AB0469 **EVALUATION OF PILOCARPINE TREATMENT IN XEROSTOMIA BY PULSED DOPPLER COLOR ULTRASONOGRAPHY: ECHOPILO STUDY**

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Background: The ultrasonography of salivary glands (USSG) has proved its utility in diagnosing and following primary Sjögren patient's (pSS) (1,2). The evaluation of disease activity is still of interest and can be studied by assessing the inflammatory status of SG using US Doppler.
Objectives: To evaluate the vascularization of salivary glands, and particularly the parotid gland (PG) using Pulsed Doppler color ultrasonography (USSGPD) in patients complaining of xerostomia before and after treatment by pilocarpine.
Methods: We prospectively included patients with objective dry mouth syndrome (using salivary flow rate) at Brest University Hospital (DiapSS cohort). The vascularization was assessed by the resistive index (RI) at the left parotid. Only patients with pathological RI (<0.8) were included in order to observe evolution after pilocarpine. USSGPD was carried out by the same operator. A dental consultation with measure of salivary flows before and after stimulation was performed. These examinations were performed at baseline and after 3 months of treatment with pilocarpine at 4 mg 3 times daily.
Results: Among the 19 patients included, 11 received pilocarpine treatment for the whole 3 months period, 6 of the 8 remaining patients stopped the pilocarpine due to side effects. Among the 11 patients with a follow-up evaluation at 3 months, 5 had pSS according to AECG criteria. The differences of RI before and after lemon stimulation were on average of -0.04 at baseline and -0.04 at M3. The sum of ultrasound's grades average of the four glands was 3.47 at M0 and 4.18 at M3. The non-simulated salivary flow was on average of 1.96 mL/mn at M0 and 5.23 mL/mn at M3, whereas the average of stimulated salivary flow was 2.84 mL/mn at M0 and 8.51 mL/mn at M3. None of these observed differences were statistically significant before and after 3 months of treatment by Pilocarpine: RI before and after lemon stimulation (p=0.953), the sum of the four glands' grades (p=0.858), the non-stimulated (p=0.26) and stimulated salivary flow (p=0.139). Concerning the 3 patients with Sjögren's syndrome, there was no differences using RI before and after treatment but the RI was lower in this subgroup compared to the xerostomia patients.The study was marked by a large number of pilocarpine's discontinuation (31%) due to adverse effects.
Conclusions: Preliminary results showed no significant differences between the 4 gland's grade, ultrasound's RI and salivary non and stimulated flow before and after three months of pilocarpine's treatment. The vascularisation of salivary glands could be an opportunity to follow our treated patients with Sjögren's syndrome or with xerostomia but more studies are needed to prove the interest of this procedure.
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AB0470 **RESPONSIVENESS OF SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS AFTER RITUXIMAB TREATMENT: A SINGLE CENTER EXPERIENCE**

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Background: Systemic lupus erythematosus (SLE) is a complex disease with multi-organ presentations. Lupus nephritis, which results from autoantibody deposition at glomerulus, induces inflammation and damage. Lupus nephritis is also the leading cause of comorbidity in SLE patient and associated with poor prognosis.
Objectives: To evaluate the treatment responsiveness of rituximab in patients with SLE.
Methods: Patients should fulfill the criteria of 1997 American College of Rheumatology classification criteria for SLE. Patients underwent chemotherapy, with severe infection, under hemodialysis or after kidney transplantation were excluded. Total 37 patients were evaluated receiving rituximab infusion from 2009 to 2013. Clinical parameters were measured before and after rituximab usage.
Results: Among the 37 patients, the female patient was 89.2%. Mean age was 39.53 years old. The mean creatinine level remained similar during the 36 months of follow-up. In the beginning of the treatment, the mean creatinine level was 1.40mg/dl (SD 0.84). After 12, 24, 36 months of follow-up, the mean creatinine levels were 1.73mg/dl, 2.16mg/dl, and 2.40mg/dl, respectively (p=0.431, 0.148, 0.328). The mean proteinuria level was 3.51g/day initially (SD 2.52), but it rapidly decreased to 1.60g/dl after 6 months of follow-up (p<0.001), and further decreased to 1.40g/day, 1.12g/day, and 0.90g/day after 12, 24, 36 months of follow-up (p=0.001, 0.002, 0.012). The mean ds-DNA level was 216IU/ml in the starting of the treatment, and it decreased to 97.04IU/ml, 88.28IU/ml, 94.6IU/ml after 12, 24, 36 months of follow-up (p=0.002, 0.003, 0.05). The C3 level revealed elevation after 36 months of follow-up. The mean C3 level was 70.63mg/dl initially, and increased to 88.60mg/dl, 90.65mg/dl, and 96.20mg/dl after 12, 24, 36 months of follow-up (p<0.001, 0.002, 0.011). The platelet level remained similar from the beginning of the study to 36 months of follow-up (269.97K/cumm to 253.5K/cumm, p=0.929). The improvement of proteinuria was significant and could be detected in 6 months, which had significant correlations with the reduction level in 24 months (p<0.001). This suggested that early improvement of proteinuria may predict the further responsiveness.
Conclusions: Although the role of rituximab still remained controversial in the treatment of systemic lupus erythematosus, it showed positive effects in our single center's experience. Early response to rituximab was an important predictor of further sustained responsiveness and reduction of proteinuria and other clinical parameters.
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SLE, Sjögren's and APS - clinical aspects (other than treatment)

