Міністэрства аховы здароўя Рэспублікі Беларусь

ДЗЯРЖАЎНАЯ ЎСТАНОВА «РЭСПУБЛІКАНСКІ НАВУКОВА-ПРАКТЫЧНЫ ЦЭНТР ТРАНСФУЗІЯЛОГІІ І БІАТЭХНАЛОГІІ»

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First of all, what is "Alufer-Bel"?

Hemostatic preparation "Alufer-Bel" in addition to the main action has a pronounced bacteriostatic, bactericidal, antimycotic effect.

The bactericidal activity of "Alufer-Bel" is not inferior to a 0.5% chlorhexidine solution and a 5% alcoholic solution of iodine.

"Alufer-Bel" does not have side toxic effects.

During the interaction of the drug with blood, a blood clot is formed, which is tightly fixed to the wound surface. Ingredients entering the drug have an inhibitory effect on local tissue fibrinolysis, which contributes to the long-term preservation of a blood clot in the vessel, even in oral fluid conditions].

In addition," **Alufer-Bel**" accelerates the regeneration and epithelization of the wound surface, increases the rate of formation and maturation of granulation tissue, the activity of the fibroblastic reaction, which is caused both by the intrinsic immunobiological properties of the blood clot and the biological influence of the ingredients in the preparation.

The positive aspects include the ease of use of "Alufer-Bel", no need for additional hemostatic agents. In addition, the drug is non-toxic, devoid of allergenic, embryotoxic and teratogenic properties, has a high antimicrobial, anti-inflammatory and anti-edema effect, which distinguishes it from other hemostatic agents.

*** (Dosage form "Alufer-Bel" is characterized by a high level of bacteriostatic, bactericidal and antimycotic activity. The minimum inhibitory concentration in relation to cultures of streptococci, pseudomonads and enterobacteria isolated from patients with local inflammatory diseases is 0.98-3 , 91 mg / ml. The hemostatic agent "Alufer-Bel" is not inferior in terms of bactericidal activity manifestation of a 0.5% chlorhexidine solution and a 5.0% alcoholic solution of iodine in relation to typical cultures of staphylococcus, streptococcus, ischemic sticks, Pseudomonas aeruginosa and candid.)

"ALUFER-BEL" is an aqueous salt of ferric chloride and aluminum. Its hemostatic effect does not depend on the coagulation cascade (no effect on tissue and plasma clotting factors, the formation of a clot does not depend on the number and quality of platelets)

The average time for the formation of a dense clot ranges from 7-22 seconds. In addition, "ALUFER-BEL"® concentrates natural blood coagulation factors and, thus, contributes to the activation of the natural coagulation mechanism. However, it does not mix with blood and does not enter the blood vessels.

The function of "ALUFER-BEL"® is not affected by external factors such as body temperature (hypothermia or hyperthermia), and its effectiveness does not decrease when used in patients receiving heparin and aspirin. In the course of clinical studies and subsequent clinical experience, it was shown that even with the use of direct and indirect anti-coagulants "ALUFER-BEL"® continues to work.

The advantages of hemostatic "ALUFER-BEL"® can be attributed to the good adhesive ability of a clot formed upon contact with blood that is tightly fixed to the edges of the wound by isolating it from penetration of a secondary infection.

The clot in the wound maintains its consistency, tightly closing the vessels and does not disintegrate. When ingested, due to lack of toxicity does not cause poisoning and overdose, as evidenced by preclinical and clinical trials.

*** ("Alufer-Bel" does not show general toxic properties with a daily course (within 10 days) administration to rats in a daily therapeutic dose (0.07 ml / kg). Intragastral administration of the drug in an amount that takes into account the possibility of a cumulative effect does not cause deviations in the cellular composition and basic biochemical indices of the peripheral blood of animals, it is not accompanied by the development of irreversible changes in the internal organs.).

Answers to questions from surgeons

Rules for the use of "Alufer-Bel" for bleeding:

To stop bleeding, the method of hemostasis is as follows:

A napkin moistened well with "Alufer-Bel" is applied to the source of the bleeding surface and lightly pressed. The exposure time required to achieve complete hemostasis is **7-22** seconds and, if necessary, it can be increased to **30** seconds.

If the liver is damaged with a wound depth of up to 5-8 cm with mixed bleeding, it is necessary to use the high adhesive properties of "Alufer-Bel", hemostasis is performed by injecting the preparation with a syringe through a thin needle directly into the depth of the wound (irrigation of the wound surfaces) after which the wound edges are reduced and slightly pressed against each other for 5-20 s.

When stopping bleeding, "Alufer-Bel" does not mix with blood and does not enter the vessels due to its high adhesive properties (it forms albuminates by contact with blood plasma due to coagulation of the main blood protein, Albumin)

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The bactericidal activity of "Alufer-Bel" is not inferior to a 0.5% chlorhexidine solution and a 5% alcoholic solution of iodine.

The use of "Alufer-Bel" when stopping bleeding from deep and open wounds is aimed at effectively stopping blood loss and preventing infectious complications.

Formed the clot is not dangerous because it consists of the blood protein of the victim. The components that make up "Alufer-Bel" are not toxic. The tactics of treatment of deep wounds is determined by the surgeon on the basis of a comprehensive assessment of the wound (depth, nature of the edges of the wound, character of the equating agent — firearm, incised, stabbed, explosive, etc.).

When using "Alufer-Bel" on a healthy skin, a thin layer with a bactericidal effect is formed. You can use instead of 5% alcohol solution of iodine for preoperative treatment of the skin or in case of contamination of the skin around the wound (with earth, sand in a mine-explosive injury) along with the use of "Alufer-Bel" to stop bleeding, you can treat contaminated skin around the wound with a napkin soaked "Alufer-Bel" in the direction of "from the wound."

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