Drinking water is the main source of fluoride. This microelement is one of the key factors in the resistance of our tooth enamel to the development of caries, and it also affects the strength of bones. The normal amount of this element in the composition of water is 0.7-1.5 mg \ dm3., But in different regions of Ukraine water is differently saturated with fluorine, for example, in the Transcarpathian, Ivano-Frankivsk, Chernihiv, Lviv, Volyn, Rivne regions, fluorine is absent or its quantity is too low.

## Action algorithm:

In this case, the appearance of these symptoms most likely occurred due to the low fluorine content in water, which we can accurately determine after evaluating the results of laboratory tests of water.

## Assessment of the results of laboratory research of water:

Transparency-30 cm (normal); smell -1 point (normal); taste -1 point (norm); dry residue 900mg \ 1 (normal); hardness-7.0 mEq. \ dm3 (normal); chlorides -340 mg \ dm3 (normal); nitrates - 16mg \ dm3 (normal); fluorine - 0.1 mg \ dm3 (does not meet the standards, the norm is 0.7-1.5 mg \ dm3); if-titer-500 (norm); TMN (total microbial number) - 20 CFU / ml (normal).

In this study of water, fluoride levels were significantly reduced, which could lead to the development of caries in patients. The dentist should first of all recommend the patient to carry out additional fluoridation of water, as it is safe for health and helps to increase the level of fluoride in the body, as well as use hygiene products for the oral cavity containing fluoride.