ENZYMATIC BURN DEBRIDEMENT WITH NEXOBRID®: APPLICATION AND WOUND EVALUATION PRESENTING DIFFERENT PROBLEMS (144)

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Question: In 2012 NexoBrid®, a novel drug based on Bromelain, got the approval for enzymatic burn debridement after several advantages over standard of care treatment have been shown in clinical trials. Particularly reduction of debridging surgery and the need of autologous skin grafting could be shown while comparable results in long term outcome were determined. Increasing clinical use now reveals difficulties in application, follow up wound evaluation and treatment which should be demonstrated and discussed in this presentation.

Methods: NexoBrid is applied on deep burn wounds and remains in an occlusive dressing for four hours. After an additional two hours soaking period („wet to dry“) ideally a clean selectively debrided wound bed is existent. This allows an accurate burn depth evaluation and an adequate follow up treatment.

Results: From 2006 to 2010 under environment of the phase III study and since 2013 we treated more than 40 patients with NexoBrid. We always had to perform an adequate analgesia or anesthesia for proper pain management or for suitable immobilisation during the procedure. A consistent and permanent contact of the enzyme mixture to the wound surface was not always ensured, depending on the patients bedding and a sufficient occlusion of the dressing. Three patients had to be treated twice on the same target wound because of insufficient primary debridement. The subsequent evaluation of the debrided wound sometimes proves to be difficult. In one patient one day after NexoBrid we tried an early skin grafting, which was accompanied with extensive graft loss. Several wound infections occurred during the period of spontaneous healing. A combination with the VAC-therapy during and after NexoBrid and with Flaminal hydro / forte® seems to be promising.

Conclusion: NexoBrid is a non-surgical tool for selective and effective debridement of deep burn wounds. But the application needs a proper training and is subjected to a considerable learning curve like surgical procedures. The following wound treatment must primarily focus on prevention of desiccation and infection and prior to autologous transplantation a corresponding preconditioning of the wound bed is important.