AB0471 **WIDE HETEROGENEITY IN TREATMENT PROTOCOLS AND INAPPROPIATE USE OF PREDNISOLONE FOR ANTI-RO/LA ASSOCIATED-CONGENITAL HEART BLOCK: A SYSTEMATIC REVIEW OF 492 CASES**

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Background: Congenital heart block (CHB) risk is 1–2% in case of maternal anti SSA/Ro and/or anti SSB/La antibody positivity. CHB have significant mortality (20–30%) and available therapeutic options' efficacy is contradictory.

Table. Treatments after diagnosis of CHB

General treatment, n(%)			
Only glucocorticoids	92 (39.3)		
Glucocorticoids and IVIG	10 (4.2)		
Only IVIG	2 (0.8)		
Glucocorticoids and hydroxychloroquine (HCQ)	2 (0.8)		
Glucocorticoids, HCQ and IVIG	2 (0.8)		
Only HCQ	1 (0.4)		
No treatment	134 (57.2)		
Glucocorticoid type, n(%)			
Dexamethasone	54 (50.9)		
Prednisolone	27 (25.4)		
Betamethazone	11 (10.3)		
Not known	14 (13.2)		
Dosing regimen of glucocorticoids, n(%)			
Dexamethasone 4 mg/day, until birth	25 (30.4)		
Prednisolone 40-60 mg/day, until birth	11 (13.4)		
Dexamethasone but not know dosage or time period	9 (10.9)		
Dexamethasone or Betamethasone cumulative dose over 100 mg's'	7 (8.5)		
Dexamethasone 8 mg/day until birth	5 (6.0)		
Dexamethasone or Betamethasone cumulative dose over 100 mg's'	3 (3.6)		
Dexamethasone 2 mg/day, until birth	3 (3.6)		
Prednisolone until birth, dosage not specified	3 (3.6)		
Prednisolone 10 mg/day, until birth	2 (2.4)		
Dexamethasone 12 mg/week, until birth	2 (2.4)		
Dexamethasone or Betamethasone 12 mg/day, until birth	2 (2.4)		
Dexamethasone or Betamethasone 25 mg/ twice a week, until birth	1 (1.2)		
Dexamethasone 10 mg/day, until birth	1 (1.2)		
Dexamethasone 6 mg/day, until birth	1 (1.2)		
Prednisolone 2 mg/kg/day, no time period	1 (1.2)		
Use of betamimetics, n(%)			
Yes	17 (12.4)		
No	120 (87.6)		
Dosing regimen of IVIG, n(%)			
0.4gr/kg/day for 5 days, then one per month or 1 g/kg 2 consequent day in a month	4 (28.6)		
1gr/kg per week	3 (21.4)		
0.4 gr/ kg per 3 weeks	3 (21.4)		
1 gr/kg per 3 weeks	2 (14.3)		
1 gr/kg per 15 days until birth	1 (7.1)		
1gr/day for 2 times totally	1 (7.1)		
CHB type, n(%)	**Taking glucocorticoids?**		**p**
	Yes	**No**	
First degree block	6 (32)	13 (68)	0.6
Second degree block	5 (18)	22 (82)	
Third degree block	46 (20)	185 (80)	
Sinus bradycardia	5 (26)	14 (74)	
Total	62 (21)	234 (79)	
Plasma exchange schedule n(%)			
Two consequtive days, then weekly	13 (61.9)		
Totally 3 plasma exchanges in 48 hours, 1 cycle	2 (9.5)		
Totally 3 plasma exchanges in 48 hours, 2 cycles	1 (4.7)		
Totally 3 plasma exchanges in 48 hours, one per 4 weeks	2 (9.5)		
Totally 3 plasma exchanges in 48 hours, one per 3 weeks	1 (4.7)		
Unknown time period	2 (9.5)		

