Evaluation of caries-resistance of tooth enamel

The essence of the method is as follows: a drop of HCI 3 mm in diameter is applied to the vestibular surface of the central upper incisor with a glass rod, previously washed with distilled water and dried. After 5 seconds the acid is washed off with distilled water and the tooth surface is dried. The depth of the enamel etching microdefect is estimated by the intensity of its staining with 1% methylene blue solution. Remains of the dye are removed from the surface of the tooth with a dry cotton swab in one wiping motion. The etched area turns out to be stained blue. The degree of staining depends on the depth of the enamel damage and is assessed with a blue scale.

Clinical Determination Of Enamel Remineralisation Rate КОСРЭ тест

To perform this test, the lip surface of the central upper incisor is thoroughly cleaned of plaque using a spatula and a 3% hydrogen peroxide solution, rinsed with water and dried. A drop of saline buffer solution (pH-0.3-0.6) is applied to the enamel surface with a glass rod. The diameter of the drop is within 2 mm. After 1 minute remove it with a cotton swab and stain the etched enamel area with 2% aqueous methylene blue solution for the same time. Remove excess paint with a dry cotton swab. Staining of the stained enamel area is repeated at daily intervals until the stained enamel area retains the ability to stain, which is a numerical indicator of resistance to dental caries.

Oral health problems arise mainly as a result of two oral diseases: Dental caries and periodontal disease. Although the prevalence of these two diseases is changing, it remains true that virtually every adult in the world has experience of either one disease or both.

Satisfactory oral health is difficult to achieve throughout the developing world not only because of increase in oral diseases but also because of lack of preventive programmes.