

# POSITIVE EFFECT OF HYALURONAN-IODINE COMPLEX IN EXTENSIVE WAR INJURY AFTER FAILURE OF VAC THERAPY - CASE REPORT

## INTRODUCTION

Treatment of traumatic wounds in war conditions is often complicated and standard treatment method sometimes fail. Vacuum assisted closure (VAC) therapy is a frequently used treatment method of extensive wounds. Even war injuries are treated with VAC after surgical debridement and lavage. The wounds are subsequently closed or grafted. However, VAC is sometimes ineffective and choice of other treatment is inevitable. Hyaluronan-iodine (HI) complex, method with potential to facilitate wound healing process, is successfully used for treatment of difficult to heal chronic wounds. Based on our findings HI finds its application also in healing acute or traumatic wounds.

## AIM

The aim of this case report is to demonstrate successful treatment of an extensive trauma war wound using hyaluronan-iodine complex (HI).

## CASE

18-year-old Afghan soldier, survivor of IED (Improvised Explosive Device) complex trauma of the left leg. After primary surgical treatment, negative pressure therapy was indicated. However, ten days after negative pressure was started, extensive bacterial colonization of the wound

was apparent under the foam. Therefore, the treatment strategy was changed. The wound was dressed daily with HI-soaked gauze.

After four days of this treatment, the wound was clean and granulated. Dermo-epidermal meshed skin grafts were applied and 95% was successfully healed in total. The patient's soft tissues healed completely and the patient was able to walk with crutches just 6 weeks after the initial injury.



Vacuum assisted closure - standard treatment



Application of hyaluronan iodine dressing

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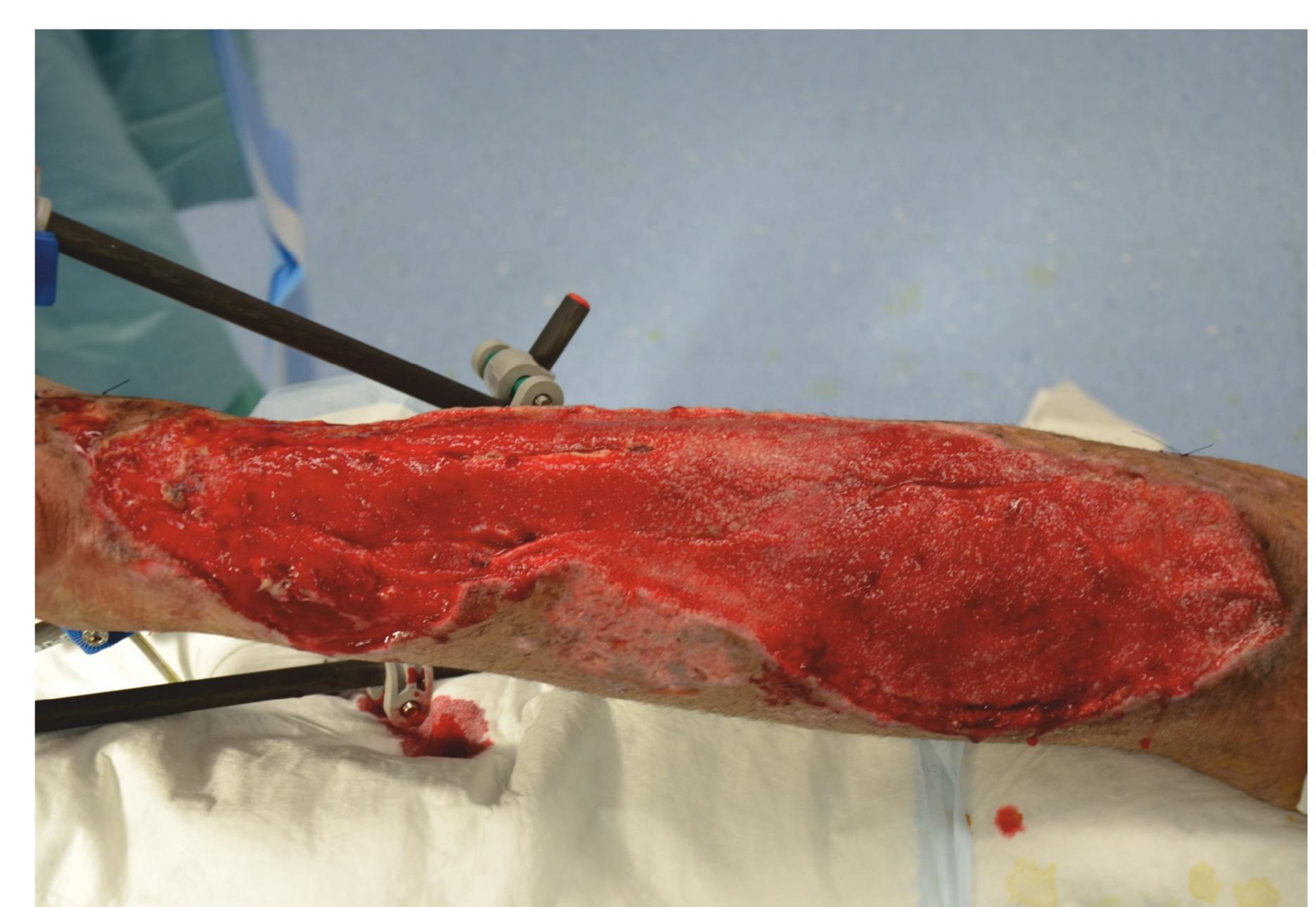
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## CONCLUSION

All war injuries with open soft tissue damage are at risk of infection. Negative pressure is the treatment of choice even in the field conditions. Failure of this treatment is always frustrating and causes difficulties. Hyaluronan-iodine soaked gauze was repeatedly used with very impressive and prompt results. Our group from the Field Hospital in Afghanistan regards its application as very easy with no special demands on the medical team.



Wound with signs of infection



Wound after application of meshed grafts, close to complete healing