

Postoperative wound after rectal surgery

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Background

Rectal cancer accounts for more than 50 % of colorectal cancer cases in the Western countries. This type of cancer is characterized by high morbidity and considerable mortality. Conventional treatment of rectal carcinoma includes preoperative radiation therapy and abdominoperineal excision of the rectum. However, post-operative complications such as wound dehiscence and delayed wound healing can frequently be seen. Possible risk factors for complications are old age of the patient, diabetes, obesity, smoking or radiation therapy.

Findings on admission and therapy

The 81-year-old male patient was admitted at our hospital with rectal carcinoma. His diagnosis based on the results of magnetic resonance imaging (MRI). Tumour size of 5 cm was determined without any metastases or lymph node involvements present. Pre-operative radiation of 30 Gy over six weeks was initiated. Laparoscopic rectal surgery was performed within a few days after completion of radiotherapy. The rectum was excised with permanent colostomy.

Wound treatment

Eight days post surgery, the wound showed first signs of infection. The wound cavity was rinsed three times per day with a polyhexanide containing irrigation solution and additionally a polyhexanide containing hydrogel was applied (Prontosan® and Prontosan® Wound Gel, B. Braun Melsungen AG, Germany). Four days later, a necrotomy was performed as part of our usual extended wound care procedure. By then, the wound was dehisced and showed signs of infection and reddened wound margins.

On the following day, antimicrobial treatment with Cutimed® Sorbact® swabs was initiated. The wound

measured 6 cm in depth and 15 cm in length. In the initial phase of the treatment Cutimed® Sorbact® was changed daily, while the secondary absorbent dressing (Cutisorb® by BSN medical) had to be changed three times per day due to the high exudation present.

After two days of treatment, the wound status had markedly improved. A reduction of infection signs and exudation was observed while the wound margins were still slightly reddened. One week later, incipient granulation and epithelialisation were visible. Infection signs and the redness of wound margins were considerably reduced. After three months of the treatment regimen with Cutimed® Sorbact® a significant reduction of the wound size was evident; the wound measured 1 cm in depth and 3 cm in length. Complete wound closure was achieved 113 days after rectal surgery.

Summary

In the present case report, Cutimed® Sorbact® proved to be an effective and convenient therapy for an infected post-operative wound after rectal excision. An antimicrobial effect was visible after only two days of treatment, and the wound status improved towards granulation after nine days. During treatment, Cutimed® Sorbact® reduced wound odour and the exudate level. The condition of the periwound area improved. In addition, a marked decrease in wound pain was observed which may be related to a decrease in the bacterial load and inflammation.

These findings are in accordance with published clinical and in-vitro results.¹⁻³ As the dressing does not contain or release any active antimicrobial compounds there was no risk of interaction with concomitant medication or therapy of the cancer patient.



Day 1

Eight days after surgery the wound shows first signs of infection. Wound margins and periwound skin are reddened. Start of wound therapy with Prontosan® and Prontosan® Wound Gel.



Day 5

After necrotomy the wound is dehisced and still shows infection signs and reddened wound margins with increased exudation.



Day 6

Antimicrobial therapy with Cutimed® Sorbact® swabs is initiated. Daily dressing change of Cutimed® Sorbact® and change of the secondary absorbent dressing three times per day.



Day 8

The wound status has improved and a decrease of infection signs can be observed. Wound margins are still slightly reddened and exudation is low. Continued wound therapy with Cutimed® Sorbact®.



Day 15

The wound status has further improved. Infection signs and redness of wound margins are markedly reduced, and initial granulation and epithelialisation are visible.



Day 106

Three months after treatment start with Cutimed® Sorbact® the wound is clean and has almost closed.



Day 113

Complete wound closure has been achieved.

Authors

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