ELECTRON MICROSCOPY AND
HISTOCHEMICAL STUDY OF MINOR
SALIVARY GLANDS IN CASES OF
RECURRENT APHTHUS STOMATITIS

Hany Amin MD, Mahmoud Abdel Ghafar MD,
Mohamed Ali MD, Ahmed Ashraf El-Hamshary MD,
Adel Abo El-Khair MD* and Mohamed Baridy MD**

Department of Otorhinolaryngology, Internal Medicine* and Histology**.
Benha Faculty of Medicine, Zagazig University, Egypt.

Abstract

This research was conducted on 15 cases, 10 cases complaining of recurrent aphthous stomatitis minor type (m R A S) and 5 control volunteers.

Biopsy is taken from the minor salivary glands of lower lip from patients during the ulcerative phase as well as during ulcer free period after complete healing of the ulcers, and biopsy is taken also from volunteers after fulfilling the data that they have no RAS at any time of their life, biopsy is taken under local anaesthesia, the biopsy specimens are subjected to examination under light microscopy after staining with toludine blue, subjected also for histochemical reactions for succinate dehydrogenase enzyme, Acid phosphatase enzyme and alkaline phosphatase lasty the biopsy specimens were subjected for electron microscopic study. The results showed that during severe attack the secretion of mucus acini was less in mount but concentrated so that its chemical nature becomes mainly of acidic mucopolysaccharides which give the secretion an acid nature weakening the covering epithelium and cause the ulcerative condition. Moreover this ulcerative eruptions were enhanced by proteolytic enzymes secreted from the excretory duct cells where the latters secrete sersous fluid rich in these proteolytic enzymes.so we conclude that RAS can be considered one of the diseases which is induced by hyperacidity. It's treatment has to be modified to include antiulcer therapy especially for prevention of recurrences. more studies has to be done to varify these findings and to prove if only the secretion in the buccal mucosa playing role in hyperacidity.