Objectives: To review the literature regarding different treatment modalities for CHB.
Methods: We performed a systematic review (August 2015) on Pubmed, using the following MeSH terms: "neonatal lupus", "congenital heart block"; results were restricted to human studies and English language. 1125 articles were assessed in abstract form and, after employing exclusion criteria, 267 original articles/case reports were evaluated in full text. Finally, 199 studies were included, reporting on a total of 492 CHB patients. All administered treatments were assessed on a patient-by-patient basis.
Results: A total of 243 cases reported data for CHB treatment: glucocorticoids (GCs) in 106 (43.6%) cases, intravenous immunoglobulin (IVIG) in 14 (5.7%) cases, and hydroxychloroquine in 5 (2.0%) cases. 21 patients received plasmapheresis treatment. 134 (55.1%) cases received no treatment. Both GCs and IVIG were mostly used in cases with complete atrioventricular (AV) block (74.1% and 61.5% of cases, respectively). Different types of GCs were used: Dexamethasone in 54 (58.6%) patients, prednisolone in 27 (29.3%) and betamethasone in 11 (11.9%) patients (total 92 patients with available data). Dosing schemes and regimens were also widely heterogeneous, with fifteen different regimens used by different centres (Table). Regarding IVIG treatment, six different algorithms were used. Similarly, five different plasmapheresis protocols were used.
Conclusions: There is no consensus in the treatment of CHB. Drug selection and dosing regimens have wide heterogeneity. More than half cases received no treatment. Of note, prednisolone has often been used, despite its inability to cross the placenta.
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AB0472 IMPACT OF DISEASE ON FAMILY AND SOCIAL LIFE IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

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Background: Systemic lupus erythematosus (SLE) is a chronic connective tissue disease with involvement of various organ systems and characteristically has a higher incidence in women than men[1]. The disease, as well as its treatment, could have significant effects on the quality of life of lupus patients.
Objectives: Here, we aimed to investigate the impact of SLE on quality of the social and family life of women.
Methods: One hundred and twenty women diagnosed with SLE were included in the study. A questionnaire including questions about family and social relations were applied and demographic information, educational status, marital status, organ involvement and treatment data were obtained. The results of this study are preliminary and the study is still ongoing.
Results: One hundred and twenty patients were studied. The average age was 37 (± 10). 77 patients were married, 29 patients were single, 12 patients were divorced and 2 patients were widows. 29% of the patients were employed. 10,8% of the patients declared having difficulty in accepting their illnesses. 94,8% of the married patients had nuclear families. Relationship with partners and family members detoriated in 15,5% of the married patients after the diagnosis of SLE. 10,7% of single patients ended their serious relationships and 28,6% developed negative thoughts about marriage after the diagnosis of SLE.
17,6% of the married patients were exposed to verbal or physical violence by their partners. 33% of the patients declared having worse social life compared to prior to diagnosis and 20,7% declared having poor relations with their friends due to their disease. 34.5% of the patients stated that they received psychological counseling after their diagnosis. No significant relationship was found between family problems, social activities, age and educational level.
Conclusions: Systemic lupus erythematosus is a connective tissue disease affecting various organ systems and leading to various comorbidities. Our results suggest that family and social relations detoriate in lupus patients due to their illness independent of their age and educational level. Over one third of the patients received psychological counseling after diagnosis. Moreover, results of this study suggest that having a diagnosis of lupus has substantial impact on the marital considerations.
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AB0473 ANTI CCP AND ANTI MCV ANTIBODIES ARE MARKER OF ARTHRITIS IN SYSTEMIC LUPUS ERYTHEMATOUS & SCLERODERMA

