



Artificial blood

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Lack of known means for treatment of blood loss is that they are limited only to function of maintenance of a blood-groove.

At big blood losses transfuse blood, erythrocytes and plasma that constitutes danger of infection, including HIV, hepatitis, incompatibility reaction.

At the base of an etiopathogenesis of blood loss the following complex of factors combined among themselves takes place:

- weakening of gas transmission function of blood, namely oxygen transport from erythrocytes in fabrics and removal of CO₂ (hypoxia),
- weakening of a conclusion of erythrocytes from depot to the course of blood, a hematopoiesis, differentiation of stem cells in cellular elements of blood,
- easing of insulin supply,
- immunity easing,
- violation of a rheology of blood and blood circulation,
- violation of a carbohydrate, proteinaceous, lipidic, mineral exchange,
- thermal control violation,
- violation of a blood-groove in arteries of a brain and heart,
- dysfunction of a brain and heart,
- acidosis,
- pain syndrome,
- stress.

For treatment of blood loss the means for treatment of the blood loss ("Spaskrov") (the patent Russian Federation No. 2416413) possessing new unknown earlier medical quality capable in the express mode at a time is offered to carry out rehabilitation impact on all factors of an etiopathogenesis of blood loss:

- restoration and optimization of insulin security,
- activation of gas transmission function of blood - transfer of oxygen from erythrocytes in fabrics and a conclusion of CO₂,
- mobilization of erythrocytes from depot to the course of blood, activation of a hematopoiesis, differentiation of stem cells in

cellular elements of blood, immunity strengthening,

- adjustment of a carbohydrate, proteinaceous, mineral lipidic exchange,
- improvement of a rheology of blood and blood circulation,
- improvement of coronary and brain blood circulation,
- improvement of function of a brain and of a heart,
- elimination of acidosis,
- elimination of a pain syndrome,
- elimination of a stress.

Means for treatment of blood loss (blood substitute) is characterized qualitatively and quantitatively complex combined structure and doses allowing to carry out the set medical task in the express mode. Complex structure of means:

- Insulin of 14 pieces.
- Solution of glucose of 10% - 400 ml
- Solution of sodium of an adozintrifosfat of 1%-1.0 ml
- Solution of panangin of 10 ml
- Solution of a strofantin of acetate of 0,05% - 0,25 ml
- Solution of ascorbic acid of 10% - 2.0 ml
- Solution of inosine of 10 ml
- Solution of analginum of 25% - 1.0 ml
- Solution of a poliglyukin of 6% - 400 ml

In means the compatible connections allowed farmkomitety in the resolved doses are used.

Means is sterile, is entered intravenously. The volume and speed of introduction are determined by the general condition of the patient, level of arterial pressure, indicators of a hematocrit.

The offered means for blood loss treatment - blood substitute - doesn't demand freezing, it is convenient for use in emergency situations and field conditions.