

CALCIPHYLAXIS – A SUCCESSFUL OUTCOME IN WOUND MANAGEMENT USING PRONTOSAN® WOUND IRRIGATION SOLUTION AND GEL

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Introduction

Calciphylaxis, (also known as calcific uremic arteriolopathy) is a rare and potentially fatal condition often associated with end stage renal disease. The condition involves calcification of the small vessels which is characterised by tender subcutaneous nodules or cutaneous plaques which may proceed rapidly to epidermal necrosis. A high mortality rate (up to 80%) is often associated with the disease due to the risk of sepsis.

A 52 year old lady with a 2 year history of end stage renal disease and dialysis dependence presented with painful erythemic lesions and focal central necrosis to both legs, a biopsy was obtained and sent for pathology, which later confirmed a diagnosis of calciphylaxis, (Picture 1). The wounds were initially treated with inadine and surgipads in order to keep the areas dry, (Picture 2) as the necrosis spread, the pain became extreme and the patient required morphine based analgesia on a regular basis which provided minimal relief (Picture 3). The patient found it increasingly difficult to sit or stand still for any length of time without the pain becoming unbearable. Symptomatic signs of infection prompted admission to hospital for 5 days IV antibiotics. Over the next couple of weeks the wounds became increasingly malodorous and on closer inspection purulent exudate was observed (Picture 4). A decision was made at this point to begin debridement of the wounds due to concerns regarding infection and risk of associated sepsis.



Picture 1 - 24/01/2008



Picture 2 - 14/2/2008



Picture 3 - 04/03/2008



Picture 4 - 01/04/2008

Method

Prontosan® which contains a surfactant (0.1% Undecylenamidopropyl Betaine) and a preservative (0.1% Polyhexanide (PHMB)) was used to clean the legs. Swabs soaked in solution were placed on all areas for 15 minutes, sharp debridement of necrosis was performed as tolerated and Prontosan® Gel was applied to all necrotic areas. A non adhesive foam and tubifast were used to cover the legs, this was repeated during each dialysis session (3 times weekly). Close observation was kept on progress, as necrotic tissue lifted areas of slough and epithelialisation were revealed. The use of Prontosan® Gel continued to the sloughy areas. Maceration was noted to some of the surrounding skin, for which a barrier cream was used and emollients were used to hydrate the newly healed areas of skin.

Results

Within two weeks of using the Prontosan® products a significant reduction in necrotic tissue could be seen with large areas of epithelialisation evident (Picture 5), the purulent exudate had gone and the malodour had diminished. The associated wound pain had reduced dramatically and the patient was now only taking paracetamol. Four weeks later superficial sloughy areas were all that remained (Picture 6) and the patient was now able to take daily showers and manage her own wound care at home. The patient reported that no analgesia was needed from this point on (Picture 7).



Picture 5 - 16/04/2008



Picture 6 - 13/5/2008



Picture 7 - 10/6/2008

Conclusion

In conclusion it is felt that the use of Prontosan® Wound Irrigation Solution and Gel, helped to debride these wounds in a timely fashion by providing a moist wound healing environment whilst reducing the bacterial load and helping to prevent any further episodes of infection. The benefits in terms of increased quality of life for this patient cannot be underestimated and as a result of the successful wound management this lady has now started to swim again, is looking forward to a holiday abroad with friends and most importantly is now being considered for the renal transplant list.

References

- 1* Morrison J, Moffat CJ & Mosby P F (2007) Leg Ulcers: A Problem Solving Approach (Edited by Moya. Page IX)
- 2* Thomas JG, (2008) Association for the Advancement of Wound Care (AWWC) Advancing Your Practice: Understanding Wound Infection and the Role of Biofilms Article

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