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## Debridement of severe wounds in children's practice

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**Background:** In connection with a growing number of road accidents, new extreme sports, the problem of open wounds has remained actual up to the present. A surgical infection, aggravating the course of wound process, increases the size of struck tissues and it's the ultimate obstacle to provide different types of reconstructive operations. The success in cure and prevention of wound contamination is in direct relationship to quality of debridement and the correct choice of treatment tactics.

**Materials and methods:** The present study is based on experience in treatment of 140 children with wounds (27,2%), open fractures of long bones (12,6%), traumatic amputations of extremities (6,4%), infected wounds (46,4%), pressure ulcers (7,4%), who underwent treatment in the Children's clinical and research institute of emergency surgery and trauma from 2015 to 2021 years. The age of patients ranged from one month to eighteen years old. The area of wound surface varied between 5 and 30 cm<sup>2</sup>.

The patient treatment was provided according to the principles of active surgical wound healing method, included:

1) radical debridement; 2) additional treatment of wound with different physical methods; 3) local wound treatment; 4) primary or early immobilization; 5) early plastic and reconstructive surgery.

**Results:** Debridement was carried out with the anatomical features of affected segment. Hydrosurgical system "Versajet" (54 patients), ultrasound cavitation of wound (70 patients), wound treatment with defocused ray of plasmic scalpel (35 patients), VAC- therapy (68 patients) were used during the surgery in order to facilitate the surgical treatment and improve results. Hydrosurgical wound treatment was carried out simultaneously with plasty in 24,3 %.

**Conclusion:** Combined use of traditional and up-to-date methods of wound treatment has allowed to bring the course of complicated wound process to not complicated one, reduced the number of repeated debridements and allowed to prepare wound surface for further plastic closure.

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