PROTEASES, PROTEASE INHIBITORS AND GLYCOPROTEINS IN ORAL FLUIDS IN HEALTH AND DISEASES

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By
PRAVEEN KUMAR SHETTY.B

Research Supervisor
DR. T. N. PATTABIRAMAN
Professor and Chairman
Department of Biochemistry,
S.D.M. College of Dental Sciences, Dharwad.
India

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SALIVA

Saliva is not one of the popular body fluids. It lacks the drama of blood, the sincerity of sweat and the emotional appeal of tears. Despite the absence of charisma, however a growing number of pediatricians, pharmacologists, clinical and forensic pathologists, psychologists and dentists are finding that saliva provides an easily available, noninvasive diagnostic medium for a rapidly widening range of diseases and clinical situations (1,2).

Saliva is used to describe the combined fluids present in the mouth. However in its strict sense this word refers only to the hypotonic, watery fluid secreted by the major and minor salivary glands. Expressions like "whole saliva", "mixed saliva" and oral fluids are used for scientific purposes to represent the combined fluids of the mouth. Indeed, whole saliva is a mixture of pure glandular saliva, gingival crevicular fluid, oral epithelial cells, microorganisms and food remnants.

Saliva is not only a pleasant lubricant which makes oral functions such as speech, mastication and swallowing easier, but also a fluid with many important functions in the maintenance of oral and general health. Although saliva is not considered as essential fluid for life in man, it protects the human body and in particular oral tissues, against numerous noxious and harmful agents. Some systemic diseases and hormonal changes can alter the flow and composition of saliva, so that in many cases saliva analysis have diagnostic value.

Compared to blood and urine, saliva is easy to collect, which makes frequent monitoring of excreted substances possible. Furthermore, the amount detectable in saliva has been interpreted to represent the biologically active fraction of a particular compound.

Whole saliva is a complex mixture of parotid, submandibular, sublingual and minor salivary gland secretions mixed with bacteria, leukocytes, sloughed