

FEATURES OF TECHNOLOGY AND APPLICATION OF COLLAGEN SPONGIA HAEMOSTATICA

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Introduction. Today the range of hemostatic agents is wide enough. The hemostatic spongia is actively used as an effective local hemostatic agent.

Aim. Researching of the features of the technology and application of the hemostatic spongia.

Materials and methods. Scientific publications, own research, as well as methods of generalization, systematization of theoretical and practical materials were used.

Results and discussion. The hemostatic spongia is a topical hemostatic agent. It has a rapid hemostatic effect by stimulating platelet aggregation. The hemostatic spongia is also used to increase in fibrinolytic activity. Collagen hemostatic spongia includes various medicines that affect certain stages of hemostasis. Since bleeding and open wounds can be accompanied by infection, the use of a hemostatic spongia requires simultaneous antimicrobial treatment. The hemostatic spongia additionally contains up to 10% broad-spectrum antibiotics and up to 3% antiseptics.

The technology for preparing a hemostatic collagen spongia can be different.

For example, to 1 liter of 1 % collagen solution in ammonium carbonate containing 9.92 g of collagen, add 200 ml of water in which dissolve 0.08 g of feracryl. Stir until smooth (collagen: feracryl ratio is 99.2:0.8). After stirring, keep the mix at a temperature of 20-25 °C for 20-50 minutes and pour into cuvettes with a layer of 5-9 mm thick with further placement in a freeze-drying chamber. During additional drying, ammonium carbonate decomposes into volatile components and is completely removed with water vapor. The result is a porous collagen sponge with a minimum number of mineral impurities. A dry spongia is cut into plates of various standard sizes, packed in polymer materials, and sterilized by gamma radiation. The second variant of technology: to 1 liter of a 1% solution of collagen in ammonium carbonate containing 9.8 g of collagen, add 500 ml of water in which dissolve 0.2 g of feracryl (the ratio of collagen: feracryl is 98.0:2.0). Further, as in example 1.

Conclusions. Thus, the research of the general technology and the features of the use of the hemostatic spongia showed the rationality of studies on the development of new compositions of this dosage form.

DEAD SEA – A NATURAL PHARMACEUTICAL RESOURCE

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Introduction. In recent years there has been a return to the use of natural methods of treatment. With a surface of 430.5 metres and a deepness of 304 metres, Dead Sea is one of the most popular natural sources used in medicine. Due to its components Dead Sea is effective in such chronic diseases as psoriasis, asthma, arthritis. Dead Sea is also known as “sea of salt”, being one of the saltiest sea worldwide (34.2% salinity). The salinity of Dead Sea is formed by the presence of