CHRONOBIOLOGICAL ANALYSIS OF NITROGEN OXIDE CONTENT IN HUMAN SALIVARY GLANDS SECRETUM

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Nitrogen oxide (NO) secretum rhythm in practically healthy people was investigated. Concentrations of nitrate and nitrite in salivary glands secretum were studied. Content of NO metabolites was determined colorimetrically using Griss reactive. Rhythm of NO secretion by salivary glands is different. NO content variations in each gland are rhythms of a middle frequency with period about 1 hour and 20 minutes. Switching from one gland to another takes place in 40 minutes. Since glands work asynchronously and produce different volumes and concentrations of NO, left and right parotid glands secretum should be investigated. Nitrogen oxide level in salivary glands secretum of one person differs during the day, herefore samples should be taken at definite time. Thus NO level in saliva is an important marker of physiological and pathophysiological reactions in organism and can be used as diagnostic characteristic.