lodophor foam dressing used to manage infected lower extremity ulcerations and abdominal wounds



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Introduction

- Lower extremity ulcerations (LEU) are prone to development of deep infections that often result in sepsis or loss of limb^{1,2}
- Up to 25% of diabetic foot ulcers (DFU) are infected with *Pseudomonas aeruginosa*³
- Iodophor foam dressing (IFD)* releases iodine which is evident by the color change from black to off-white/yellow during exudate absorption
- · IFD provides an anti-bacterial environment within the dressing

Objective

A retrospective case series to evaluate reduction in infections with IFD treatment in patients with LEU and abdominal wounds.

Methods

This case series consisted of four cases with osteomyelitis and/or pseudomonas infections:

- Case 1—presented with right leg LEU and copious amounts of pseudomonas drainage
- Case 2—presented with DFU, chronic infection, osteomyelitis, following ray amputation of the right fifth toe
- Case 3—presented with chronic non-healing DFU, osteomyelitis, following ray amputation of the right second toe
- Case 4—presented with an abdominal wound and multiple areas of pseudomonas drainage
- Cases 1 and 4 with pseudomonas received both IFD and antibiotic cream with dressing changes

Case 1

72-year old with venous ulceration medial aspect of the right lower extremity and pseudomonas infection with copious amounts of green drainage as shown pretreatment prior to IFD and 0.1% gentamicin treatment. Four days following treatment, the green drainage and odor had decreased significantly (image not shown). At day 20 the wound showed neo granulation following IFD and antibiotic treatment. At day 22 there were no signs of pseudomonas infection.





Day 20 following IFD

Pre-treatment



Day 22 (with IFD)

Day 22 (IFD removed)

Case 2

Clinical osteomyelitis and maceration post-ray amputation with non-dehisced incision line and skin breakdown. At day 3, following IFD maceration, drainage and swelling were reduced.



Post-amputation prior to IFD



Case 3

59-year old patient with confirmed osteomyelitis underwent ray amputation of the right second toe (see day 3). At day 17 induration and maceration was observed prior to the application of IFD. Day 19 postamputation and day 2 following IFD application the induration had subsided.





Day 3 post-amputation



Day 17 application of IFD

Day 17 post-amputation



Day 19 post-amputation (day 2 IFD)

Case 4

Pre-treatment showing abdominal wound with pseudomonas drainage prior to IFD + antibiotic treatment. At day 2, following treatment, there was a significant decrease in exudate drainage at the sites marked by the labels.



Pre-treatment with gauze



Day 2 following IFD



Pre-treatment without gauze

Results

- Case 1—had decreased pseudomonas drainage at day 4 with no signs of infection at 3 weeks
- Case 2—had reduced maceration, drainage, and swelling at 3 days following ray amputation
- Case 3—had subsiding induration and reduced infection at 2 days
- Case 4—showed reduced dryness and a decrease in pseudomonas drainage at 2 days post-IFD application

Conclusion

We conclude that an IFD can provide an optimal wound healing environment in patients with LEU and abdominal wounds. Within 2-4 days following application of IFD, we observed reduced drainage following amputation presumed from lack of Pseudomonas.

References

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