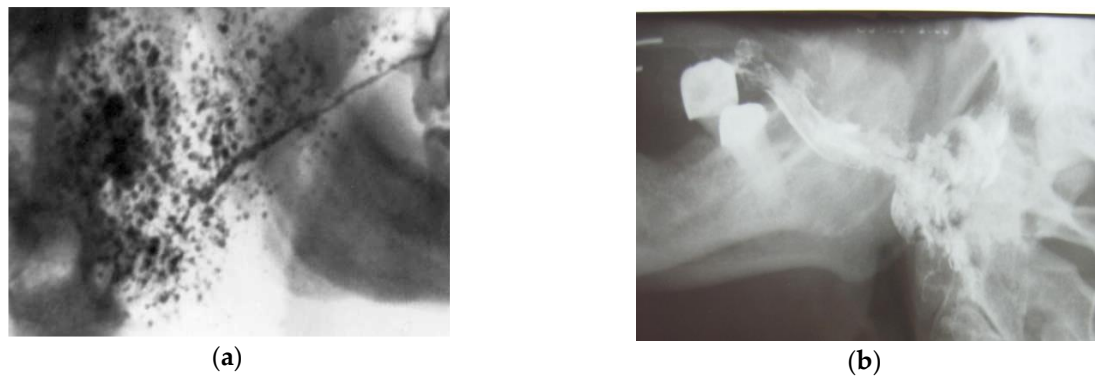
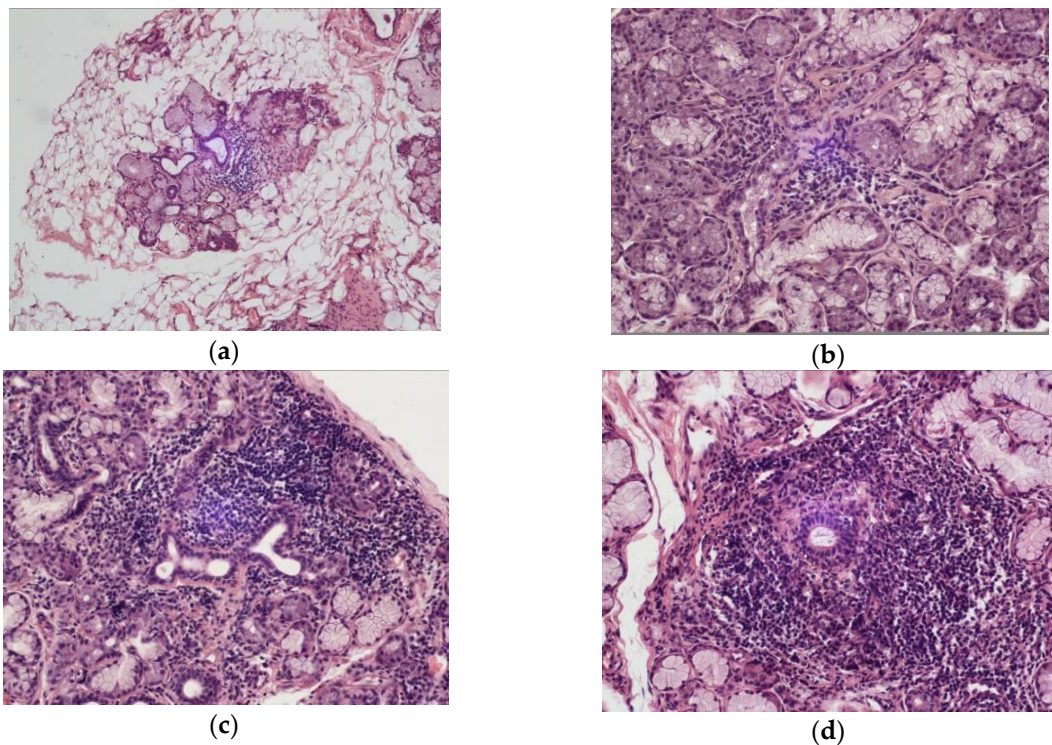


