

AN ENZYME ALGINOGEL® IN THE MANAGEMENT OF A SURGICAL WOUND AFTER A RESECTION FOR SIGMOID STENOSIS

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Introduction

Stenosis of the colon can occur as a result of chronic diverticulitis in the left-sided colon. Diverticulosis occurs primarily in the sigmoid colon, corresponding to the highest intraluminal pressure. The chronic inflammation can cause fibrosis-obstruction of the colonic lumen and change of bowel habit with increasing constipation and lower abdominal pain.

This poster describes the management of Eva (pseudonym), a 53 year old professional photographer with a 6 year history of diverticulitis who was discharged home with a lower abdominal wound following a sigmoid resection for stenosis in the sigmoid caused by diverticulitis.

Method

She presented with a painful, heavily exuding lower abdominal wound measuring approximately 7cms x 5cms containing 50% slough and 50% granulation tissue. Eva's wound had received suboptimal care in the hospital in the form of wet gauze, necessitating as a minimum, daily dressings which increased Eva's pain and anxiety levels.

The aims of treatment were to control Eva's pain, autolytically debride the sloughy tissue thus reducing the wound bioburden, control the exudate and ultimately to heal the wound enabling Eva to return to everyday living and work as soon as possible. The wound was cleansed with a wound irrigation solution and dressed with Flaminol®, an enzyme alginogel® (Flen Health) containing two antimicrobial enzymes (glucose oxidase and lactoperoxidase). Flaminol® Forte, with a higher proportion of alginate and is therefore more absorbent, was selected due to the high exudate levels. This was covered with a bordered foam dressing.

Results

Eva tolerated the dressing regimen well and there was a clear improvement with the dressing regimen within seven days with her abdominal wound debrided and a marked reduction in exudate. The introduction of an Flaminol® combined with a foam secondary dressing, reduced pain and trauma, controlled the exudate, debrided the wound and reduced the bioburden. This in turn permitted time between dressing change to be extended to twice weekly. The wound had healed by the middle of week four.

Discussion

Diverticulitis is an uncommon disease in patients younger than 45 years¹, with the incidence rising with age; 50% of patients who present with diverticulitis are over the age of 50 years². The presence of colonic diverticula (mucosal herniation through the intestinal muscle wall) is inversely correlated to the intake of dietary fibre coupled with other possible factors namely physical inactivity, obesity and use of NSAID. Diverticulosis is most common in Western countries. Diverticulitis is more common in the sigmoid colon than in any other tracts of the large bowel.

Devitalised tissue is a barrier to healing with slough acting as a reservoir for microorganisms and biofilm formation³ which impedes healing. Flaminol®, with its alginate polymers and enzymes, has a proven broad-spectrum antibacterial activity⁴ with the ability to inhibit biofilm formation⁵, thereby helping to control bioburden whilst absorbing exudate. It has the capability of absorbing excess exudate whilst remaining in a gelled state, it promotes debridement and controls wound bioburden as well as reducing pain at dressing change.

Conclusion

This case study demonstrates the effectiveness of Flaminol® in assisting autolytic debridement coupled with control of exudate and the promotion of healing in an abdominal surgical wound.

Day 1



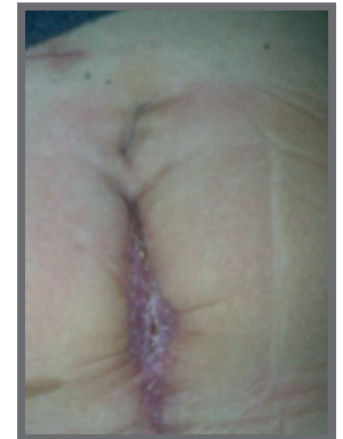
Day 6



Day 17



Day 24



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