DEVELOPMENT OF A MEDICINAL PHYTOPARD PRESERVATIVE DENTAL POLYMER WITH A MODERATE COMPOSITION OF MOTHER OF PEARL (MATRICARIA, CHAMOMILLA) DRY EXTRACT

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https://doi.org/10.5281/zenodo.17318423

Relevance: An analysis of the literature on the chemical composition, medicinal properties and use of the chamomile plant in medicine, in particular in dentistry, was carried out. Studies show that flavonoids, chamazulene, apigenin, essential oils and other biologically active substances contained in chamomile extract have anti-inflammatory, antiseptic, analgesic and regenerating effects.

In dental practice, chamomile extract is widely used in the treatment of inflammation of the oral mucosa (gingivitis, stomatitis, periodontitis, etc.). Medicines prepared on the basis of this extract help maintain oral hygiene, reduce microbes, and restore the mucous membrane.

Based on the literature studied, it was determined that the creation of coatings that can be used in dentistry based on chamomile extract is of scientific and practical importance.

Objective. Taking into account the above, the aim of the study was to justify the moderate composition of a dental polymer medicinal phytopar containing chamomile dry extract obtained from a local chamomile plant.

Methods and styles. In our studies, initially, the concentration of chamomile dry extract was selected as 10% in the polymer mass based on scientific articles. At the next stage, a polymer that forms a moderate coating was selected to create a polymer medicinal coating. For this, model polymer masses were formed using various polymers. Na KMS, MS, collagen, PVP were used as polymers in the formation of the film. Of these, MS polymer was selected as moderate.

Initially, the effect of the concentration of glycerin added as a plasticizer on the properties of medicinal polymer films was studied. The following indicators were evaluated: appearance and ability to separate from the mold surface:

The analyses were carried out in accordance with the methods given in the State Pharmacopoeia of the Russian Federation, as well as the State Pharmacopoeia of the Republic of Uzbekistan and literature sources. At the next stage, the effect of the concentration of peach oil added to the mass of medicinal polymer film on the properties of the above-mentioned polymer films was also studied

Results. For the study, glycerin was added in concentrations of 1.0%, 1.5%, 2% and evaluated according to the above-mentioned indicators. The best result according to the above-mentioned indicators was recorded for the medicinal polymer film containing 2% glycerin. Since the desired viscosity was not achieved after the addition of glycerin as a plasticizer, the next step was to examine the effect of peach oil on the properties of the medicinal polymer film. For this, medicinal polymer films with peach oil added at concentrations of 0.5%, 1%, and 2% were prepared. When studying the properties of the obtained polymer films, it was found that the moderate concentration was 2%. At the remaining concentrations, brittleness of the film was noted. According to the experimental results, MS was selected at a concentration of 2% as the moderate polymer forming the film in the composition of the dental polymer film based on chamomile dry extract.

Conclusion. A number of polymers were studied to obtain dental polymer medicinal phytofilms containing chamomile dry extract: Na KMS, MS, collagen, PVP. According to the results of

evaluating the indicators of the obtained phytofilms, the moderate film-forming polymer-MS was selected.