SEMIQUANTITIVE INDICES IN SALIVARY GLAND SCINTIGRAPHY IN SJÖGREN'S SYNDROME

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AIM: To assess the function of salivary glands utilising semiquantitative indices as compared to sialometric measurements in patients with Sjögren's Syndrome (SS).

MATERIAL AND METHODS: 37 patients aged 23 do 68 lat (=48,7 lat) with Sjögren's Syndrome and 10 controls were enrolled in the study. Salivary scintigraphy was performed utilising a single-head gammacamera Diacam (Siemens, Erlangen, Germany) following the application of 99m-technetium as pertechnetate (185 MBq). The results of parotid and submandibular glands were analysed semiquantitively utilising the indices of maximal tracer's uptake in the glands, percentual uptake in particular glands and stimulated saliva's ejection fraction. Sialometry, i.e. collecting and measuring the amount of saliva with calculating its speed of secretion has been performed by a dentist.

RESULTS: no significant differences in the uptake of a tracer were found between parotid (mean 46,8%) and submandibular glands (mean 53,1%) between SS patients and controls. Also no differences were found between SS patients with normal and impaired sialometric findings - uptake indices mean 50,4% and 52,2% respectively for submandibular and mean 49,4% i 47,7% parotid glands. Maximal tracer's uptake in the glands and percentual uptake in particular glands did not correlate with sialometric findings. Stimulated saliva's ejection fraction at 30^{th} min. of the study in controls was 10,1% in parotid glands and 2,7% for submandibular glands. In SS patients it was decreased to 9,0% in patients with normal sialometry findings, 7,4% with oligosialia, in xerostomia - 0,5%. Those data, however correlated poorly with stimulated sialometry findings.

CONCLUSIONS: it seems that semiquantitive indices of salivary scintigraphy are little specific in Sjögren's Syndrome patients, although sometimes may be useful jointly with qualitative analysis of scintigraphy and sialometric findings.