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DISEASES OF THE ORAL MUCOSA CAUSED BY THE REACTION TO MATERIALS OF DENTURES. GALVANOSIS

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Nowadays metal dental prostheses are widely used. Along with the introduction of metals into the orthopedic treatment practice complications caused by a reaction to these materials were described and explained by the appearance of galvanic phenomena in the oral cavity. Usually the diagnosis is formulated as "galvanosis".

Galvanosis (electromagnetic allergy) is the presence of galvanic currents in the mouth (growth of electric potential difference, current, electric conductivity of mouth liquid) with the simultaneous presence of the complex of clinical symptoms of intolerance to metal alloys.

The symptoms of the disease state include "metallic" taste, burning tongue, a sense of bitterness and sour-salty taste, a feeling of electric current, the change in salivary flow, deterioration of general condition, etc.

The diagnosis is established on the basis of complaints, data of dental examination of patients with metal fillings, crowns, bridges and other inclusions.

The diagnosis is based on measurement of the potential difference of metal inclusions, which are set in a specific algorithm. It helps to make a differential diagnosis with other pathological conditions such as allergic reactions to metals, metabolic disorder, disturbance of electrolyte composition of saliva and detect any deviations from the physiological norm.

Appliances that are used for measurement of electrochemical changes in the oral cavity are laboratory voltmeter, ammeter, potentiometers.

Galvanosis treatment is aimed at elimination of its causes. It includes the removal of dissimilar metals from the cavity of the mouth. Removing the stainless steel prosthesis gives a quick effect already in 3-7 days.

Prevention of diseases caused by denture material includes the selection of materials combined properly with each other, the use of new alloys, new technologies precluding the development of prosthetic stomatitis and galvanosis.