

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.

References:

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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 INAPPROPRIATE 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)
Betamethasone	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(%)		
0.4 gr/kg/day for 5 days, then one per month or 1 gr/kg 2 consequent day in a month	4	(28.6)
3 gr/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)
1 gr/day for 2 timestotally	1	(7.1)
CHB type, n(%)		
	Yes	No
First degree block	6 (32)	13 (68)
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 consecutive 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)