PP314 Negative pressure therapy as surgical management of the infection wounds after trauma in children

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Aim: To evaluate the results of negative pressure wound therapy in surgical treatment of wound complications following after trauma in children.

Method: We performed a retrospective review of 27 patients who treated with wounds in our hospital during 2011 - 2017. There were 21 boys (76%) and 6 girls (24%). 15 patients was infected by open fractures, 12 patients with inflammatory complications after surgery and ischemic necrosis. The wounds were treated by debridement and depend on size and type wound combined with an ultrasound dissector* and negative pressure wound therapy and then closing them. The wound therapy was combined with osteosyntesis of the fractures. Good results included the complete closure of the wound with consolidation of the fracture. Satisfactory result was considered a delayed consolidation of the fracture with complete healing of the wound, some limitation range of motient. Unsatisfactory result was considered non-fracture, non-healing of the wound. The observation period is 3 years.

Results / Discussion: Forearm's damage were -10 children (37%), shoulder 1 (4%), hands -1 (4%), hips - 2 (7%), femur – 4 (15%), tibia - 8 (29%), feet -1 (4%). As a result of treatment in 23 patients (85,2%) a good result was obtained, in 2 patients (7,4%) satisfactory, in 2 (7,4%) patients the result was unsatisfactory. They performed amputation, in view of damage to the vascular-neural bundle.

Conclusion: Timely and adequately executed primary debridement with ultrasonic cavitation and negative pressure wound therapy can prevent the spread of purulent infection.

*"Sonoka-180"