is preferable over serological analysis in terms of disease-sensitivity. These alternative methods might be necessary to increase accuracy of the diagnosis since at least 20%

of SS patients show a sustained lack of anti-Ro and anti-La antibodies in their serum.

FRI0221 PRIMARY AND SECONDARY SJÖGREN'S SYNDROME – RESPIRATORY INVOLVEMENT

¹A Carvalheira, ¹P Ferreira, ²J Figueirinhas, ¹L Ferreira, ²J Vaz Patto. ¹*Pneumology -Hospital Pulido Valente*; ²*Rheumatology, Portuguese Institut of Rheumatology, Lisbon, Portugal*

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Background Pulmonary disease is reported in both primary and secondary Sjögren's syndrome.

Objectives In order to study the respiratory involvement we evaluated 52 patients with Sjögren's syndrome.

Methods Forty seven patients were female (90.4%) and five were male (9.6%).

The mean age was 53 years (range 26–80).

The median duration of the disease was 11 years.

Twenty four patients (46%) had criteria (European criteria) for primary Sjögren's syndrome (A Group) and 28 patients (54%) for secondary Sjögren's syndrome (B Group).

Rheumatoid arthritis was present in 20/28 (71%) with secondary Sjögren's syndrome (B Group).

We used clinical, radiological and functional criteria for the assessment of respiratory involvement.

Results A total of 21/52 patients (40%) reported symptoms, 9 from A Group (17%) and 12 from B Group (23%).

Chest radiographs had evidence of abnormality in 21/52 patients (40%), 11 from A Group (21%) and 10 from B Group (19%).

Lung function impairment was seen in 15/52 patients (29%), 6 from A Group (12%) and 9 from B Group (17%).

Conclusion This study provides evidence that lung involvement is an important manifestation of Sjögren's syndrome in primary as in secondary disease.

FRI0222 VALIDATION OF TWO NONINVASIVE DIAGNOSTIC METHODS FOR XEROSTOMIA IN SJOGREN'S SYNDROME

NN Cusumano, F Pelusa, B Meletti Madile, S Marquez. *Internal Medicine, Medicine School, Rosario, Argentina*

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Background Sjogren's Syndrome (SS) is a systemic autoimmune disease the mainly affects exocrine glands and usually presents a persistent dry mouth (xerostomia) and/or dry eyes (xerophthalmia). Xerostomia is an unsatisfactory diagnostic criteria because is subjective and can be caused by other conditions like: side effects drugs, stress, depression, dehydration, radiation therapy, and other systemic diseases like sarcoidosis, amyloidosis, lymphoma, VIH infection, etc. Altho minor salivary gland biopsy (MSGGB) is an easy and safety objective diagnostic methods is rather invasive and unpleasant for the patients.

Objectives Validate two simple, easy, noninvasive and nonexpensive diagnostic methods for xerostomia in Sjogren's Syndrome (SS).

Methods Thirty-six (36) SS Patients with mean age 57 (range 31–74), 32 female and 4 male, diagnosed according to revised European Community criteria were included in the study. 13 Patients with pSS (primary SS) 12 Patients with sSS (secondary SS) and 11 with probable pSS (3 criteria). We performed in all

patients the Saliva Ferning Test (SFT), a qualitative test considered positive when fern leaf pattern was abnormal (Andonopoulos AP 1992; Cusumano NC 2000) and a semiquantitative unstimulated whole saliva flow rate test (UWSFR) considered positive for xerostomia when range for wet filter paper was 0–2 cm in 5 min (Lopez Jornet 1993). We evaluated the association between SFT and UWSFR with MSGB focus score III and IV according to Chisholm-Mason gradin system) Chi Squared test and Exact Fisher test was used to compared qualitative variables. P values < 0.05 were considered significant.

Results 21 Patients (58%) had abnormal SFT associated with MSGB focus score III-IV E. Fisher significant ($p < 0.05$) 14 Patients (38%) had UWSFR range 0–2 cm in 5 min with MSGB focus score III-IV, Chi-Squared significant ($p < 0.05$). 12 Patients (33%) both positive SFT and UWSFR had significantly association with MSGB focus score III-IV E. Fisher ($p < 0.05$). We did not find significance, E. Fisher ($p = 6$) when compared SFT with UWSFR.

Conclusion This study suggest that both, easy, safety noninvasive and nonexpensive saliva tests could be performed by the physician like a screening, in those patients with xerostomia and SS suspicion.

FRI0223 LONG TERM FOLLOW-UP IN 68 PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME: CLINICAL AND SEROLOGICAL FEATURES

P Ostuni, P Sfriso, C Grava, C Botsios, L Semerano, S Todesco. *Division of Rheumatology, Department of Medical and Surgical Sciences, University of Padova, Padova, Italy*

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Background There are few studies, regarding pSS long-term clinical course. Moreover, it has often been studied in limited groups of patients, employing different recruitment and diagnostic criteria.