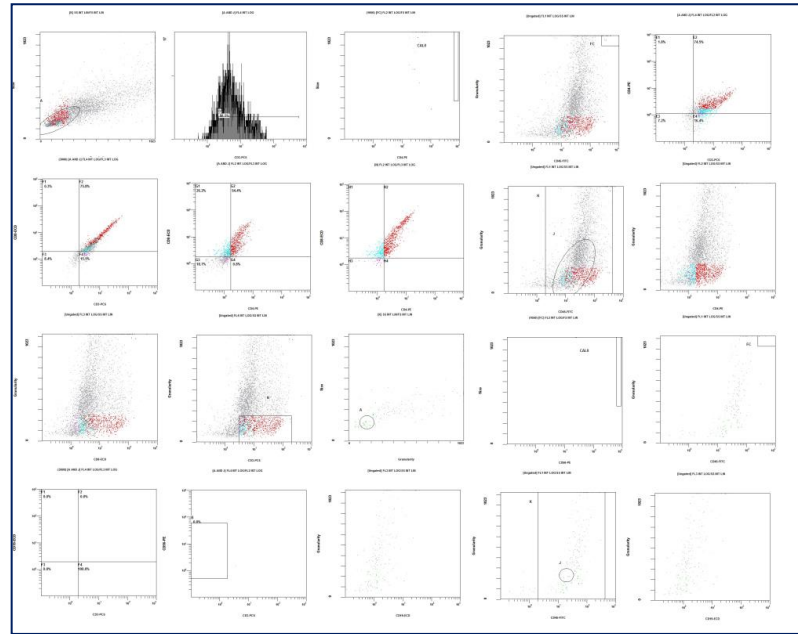
**Supplementary Materials:** The following are available online at [www.mdpi.com/xxx/s1](http://www.mdpi.com/xxx/s1), Figure S1: Parenchymatous parotitis X-rays, Figure S2: Labial salivary gland biopsy (hematoxylin-eosin  $\times 200$ ), Figure S3: Representative set of scatter-plots of a patient with SS, Figure S4: The relative number of subpopulations of T-helpers (CD4+) and cytotoxic T-lymphocytes (CD8+) in the studied groups of patients. Table S1: Cytological analysis of salivary sediment in studied patients, Table S2: Lymphocytes percentage in the cellular composition of salivary sediment in studied patients. Table S3: Immunogram of parotid saliva of the studied patients.



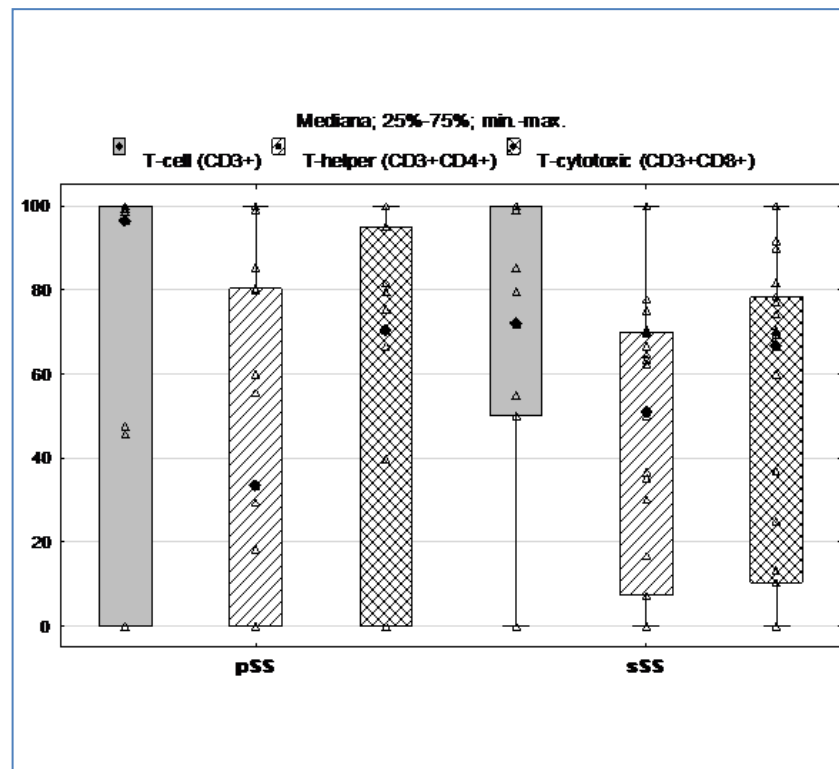
**Figure S1:** Parenchymatous parotitis X-rays: (a) advanced stage, (b) late stage.