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Background: Anti-citrullinated protein antibodies (ACPA) have been reported as more specific serological markers of rheumatoid arthritis (RA). They provide a superior alternative to the rheumatoid factor (RF) test in laboratory diagnostics of RA (1). Different studies suggest that the enzymatic citrullination and the production of ACPAs may also be associated with other inflammatory arthritis-associated autoimmune diseases (2).
Objectives: Is to detect the presence of anti CCP and anti CMV antibodies in SLE & SSc and its correlation to radiological findings and disease activity.
Methods: Our study was included 70 SLE patients and 30 systemic sclerosis (SSc) patients diagnosed according to ACR classification criteria. After informed consent, all patients were subjected to detailed history taking, full clinical examination including rheumatological examination, laboratory investigations: included CBC, ESR, CRP with titer, urine analysis, renal & liver function, serum uric acid, Anti CCP antibodies & Anti MCV antibodies by ELISA. X- ray and U/S on both hands and knees and disease activity score using SLEDAI score for SLE patients and SSc disease activity score (Medsgar score) for SSc patients.
Results: In our study, anti CCP antibodies were found in 8 (11.4%) of SLE patients and 4 (13.3%) SSc patients, while anti MCV antibodies were found in 14 (20%) SLE patients and 8 (26.7%) of SSc patients.There is association between presence of anti CCP Abs and anti MCV Abs and a clinically evident arthritis in both SLE and SSc. Strong relationship between high CRP level and a severe arthritis and joint erosions was noticed in SLE patients. A significant radiological evident in the form of synovial hypertrophy and bony erosions were found using ultrasonography and plain X-ray with seropositive anti CCP and anti MCV Abs in both SLE and SSc patients.In our study, cut off value of anti CCP which was >12, with sensitivity of 70.42%, specificity of 60% positive predictive value of 80.6%, negative predictive value of 46.2% with diagnostic accuracy of 61.7%, and best cut off value of Anti MCV which was >11, with sensitivity of 98.46%, specificity of 30%, positive predictive value of 75.3%, negative predictive value of 90% with diagnostic accuracy of 60.2% in SLE & SSc.
Conclusions: There is a significant association between presence of anti CCP antibodies and anti MCV antibodies and the presence of evident arthritis either clinical or radiologically by using both x-ray and U/S on both hands and knees in SLE and SSc patients.
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AB0474 THYROID DYSFUNCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS: ITS IMPACT AS A CARDIOVASCULAR RISK FACTOR

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease caused by immune system–mediated tissue damage Thyroid function abnormalities and thyroid autoantibodies have been frequently described in patients with rheumatologic autoimmune diseases, such as SLE
Objectives: The aim of the study Was to assess thyroid function and anti-thyroid antibodies in SLE patients and evaulate the effects of the thyroid dysfunction on the clinical parameters, disease activity and assess its impact as a cardiovascular risk factor.
Methods: A total number of Fifty SLE female patients were selected, Triglycerides (TG), total cholesterol (TC), LDL and high density lipoprotein (HDL).Thyroid Stimulating Hormone (TSH),serum freeT3 (FT3), freeT4 (FT4).Serum thyroid peroxidase antibodies (TPOab) and serum thyroglobulin antibodies (TGab) erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), IMT (intima-media thickness) of the carotid arteries and Echocardiography was done for all patients
Results: There is a statistically significant correlation between SLE and thyroid disorder p. value<0.05.clinical hypothyroidism was the most common abnormality presented followed by subclinical hypothyrodism.There is a statistically significant correlation between IMT and thyroid disorder p. value<0.05.There is a statistically significant correlation between cardiac valves disorder and thyroid disorderT, we found a statistically significant correlation between pericardial effusion and thyroid disorder p. value<0.05.
Conclusions: we conclude that thyroid disorder is more common in lupus patients especially those in exacerbation and +ve for antithyroid Ab and Those with thyroid dysfunction had increased cardiovascular risk. These patients should be investigated for Lipid profile echocardiography and neck US for detection of early atherosclerosis and other CVD Those with thyroid dysfunction had increased cardiovascular risk.
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