

Photoactivated deep fluorination of dentin of the tooth during the endodontic treatment
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Abstract. Step by step activation of liquid and suspension of complete set "Gluftored" for deep fluorination of enamel and dentin of the tooth by energy of laser radiation increases the depth, quality of fluorination of tissues weakened because of dissecting and the influence of aggressive drugs that are used under endodontic treatment, and disinfection owing to copper.

Key words: «Gluftored», activation, laser radiation, dentin, tooth.

Actuality. Dissecting tooth tissues of the patient during endodontic treatment, tool extension of root canals and irrigation using aggressive drugs weaken the tooth, making it brittle. *Purpose.* To strengthen, consolidate dentin in endodontic treatment, in addition disinfect using photoactivated deep fluorination of dentin of the root canal, the tooth cavity and the carious cavity using a set of "Gluftored." The set includes a liquid with F ions and Cu crystals, and finely divided suspension of calcium hydroxide, or using the analogue of «Dentin-Versiegelungsliquid», Humanchemie, Germany, proposed by Knappwost.

Methods. Prepared for sealing the root canal of a tooth using endodontic syringe need to fill with liquid "Gluftored". Step by step in the beginning low intense laser radiation affects on the fluid, λ 0,63 μm , using fiber-optic cable or blue light of light emitting diode, λ 0,42-0,48 μm , during 30-60 seconds at the distance of 3 mm from the mouth of the canal . Need to dry a root canal, fill using syringe with a suspension preliminary shaking, and ray [1]. Similarly, realize deep fluorination of dentin of the tooth cavity and carious cavity, step by step wetting in liquid and suspension, and raying. Root canal, tooth cavity and carious cavity is drying and sealing. Use the device cavity laser therapy PLA "Smile-01" (Russia), power 15 MW, or activator of polymerization polymers. *Result.* Step by step influence on liquid and the suspension of the set "Gluftored" realized by laser radiation promotes deeper penetration of fluid and equal arrangement of formed crystals of calcium fluoride and crystals with copper in all dentinal tubules of tooth, sealing them and disinfection. *Conclusion.* Photoactivated deep fluorination of all dentin of tooth during endodontic treatment increases the mineralization, the strength of the tooth tissues and clinical result.

1. Britova A.A., Uzhakhova L.V., Proshina L.G. Basis of photoactivation of the drug "Gluftored" for deep fluorination of hard tissues of the tooth / SWorld collection of scientific works of the International Conference "Promising innovations in science, education, production and transport - 2013". Odessa, 17-26 December 2013 - Vol. 4. Volume 53 - Odessa. - P. 16-20.