Objectives Aim of current study was to estimate predictive value of cytology of induced sputum for progressive pulmonary involvement in patients with connective tissue diseases.

Methods Forty-five patients with established diagnosis of connective tissue disease (SLE, PSS, PM/DM), were examined for pulmonary involvement (X-ray, spirometry, diffusion lung capacity, high resolution CT scan, event.bronchoscopy with BAL). Induced sputum was obtained after inhalation of 5 ml of 3 percent solution of sodium chloride by ultrasonographic nebuliser. The induced sputum was cultivated, cytological and immunophenotypisation examinations were made. Pulmonary function tests and induced sputum examinations were repeatedly done after 9–12 months.

Results We have detected progression of pulmonary involvement in 16 patients. Cytological features of leucocyte predominance were found in 12 of them. In 29 non-progressive patients was leucocyte predominance found in only six cases. Respiratory infection was excluded.

Conclusion Method of induced sputum seems, after thoroughgoing appreciation, to be the interesting possibility of simple, non-invasive method for screening of pulmonary involvement progression in patients, suffering by connective tissue diseases.

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FRI0136 IMMUNE ADSORPTION IN HIGHLY ACTIVE SLE INCREASES THE RISK OF BACTERIAL, BUT NOT OF SEVERE VIRAL INFECTIONS

¹GH Stummvoll, ¹M Aringer, ²M Jansen, ²A Goldammer, ²K Derfler, ¹JS Smolen, ¹WB Graninger. ¹Rheumatology/Internal Medicine III; ²Nephrology/Internal Medicine III, University of Vienna, Vienna, Austria

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Background Active SLE patients undergoing plasmapheresis and cyclophosphamid therapy are at high risk of severe bacterial and viral infections. Immune adsorption (IAS) is a more novel approach to autoantibody removal with an unclear risk of infections in SLE.

Objectives We therefore decided to investigate the risk of infections in patients undergoing longterm IAS.

Methods We analysed the records of ten consecutive active SLE patients treated with long term IAS (mean 38 months) for the occurrence of severe infectious disease. We compared the IAS patients to historical control groups¹ of 9 patients under plasmapheresis and cyclophosphamid (PP) and 12 patients treated with cyclophosphamid (CX) alone for similar time periods.

Results One IAS patient died from gram-negative septicemia. Three localised bacterial infections (two gram-positive, one gram-negative) were treated with antibiotics. All infections occurred in the subgroup of five highly active patients (SIS >15, mean 17.7 ± 0.9) who all underwent additional CX therapy, showing characteristics similar to the CX and PP control groups (SIS 18.7 ± 2.4 and 20.3 ± 3.7, respectively). Bacterial infections were more frequent than in the CX group (4/5 vs 1/12, p < 0.01), but similar to the PP group. No severe viral infections were detected.

Conclusion IAS did not promote severe viral infections, but was associated with an increased rate of potentially life-threatening bacterial infections in SLE patients with very active disease.

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FRI0137 PROLACTIN IN SYSTEMIC LUPUS ERYTHEMATOSUS

¹L Moszkorzova, ¹C Dostal, ²J Marek, ²Z Lacinova, ¹L Musilova. ¹1st Department, Institute of Rheumatology, Prague, Czech Republic; ²3rd Med. Department, 1st Med. Faculty Charles University, Prague, Czech Republic

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Background Prolactin (PRL) is an anterior pituitary hormone which is known to stimulate humoral and cell mediated immune responses, and may have a role in the pathogenesis of systemic lupus erythematosus (SLE).

Objectives To determine whether elevated serum prolactin associates the SLEDAI activity and/or specific organ involvement in SLE when recent reports have been till now discrepant.

Methods Basal serum PRL levels were determined in 55 consecutive SLE patients (pts) (49 females, 6 males) and in 41 healthy controls (31 females, 10 males) by RIA method. The estimated normal values of serum PRL were 200 mUI/l for males and 450 mUI/l for females.

Results The idiopathic hyperprolactinemia (hyper-PRL) was found in 7 SLE females (14,29%; 828,682 ± 391,410 mUI/l) and in 3 males (50,00%; 305,469 ± 65,751 mUI/l); and in one male in healthy controls (10,00%; 348,352 mUI/l) only. In remaining 42 SLE females and in 3 males PRL serum level was normal (365,783 ± 282,796 mUI/l; 142,854 ± 84,512 mUI/l). After 6 months repeatedly determined serum PRL in 2 females and 2 males with initial hyper-PRL, has shown normalisation in 1 female and 1 male. As to the proposed association between hyper-PRL and disease activity and specific organ involvement and presence of anti-ds-DNA there are some data on the Table 1.

Abstract FRI0137 Table 1

	Hyper-PRL	SLEDAI activity >4	Lupus nephritis (n = 15)	CNS (n = 11)	anti-ds-DNA (n = 28)
Females	7 (14%)	5 (71%)	3 (20%) *ns	0 *ns	3
Males	3 (50%)	2	3	1	2

Conclusion There was significantly higher frequency of hyper-PRL in 55 SLE pts compared to 41 healthy controls (p < 0,001). The value of serum PRL has normalised in 2 pts with hyper-PRL from 4 pts with initial hyper-PRL without any specific treatment after 6 months by repeated estimation. We document a new idiopathic hyper-PRL in 1 patient with normal initial serum PRL. The association between hyper-PRL and activity and/or specific organ involvement and presence of anti-ds-DNA was not statistically significant due to low number of observations.

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