

The Use of Silver Antimicrobial Dressings*: status post Mohs Surgery in the treatment of Basal Cell Skin Cancer

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ABSTRACT

Basal cell carcinoma is the most common type of cancer in humans. Commonly referred to as BCC or Rodent Cancer, BBC often affects adults of fair skin complexion who have sun exposure or repeated occurrence of sunburns. BBC may also be inherited, often a problem for those with Basal Cell Naevus Syndrome (Gorin's). BBC usually grows slowly over months or years and can vary in size from a few millimeters to several centimeters. Mohs Surgery is used as a treatment of BCC, however, it is high risk in areas of the face. Recurrent BCCs are ill-defined, morpheic, often best removed by a dermatological surgeon by Mohs Surgery. This procedure involves examining the excised tissue under a microscope until the tumor has been completely removed. Both the epidermis and the dermis are disrupted leaving an open wound. Silver antimicrobial dressings were utilized in this case study. Results demonstrated increased granulation tissue and epithelialization with no wound infection. Controlled-released polymers deliver antimicrobial ionic silver in a constant stream into the wound over a period of five to seven days. Ionic silver antimicrobial dressing has shown to be effective against a broad range of fungi, gram positive and gram negative bacteria including *S.aureas*, *P. aeruginosa*, *E. coli*, *C. albicans*, *A. niger*, MRSA, and VRE. One may conclude that wound progression was achieved in a timely manner with no wound infection.

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CASE STUDY:

Patient is a 67 year old female who was diagnosed with basal cell carcinoma. She presents status post Mohs surgery of the right temporal region, proximal to right eye on 10-27. She was evaluated at the Physical Therapy wound clinic 10-29. The wound measured 3.8 cm x 4 cm x 0.3 cm, the wound edges were intact and symmetrical. The wound bed consisted of adherent devitalized fatty tissue with mixed fibrous and granulation tissues. There was a small amount of serous exudate, and there was no odor present. Her past medical history is significant for smoking 1 ppd for 25 yrs. Her current medications are: Premarin, Zocor, multi-vitamin, and calcium.

METHOD

A multi-disciplinary approach was utilized in the care and treatment of the patient. Physical Therapy initial evaluation, the wound was irrigated with normal saline using a 35 cc syringe and a 19G catheter, sharp debridement was performed as needed with every dressing change. The wound was dressed with a silver microlattice dressing*, covered with a non-adherent foam and secured with hypoallergenic tape. After five days of this particular dressing, it was found to be too bulky and uncomfortable for patient. The treatment was changed to a silver antimicrobial semi-occlusive thin film** with an alginate to absorb exudate.

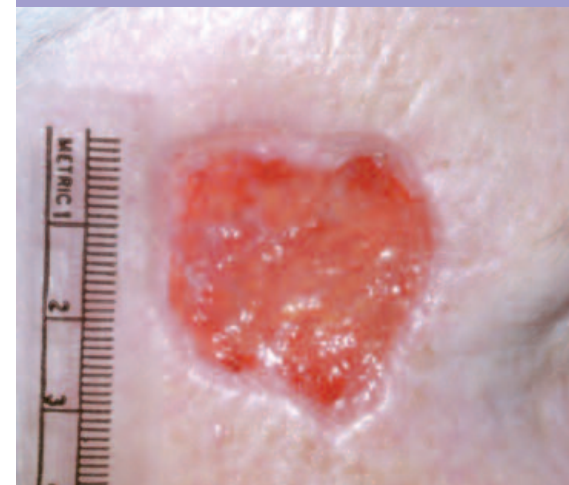
10-29 right temporal region, 3.8 x 4 x 0.3 cm



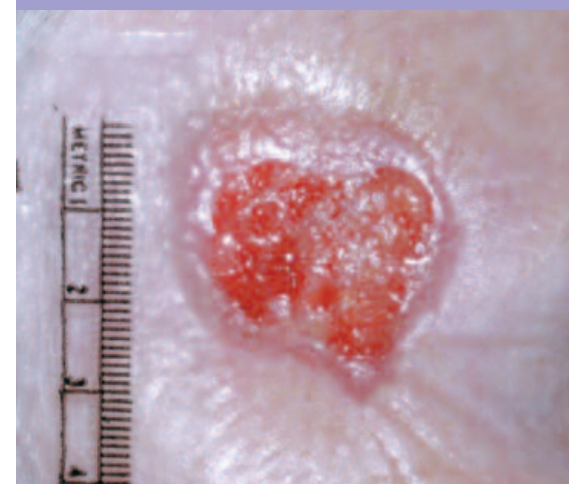
11-4 after 5 days of treatment



11-14



11-20



Wound closure, good cosmetic results



RESULTS AND CONCLUSION

This case study demonstrates that a full thickness surgical wound was able to progress through the phases of wound healing in a timely and progressive manner. Due to her age and PMH of extensive tobacco use, this patient was compromised for healing. With the use of silver antimicrobial dressings, this patient was able to avoid painful dressing changes, and obtain full wound closure with minimal scarring. The dressing provided an optimal moist wound healing environment by managing the exudate and reducing the bioburden.

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