

Anaphylactic shock infusion therapy

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Conflict of interest: none

ABSTRACT. Anaphylactic shock is anaphylaxis with signs of critical organ hypoperfusion that threatens the patient's life. For anaphylactic shock, the features of both distributive and hypovolemic shock are inherent. Distributive shock leads to the movement of fluid from the capillaries into the surrounding tissue, accompanied by inadequate perfusion of the tissues. The rapid recognition of anaphylaxis, the administration of epinephrine and the replacement of intravascular fluid are key factors in the successful outcome of the treatment of this potentially fatal event. The main principle that should be followed when carrying out infusion therapy of anaphylactic shock is the principle of small volume resuscitation (SVR), based primarily on the redistribution of endogenous fluid without the need for significant volumes of exogenous solutions. Hyperosmolar solutions used for SVR infusion therapy provide fluid return from the intercellular space to the vascular bed. The movement of fluid from the intercellular sector to the intravascular volume leads to an increase in the volume of circulating blood, contributes to the normalization of microcirculation and perfusion of tissues. SVR leads to an anti-shock effect due to a sharp increase in the intravascular volume of blood, and a decrease in edema improves microcirculation and perfusion of tissues and normalizes the water-electrolyte balance. Infusion therapy for anaphylactic shock is carried out by crystalloid solutions till hemodynamic stabilization. The choice of acceptable preparations for infusion varies among simple and balanced saline solutions, preparations based on polyhydric alcohols, taking into account the individual reaction of the patient to volume infusion.

KEY WORDS: anaphylaxis, shock, infusion.