Salivary glands and thyroid ultrasonography in Sjögren´s syndrome

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Introduction. Our aim was to determine the importance of Parotid Gland (PG) and Submaxilary Glands (SMG) ultrasonography (US) in Portuguese patients with Sjögren's Syndrome (SS).

Patients and methods. We performed salivary gland (SG) US of PG and SMG in 129 patients with SS (European criteria): 82 primary SS patients (P-SS) - 79 F, 3 M; mean age 62.7 years, SD 9.1, and 47 with SS associated with other connective tissue diseases (S-SS) - 43 F, 4 M, mean age 60.6 years, SD 10.7. Patients (pts) with S-SS had the following associated diseases: Rheumatoid arthritis 33 pts; mixed connective tissue disease (DMTC) 4 pts; ankylosing spondylitis 2 pts; progressive systemic sclerosis 4 pts; systemic lupus erythematosus 3 pts; psoriatic rheumatism 1 pt. We used a control group of 72 patients from the general rheumatology consultation, without Sjögren's Syndrome - 68F, 4M, mean age 61.2 years, SD 10,5. The following parameters were evaluated: parenchymal homogeneity, presence of nodules, cysts, calcifications, glandular size, regularity/irregularity of glandular border and evidence of lymph nodes. Thyroid US was performed in 67 P-SS pts, 41 S-SS pts and 68 controls.

Results

	SG	Patients with alterations N (%)	Parenchymal homogeneity N (%)	Nodules N (%)	Cysts N (%)	Altered size N (%)	Calcifications N (%)
P-SS N=82	PG	27 (32.9)	9 (11)	7 (8.5)	9 (11)	10 (12.2)	3 (3.7)
	SMG	35 (42.7)	29 (35.4)	3 (3.7)	8 (9.8)	19 (23.2)	0
S-SS N=47	PG	10 (21.3)	2 (4.3)	2 (4.3)	3 (6.4)	3 (6.4)	2 (4.3)
	SMG	13 (27.7)	13 (27.7)	1 (1.2)	2 (4.2)	3 (6.4)	0
Controls N=72	PG	17(23.6)	7 (9.79)	4 (5.6)	6 (8.3)	7 (9.7)	2 (2.8)
	SMG	17 (23.6)	10 (13.9)	1 (1.4)	4 (5.6)	7(9.7)	0

Abnormal thyroid US was found in 47.8% of P-SS pts, 61% of S-SS and 57.4% of controls.

Discussion and conclusions

1. The present study suggests a higher prevalence of alterations in SMG in pts with P-SS compared with the control population (p=0,0125)
2. The high frequency of alterations in SG can be promising to evaluate SG involvement and to search complications of SS
3. We found a high prevalence of thyroid alterations in all study groups which may be related to the pts age and not to SS