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**Effect of magnesium containing drug on the indicator of oral liquid mineralization in patients with a high level of dental caries.**

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**Introduction.** It is known that magnesium activates more than one hundred enzymes, in particular - the alkaline phosphatase (AP). AP catalyzes the cleavage of orthophosphate from organic compounds, forming foundation of inorganic phosphate, which is required for mineralization.

**The purpose of research** was to define the influence of 5% solution of magnesium sulfate and mineral balm on the basis of Poltava's bischofite - "Elixir for oral cavity" on indicators activity of AP at patients in the prevention of dental caries.

**Materials and methods.** 57 patients from 19 to 30 years old were examined.

The Main Group (MG) - 31 patients with high level of caries intensity, the control group (CG) - 26 patients with low level of caries intensity.

After the initial biochemical studies of oral liquid (OL) for MG patients were administered within two weeks to use application of 5 % solution of magnesium sulfate for 10 minutes and rubbing to the hard tooth tissues 1 - 2 drops of mineral balm based on Poltava's Bischofite – «Elixir for oral cavity» by toothbrush for 3 minutes in the morning and evening. Biochemical studies of OL s were repeated after a prophylactic course and a month later.

**Results.** The results of the biochemical studies of OL found that examined patients from MG had reduced levels of AP to 2,3 times than in CG. At patients of OG right after the preventive course of treatment the AP level increase in 2,2 times compared with before treatment, and closer to that of CG. One month after treatment indicators of AP activity remained at a high level.

**Conclusions.** Combination of 5% solution of magnesium sulfate and mineral

balm - "Elixir for oral cavity" leads to normalization of alkaline phosphatase in patients with a high level of intensity of dental caries.