Adtec SteriPlas Treatment of Surgical Site Infections

Non-thermal atmospheric gas plasma has already been shown to decrease the bacterial load in chronic wound dermatological applications. Recent results on treatment of surgical site infections show promising results.

Patient 1- a male patient, 66 years, developed nearly one year after implantation of a LVAD an infection of the pump pocket with Enterobacter cloacae complex and was then selected for plasma treatment.

Patient 2- , male 71 years with Coronary artery disease following CABG-operation BMI > 40, Diabetes. The patient developed secondary a seroma after sternal refixation. The swabs taken from the seroma showed Staph epidermidis.

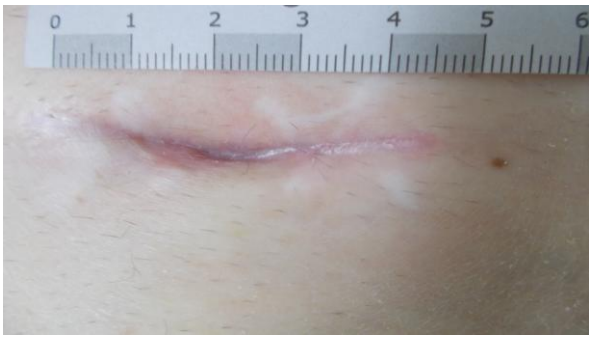
Study Outline

Patient 1 –Plasma treatment started in January 2016 and the patient was treated with 3 minutes plasma 3 times a week for 3 weeks. First wound closure: In combination with NPWT, Secondary with ActiMaris

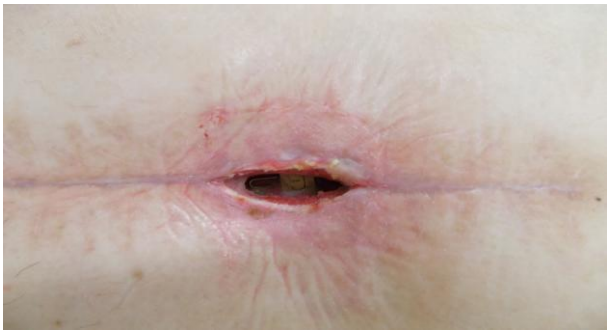
Patient 2 – Plasma treatment started in January 2016 and the patient was treated for 5 minutes 3 times a week. Treatment time 2 weeks in combination with NPWT in the small access area.

Results

Patient 1- Swabs were negative on plasma treatment and the wound showed good healing with complete closure of the wound after 3 weeks treatment.



Patient 2 – Patient showed good healing after treatment. Swabs were negative and wound closure was performed only with three sutures without opening the complete wound.



These tests were carried out by Dr Heinrich Rotering at the Universitätsklinik Münster, Germany and further research is planned on the use of plasma on surgical site infections.

Data presented ‚New options for infection control in wound management'
H. Rotering, EWMA Bremen 2016