

of the problems: «Who, When, Where and Why to teach»? , because the doctoring it is a gift of God.

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**MODERN ANESTHETICS CONTAINING
BENZOCAINE FOR THE APPLICATIVE
LOCAL ANESTHESIA IN DENTAL
MEDICINE PRACTICE TODAY**

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The ethylic ether of the paraaminobenzoic acid – Benzocaine (Anaesthezin, Anaestalgin, Topanalgin) was synthesized in 1890. Now this is quite active, low-toxic local anesthetic, insoluble in water, without resorptive action. Benzocaine is applied in the drug's forms of powders, 5–20% glycerol and oily solutions, 20% gels and spray-aerosols, ointments, 50–70% pastes solids for pain fabric tooth gels, tablets for dissolution in the oral cavity, and for the treatment of the stomatitis this drug combining it with hexamethylenetetramine in stomatological dentistry.

Benzocaine Drugs – Topical paste (Product Deentaries SA, Switzerland), Ultracare (Ultradent), Gelato (Deepak Products Inc.), Dentol (Pharmascience Inc, Canada), Jen-Relief (Jendental Inc., DentMarket, Kyiv, Ukraine), Gingicaine Gel (Belport Co, Gingi-Pask, USA), Topex (Sultan chemists inc., USA), Ez Gel A (PE-Izimediks Kiev, Ukraine – Canada), Ezmedix EZ Gel-A (Ezmedix), Topicale® Xtra (Premier Dental, Canada), Premier Topicale Gel (Premier Dental, Canada) – have a nice taste by cherry, orange, raspberry, strawberry, strawberry, pina-colada or mint, and do not have a local irritant in the mouth.

The appearance of negative side effects possibly due to exceeding the recommended doses or in individual hypersensitivity to Benzocaine.

The applicative local anesthesia in dentistry used to anesthetize the site prior to injection anesthesia, before the excision of the gums and removing hypertrophied papilla, if gums and dentin hypersensitivity, deleting temporary occlusion of deciduous teeth, removing the teeth of the third degree of mobility, during a simple curettage, abscesses's opening, in the treatment of ulcerative stomatitis, remove tartar, to suppress the gag reflex when removing the cast and conducting radiological examinations, for quick removal of the pain of teething children (from 4 months of age – gum's gel 7,5% Dentol).

This intraoral local applicative (surface or terminal) anesthesia in modern dentistry refers to non-injecting medication methods of local anesthesia,

use of which ensures the greatest comfort for patients, which is particularly important in pediatric practice, and success of the whole process of outpatient and inpatient treatment.

Comfortable painless dental procedures carried out is an important criterion of modern professional rating practitioner dentist, in private dental medicine practice especially today.

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**BREAST CANCER AND RADIATION
RISK IN SEMEY REGION**

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As show the results of years of research conducted in contingents exposed to prolonged high-ionizing radiation (such as nuclear bombing tests and disasters), the negative effect of irradiation is not confined to the direct effect on the treated. Nor is it possible to explain the peculiarities of morbidity in regions subjected to the effect of radioactive fallout by the presence of known hereditary (genetic) defects. There is a hypothesis that the increase in prevalence of several diseases in the descendants of exposed persons may be associated with poorly understood complex of minor genetic changes manifested at the level of regulatory systems dysfunction (nervous, endocrine and immune system, to a certain extent). One manifestation of this dysregulatory complex may be the increased frequency of malignant tumors of hormone-dependent tissues in the descendants of exposed individuals. At the moment, there has been revealed a considerable number of genes that are predictors of various diseases, including cancer.

In terms of malignant neoplasms, modern epidemiological situation is characterized by reduction in the incidence of a number of previously highly-common tumors and increase of hormone-dependent tumors, especially those of female reproductive system organs. Breast cancer is in the first place in the structure of cancer incidence in women. Prognostically, breast cancer is favorable when it is timely detected. Unfortunately, in many cases there is a late detection of cancer associated with a greater risk of recurrence and metastasis after specific treatment. Several studies indicate the link between breast cancer and exposure to ionizing radiation. In particular, the increase in cancer incidence was detected in the areas of radiation risk at the Semipalatinsk Test Site (SNTS) that remains under the attention of researchers. There have also been identified peculiarities of genes-predictors prevalence associated with exposure to ionizing radiation, not only in directly exposed individuals, but also in their descendants.