

Salivary and lacrimal secretion is reduced in patients with ESRD

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Abstract

A reduction in salivary and lacrimal secretion has been described in several diseases. However, such alterations have not been investigated fully in patients with chronic renal failure. The aim of the present study is to estimate the frequency of alterations in salivary and lacrimal secretion in long-term hemodialysis patients.

Sixty-three hemodialysis patients and 23 healthy control subjects were studied. In all of them, we tested salivary secretion (Saxon's test), lacrimal secretion (Shirmer's test), and **the presence of xerostomia and xerophthalmia symptoms**. In a subgroup of patients, we performed other tests to evaluate evidence of ocular lesions and tissue damage to salivary glands. We also tested the relationship between salivary and lacrimal secretion and autonomic nervous system function.

On average, **salivary and lacrimal secretion were markedly reduced in uremic patients compared with healthy controls, and alterations in salivary gland function were related strongly to salivary gland fibrosis and atrophy**. Xerophthalmia often was asymptomatic, but frequently was associated with corneal lesions. Xerostomia and xerophthalmia were unrelated to autonomic dysfunction and hepatitis C virus infection.

A reduction in lacrimal and salivary secretion is frequent in long-term dialysis patients.

Such alterations often are asymptomatic and could be the expression of acceleration of an age-dependent decline in glandular function and attendant fibrosis and atrophy.