**Figure. S2:** Labial salivary gland biopsy (hematoxylin-eosin  $\times 200$ ): (a) enlarged intercalated ducts, focal lymphocytic infiltration, slight sialadenitis, lipid inclusions; (b) moderate sialadenitis, focal lymphocytic infiltration (up to 70 cells in focus); (c) severe sialadenitis, focal lymphocytic infiltration (up to 200 cells in focus); (d) severe sialadenitis, focal lymphocytic infiltration (up to 200 cells in foci, sporadic plasma cells), lymphocytic infiltration around the intercalated duct.



**Figure S3:** Representative set of scatter-plots of a patient with SS.



**Figure S4:** The relative number of subpopulations of T-helpers (CD4+) and cytotoxic T-lymphocytes (CD8+) in the studied groups of patients. pSS: Primary Sjogren's Syndrome; sSS: Secondary Sjogren's Syndrome.

**Table S1:** Cytological analysis of salivary sediment in studied patients

Disease (number of patients)	Incidence rate, n (%)			
	Epithelial cells	Erythrocytes	Granulocytes	Lymphocytes

pSS <sup>1</sup> (n=12)	11 (91.6%)	1 (8.3%)	5 (41.6%)	11 (91.6%)
sSS+RA <sup>2</sup> (n=13)	13 (100%)	1 (7.6%)	6 (46.2%)	10 (76.9%)
sSS+SLE <sup>3</sup> (n=8)	8 (100%)	1 (12.5%)	2 (25%)	6 (75%)
sSS+ SSD <sup>4</sup> (n=7)	7 (100%)	0 (0%)	2 (28.5%)	5 (71.4%)
Average for group	39 (97.5%)	3 (7.5%)	15 (37.5%)	32 (80%)
Control group (n=20)	11 (55%)	0 (0%)	1 (5%)	0 (0%)

<sup>1</sup>primary Sjogren's Syndrome

<sup>2</sup>secondary Sjogren's Syndrome, associated with rheumatoid arthritis

<sup>3</sup>secondary Sjogren's Syndrome, associated with systemic lupus erythematosus

<sup>4</sup>secondary Sjogren's Syndrome, associated with systemic scleroderma

**Table S2:** Lymphocytes percentage in the cellular composition of salivary sediment in studied patients

Disease (number of patients)	Lymphocytes percentage in the cellular composition			
	0	1-10%	11-50%	>50%
pSS <sup>1</sup> (n=12)	1	7	3	1
sSS+RA <sup>2</sup> (n=13)	3	8	1	1
sSS+SLE <sup>3</sup> (n=8)	2	5	1	0
sSS+ SSD <sup>4</sup> (n=7)	2	3	2	0
Average for group	8	23	7	2

<sup>1</sup>primary Sjogren's Syndrome

<sup>2</sup>secondary Sjogren's Syndrome, associated with rheumatoid arthritis

<sup>3</sup>secondary Sjogren's Syndrome, associated with systemic lupus erythematosus

<sup>4</sup>secondary Sjogren's Syndrome, associated with systemic scleroderma

**Table S3:** Immunogram of parotid saliva of the studied patients.

Disease (number of patients)	Incidence rate, %				
	T-cells (CD3+)	T- helpers (CD4+)	T-cytotoxic cells (CD8+)	B-cells (CD19+)	Natural killer cells (CD56+)
pSS <sup>1</sup> (n = 12)	90%	43.7%	64%	9%	9%
sSS+RA <sup>2</sup> (n = 13)	65%	45%	47.8%	2.2%	8.7%
sSS+SLE <sup>3</sup> (n = 8)	66.8%	36.4%	51.4%	0	0
sSS+SSD <sup>4</sup> (n = 7)	64.5%	41.5%	48.9%	0	0
Average for group	71.7%	41.6%	53%	2.8%	4.4%
Control group	0	0	0	0	0

<sup>1</sup> primary Sjogren's Syndrome; <sup>2</sup> secondary Sjogren's Syndrome, associated with rheumatoid arthritis; <sup>3</sup> secondary Sjogren's Syndrome, associated with systemic lupus erythematosus; <sup>4</sup> secondary Sjogren's Syndrome, associated with systemic scleroderma.