Incision and Drainage (I & D) Treatment of Abscesses in an Emergency Department: Clinical Evaluation of a 100% Sodium Carboxymethylcellulose (NaCMC) Ribbon Dressing with Ionic Silver and Strengthening Fiber* as a Primary Dressing
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Discussion
Skin and soft-tissue infections (SSTI) are common in patients presenting for treatment in emergency departments (ED). Incision and drainage (I & D) is the primary treatment for cutaneous abscesses where cellulitis is not present. Abscess I & D can be accomplished as an outpatient procedure with the use of packing material and clinical follow-up. The use of a 100% NaCMC dressing with ionic silver has been shown to eradicate a broad spectrum of skin and wound pathogens in dressings including Staphylococcus aureus, methicillin resistant Staphylococcus aureus (MRSA), and vancomycin resistant Enterococcus (VRE), all of which are prevalent in many SSTI.

Objectives
The primary goal of this evaluation was to assess the ease of use of this ribbon as packing material for abscesses presenting in the ED being treated by I & D. Additional assessment points included frequency of dressing changes and pain at dressing changes.

Method
Eligible patients presented to the ED with a cutaneous abscess on either the buttocks or extremities and were treated through I & D, with or without antibiotics. Patients were excluded if cellulitis was present or the abscess was not treated through I & D.

The incision of the abscess was made sufficient to allow drainage of effluent and packing of the wound with the ribbon dressing. A secondary dressing of clinicians’ choice was used to cover the packed wound. Patients received instruction for follow-up care upon discharge.

Results
The NACMC ribbon with ionic silver was beneficial in reducing the number of dressing changes and decreasing return visit frequency, both direct results of the dressing’s characteristics and once weekly dressing change requirements. Clinicians found the dressing easy to use and that the dressing remained intact during removal. Patients reported that the dressing was comfortable while in place and experienced minimal pain during dressing changes.

Case 1

Day 1: Male patient presented to ED with abscess on medial aspect of R lower extremity at knee level
Day 1: After I & D the wound was packed with a NaCMC ribbon dressing with ionic silver and strengthening fiber. Patient did not return to clinic
Case 2

Day 1: Female patient presented to ED with abscess on right shoulder

Day 1: After I & D the wound was packed with a NaCMC ribbon dressing with ionic silver and strengthening fiber

Day 5: Wound appearance after the removal of the dressing and cleansing. The wound was repacked with the ribbon dressing

Case 3

Day 1: Male patient presented with left gluteal abscess previously incised at another facility

Day 1: After I & D the wound was irrigated and then packed with NaCMC ribbon with ionic silver and strengthening fiber. The lateral incision required 4 ribbons and the medial incision required 3 ribbons for adequate packing

Day 2: The ribbon dressings were removed intact. The patient returned to clinic every other day for dressing changes

Day 2: After the wound was cleansed it was repacked with the ribbon dressing

Day 4: Ribbon dressing removed intact

Day 4: Ribbon dressing packed into wound

Day 8: Ribbon dressing removed intact

Day 8: After wound cleansing the wound was repacked with the ribbon dressings. Packing was no longer needed at Day 11-13

Product Notations:
*AQUACEL® Ag Ribbon Dressing with Strengthening Fiber

References:

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