Objectives During a 10 years follow-up we longitudinally studied the clinical evolution, the rate of severe complications and mortality in a large cohort of patients with pSS.

Methods We evaluated 68 consecutive outpatients with pSS according to the Fox's criteria: 67 females and 1 male, followed since January 1987 to November 2000. The patients were divided into 2 groups according to the autoantibodies pattern at the diagnosis: anti-Ro and/or La positive and anti-Ro/La negative. The prevalence of several clinical and serological abnormalities, evaluated at the beginning of the study, was compared with the prevalence observed at the end of the follow-up. Moreover, a 10 years Kaplan-Meier survival analysis was performed, considering as end points the development of lymphoproliferative disorders, death and the association death/lymphoproliferation, in order to establish how the progression of the disease might affect survival and major morbidity of pSS. Finally, we analysed whether pSS is associated with an increase of the mortality rate in comparison with the general population.

Results Eight patients from the study group died (13.2% up to 10 years of follow-up). The prevalence of arthritis in Ro and/or La positive cases was significantly higher at the beginning of the follow-up in comparison with the end of the study ($p = 0.041$). On the contrary, a significant higher prevalence of lymphoproliferative disorders was present in Ro and/or La positive group at the end of the follow-up ($p = 0.041$). We also observed significantly lower levels of C4 and significant higher IgG, IgA and ESR in the Ro and/or La positive group than in the Ro/La

negative group, either at the beginning (respectively $p = 0.003$ $p < 0.0001$ $p = 0.0014$ $p = 0.0007$) or at the end ($p = 0.007$ $p = 0.0005$ $p = 0.013$ $p < 0.0001$) of the follow-up. Lymphoproliferative disorders were diagnosed in 5 patients. The development of this complication was associated with the assessment, in all the cases, of purpura, parotid swelling and low C4 levels. The 10 years-survival rate of all the pSS patients resulted 86.5% that was under the survival rate of the Italian general population (90%) ($p = n.s$).

Conclusion The glandular manifestations of pSS were distinctively present in the majority of the patients already at the time of the diagnosis and the serological picture remained typically constant during all the follow up. Increased IgG, IgA and ESR as well as low C4 levels were significantly prevalent in the Ro and/or La positive group. Finally, we have not found any significant increase in the mortality of pSS patients in comparison with the general population.

FRI0224 LYMPHOPROLIFERATIVE DISORDERS IN PRIMARY SJÖGREN'S SYNDROME: A TEN YEARS FOLLOW-UP STUDY OF 68 CASES

C Botsios, P Sfriso, L Semerano, P Ostuni, C Grava, PF Gambiari. *Division of Rheumatology, Department of Medical and Surgical Science, University of Padova, Padova, Italy*

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Background Primary Sjögren's syndrome (pSS) is a systemic autoimmune disease chiefly involving salivary and lacrimal glands, associated with a high risk of developing non Hodgkin's lymphoma (NHL) (about 44 times higher than in the general population), usually B-cell lymphomas of mucosa associated lymphoid tissue (MALT). Anyway, the most frequent histologic lesion of major salivary glands of pSS patients is myoepithelial sialadenitis (MESA).

Objectives We longitudinally studied the prevalence and the clinical features of lymphoproliferative disorders in a large cohort of pSS patients throughout a 10-years follow-up period.

Methods We evaluated 68 consecutive outpatients, affected by pSS according to the Fox's criteria, followed since January 1987 to November 2000. Patients were divided into two groups, according to their autoantibodies pattern at the time of diagnosis: anti-Ro and/or La positive vs anti-Ro/La negative. We excluded patients affected either by secondary SS or associated to other connective tissue diseases and HCV infection, or by isolated keratoconjunctivitis sicca and those taking drugs causing sicca syndrome. We even calculated the relative risk on the basis of incidence rate of NHL as reported by Italian Cancer Registry.

Results Lymphoproliferative disorders were diagnosed in 5 (7.35%) patients. Lymphoproliferation was significantly prevalent in the Ro/La positive group ($p = 0.041$). We recorded 2 cases of NHL of intermediate or low grade malignancy (1 rhinofaryngeal plasmocytoma associated with glomerulonephritis and monoclonal crioglobulinemia and 1 parotid MALToma) and 3 pre-neoplastic disorders (2 cases of MESA and 1 case of renal lymphoproliferative disorder). The latter died of melanoma 4 years after the diagnosis of lymphoproliferative disorder. In all the cases the development of a lymphoproliferative disorder was associated with purpura, parotid swelling and low C4 levels, either at the time of diagnosis or during the follow-up. Kaplan-Meier rates analyses showed that MESA and NHL represented late occurring events in the course of pSS. According to our results, the relative risk (RR) to develop NHL was 36.1 for the