

AIR - ABRASIVE POWDERS AND THEIR COMPOSITION

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Air-abrasive or Air-flow systems, translated from English as "air-flow", are used to remove pigmentation and plaque from the surface of teeth, including in hard-to-reach places. An aerosol stream is formed from a mixture of powder-abrasive, water, and compressed air. Dropping pressure from the tip of the instrument, the flow of particles effectively and quickly removes soft dental deposits from the tooth surface.

Powder Air-Flow Classic (EMS) - based on sodium bicarbonate with an average particle size, which is considered a low abrasive, fine powder. Contains various flavors. It is used to remove supragingival deposits and pigmented plaque.

The air-flow soft powder is a low abrasive, finely dispersed powder, glycine is considered the main component. The average particle size is 65 microns. It is used for the treatment of teeth for patients with sensitive periodontal disease, as well as for patients who need frequent and regular professional hygienic dental procedures.

Powder "Air-Cleans" prof - sodium bicarbonate is used as the main component with a particle size that allows cleaning with a gentle effect on the tooth's hard tissues. Suitable for both removal of hard dental plaque and preparation of carious cavities. Contains an active abrasive - aluminum oxide (30-45 microns).

Erythritol is a polyhydric alcohol, a natural sweetener found in natural products and synthesized artificially, and is widely used in the food industry. Erythritol-based air polishing powder - Air-Flow® Plus. It contains 0.3% chlorhexidine and has the smallest particle size at 14 microns. Its cleaning effect is due to the high density of the particle flux. Due to its very low abrasiveness, the powder can be used for both supra- and subgingival polishing.

References:

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EARLY DETECTION OF ORAL MALIGN LESIONS

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Introduction. An analysis of the recent literary sources indicates that one of the common diseases of the oral mucous membrane and the red border of the lips are diseases accompanied by hyper- and dyskeratosis, there are lichen planus, leukoplakia, various forms of cheilitis, known as facultative precancers, with a frequency of malignancy up to 19% (Kamilov Kh.P., Kadyrbaeva A.A., 2019).

Currently, such techniques are known as stomatoscopy, photostomatoscopy, luminescence study when exposed to ultraviolet rays (Wood's rays), fluorescence diagnostics (Bulgakova N.N., 2015; Krikheli N.I., 2016).

Material and methods. 50 patients with precancerous diseases of the oral mucosa were examined at the age of 25-80 years at the Department of Hospital Therapeutic Dentistry of the Tashkent State Dental Institute for the period of 2017-2020 Among them there were erosive and ulcerative form of lichen planus - in 27 patients (54%), erosive leukoplakia - in 12 patients (24%), verrucous leukoplakia - in 8 patients (16%); traumatic ulcer - in 2 patients (4%), cheilitis - in 1 patient (2%) identified.

For the autofluorescence stomatoscopy of the oral mucosa, the AFS-D set ("Polironik") was used.

As a result of the AFS study, one third of those who applied were found to have a lesion of the oral cavity in the form of an increase or decrease in the intensity of autofluorescence. Thus, in 16 patients (31.3%), autofluorescence differed from the luminescence of a healthy oral mucosa. Among them, 42 patients (84%) with erosive and ulcerative lesions of the oral mucosa showed a decrease in fluorescence, which was revealed in the form of dark areas without visible luminescence. In foci of increased keratinization, an increase in fluorescence was noted in the form of a bright white glow.

Conclusion. The use of autofluorescence stomatoscopy for screening in dentistry makes it possible to detect differences in the glow of healthy and pathologically altered tissue, as well as improve visualization and objectively determine the area of the affected surface. In addition, the device of autofluorescence stomatoscopy can be considered an effective method for assessing the outcome of treatment and optional diagnostics of oral precancers in dynamics.