



## THE USE OF HEMOSTATIC AGENT "HEMOBEN" DURING SURGICAL NECRECTOMY OPERATIONS

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### Abstract:

In modern surgical practice there is a need for systematization of data on the effectiveness of "Hemoben" application, determination of optimal indications for its use, development of standardized approaches to the use of the drug in various types of necrectomy. This determines the relevance and practical significance of research in this direction.

**Keywords:** hemostasis, burns, necroectomy, autodermaplasty, hemostatic agents, traumatic surgery

**INTRODUCTION.** The problem of effective intraoperative hemostasis during necrectomy remains one of the urgent tasks of modern surgery. It is particularly important for extensive necrectomy, when the area of the surgical field is significant and the risk of bleeding is significantly increased. According to modern research, intraoperative blood loss during necrectomy can reach significant volumes, which significantly affects the course of the postoperative period and the outcome of treatment in general.

The management of intraoperative bleeding during necrectomy procedures remains one of the most challenging aspects of modern surgery. Effective hemostasis during surgical debridement of necrotic tissues is crucial for successful treatment outcomes and postoperative recovery. According to recent studies, significant blood loss during necrectomy procedures can occur in up to 30-40% of cases, potentially leading to complications and prolonged hospital stays.

Local hemostatic agents have become increasingly important in surgical practice, offering various mechanisms of action and different levels of effectiveness. The development and implementation of new hemostatic agents continue to be an active area of research in surgical medicine. Among these, "Hemoben" represents a novel approach to achieving reliable local hemostasis during surgical procedures.

The relevance of studying "Hemoben's" effectiveness in necrectomy operations is determined by several factors. First, there is a persistent need for more effective methods of local hemostasis in surgical practice. Second, the growing number of complex surgical cases requires advanced hemostatic solutions.

Currently, the arsenal of local hemostasis is constantly expanding, due to the desire to minimize blood loss and

improve the results of surgical treatment. Of particular interest are modern local hemostatic agents, which have a complex effect and high efficiency. One of these drugs is the hemostatic agent Hemoben. The relevance of studying the effectiveness of Hemoben in necrectomy is due to several factors. Firstly, the need to improve the methods of local hemostasis in this type of surgery. Secondly, the need to expand the evidence base for the use of modern hemostatic agents. Thirdly, the importance of developing optimal algorithms for the use of local hemostatics in various clinical situations.

Hemoben is a modern hemostatic agent, the mechanism of action of which is based on the activation of its own blood clotting mechanisms and the formation of a stable thrombus in the field of application. The drug has a number of advantages, including rapid onset of action, ease of use, biocompatibility and the absence of significant side effects.

It is particularly important to study the effectiveness of Hemoben in various types of necrectomy, which will optimize the tactics of its use and improve the results of surgical treatment. It is also necessary to evaluate the effect of the drug on the course of the wound process and the healing time of the surgical wound.

**THE PURPOSE OF THE WORK.** Analysis of the effectiveness of the use of local hemostatic implant "Hemoben" in patients with severe burns.

**RESEARCH MATERIALS AND METHODS.** In this study, the results of the treatment of 35 patients with thermal burns (10 women and 25 men) who were treated in the combustiology Department of the Samarkand branch RNTSEMP during 2023-2024 were analyzed. The age of patients ranged from 15 to 55 years. Injuries were mainly caused by flames (23 cases), boiling water (9 cases) and contact burns (3



cases). While the total area of damage ranged from 5 to 20%, deep burns at IIIB-IV level accounted for 10%. Early necrectomy in all patients was performed in autodermoplasty up to healthy tissues, along with a case of capillary bleeding. Hemostasis was provided once a day for three days by using a 10 mg dose of hemostatic powder of the cellulose-based drug "Hemoben".

**RESEARCH RESULTS.** The clinical evaluation included the following criteria: the amount and nature of divorces, wound bleeding rate, donor site epithelization duration, transplanted autodermotransplantate epithelization completeness, and wound pain rate. In 35 deep burn patients, the surgical procedure involved the use of the drug "Hemoben" to stop bleeding after removal of necroticized skin and subcutaneous structures.

Our research showed that in the process of early surgical necrectomy and obtaining fragmented autotransplants from donor plots, 6 to 10 ml of blood loss was observed on an area of 100 cm<sup>2</sup>. After the application of "Hemoben" hemostatic powder, the bleeding had completely stopped and the wound surface had a shiny appearance, indicating the formation of an adhesive veil. Pain sensations were minimal. In the process of closing the wound defect with donor autologous flaps, good skin adhesion has been noted.

**DISCUSSION.** Based on the obtained data, the following conclusions were made. The use of "Hemoben" during autodermoplasty after early necrectomy provides complete hemostasis and reduces wound pain. A single local application of "Hemoben" during autodermoplasty after necrectomy promotes rapid graft adhesion, which leads to quick and complete engraftment of skin flaps.

**CONCLUSION.** Appropriate local hemostatic therapy during surgery helps prevent blood loss and improves treatment outcomes in this group of patients. From this perspective, the use of "Hemoben" as a local hemostatic agent is promising. The use of "Hemoben" allows performing early necrectomy with simultaneous or delayed autodermoplasty, which helps to modify the course of burn disease, accelerate the restoration of skin integrity, reduce the duration of hospital treatment, and decrease the number of infectious complications and mortality cases.

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