

# MANAGEMENT OF POSTOPERATIVE WOUND COMPLICATIONS OF COLORECTAL CÂNCER RESECTION: LITERATURE REVIEW



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## INTRODUCTION

Colorectal Cancer (CRC) is a malignant tumor that affects the large intestine and rectum. According to INCA (2025), 704,000 new cases of cancer are expected in Brazil for each year of the 2023-2025 triennium. The choice of therapeutic strategies for CRC can involve conservative or surgical approaches, which may be applied alone or in combination, depending on the type and stage of the cancer. **Surgical treatment is the most effective and potentially curative first-choice approach.** However, surgical techniques carry risks of complications and mortality. Among surgical complications, a failure in the normal healing process can lead to negative outcomes, also referred to as Complicated Surgical Wounds. These complications are classified according to the consensus of the World Union of Wound Healing Societies as seroma, hematoma, skin ischemia, necrosis, dehiscence, evisceration, fistulization, and poor or abnormal healing. Epidemiological studies on complicated surgical wounds report an incidence rate of 3.2% in cancer hospitals. Surgical site infection (SSI) is the most frequent complication among surgical wound complications (SWC). A study on postoperative morbidity and mortality reports that 30% to 40% of deaths are due to this type of infection. Another commonly found SWC is dehiscence, which prolongs treatment and hospital stay.

## JUSTIFICATION

CRC is one of the most prevalent neoplasms in Brazil and worldwide. Surgical resection is one of the curative treatment pillars and may present postoperative complications. The nursing professional has autonomy in various aspects of care related to complicated surgical wounds. This topic is highly relevant as it contributes to professional training by addressing, with scientific basis, the complications and management of this surgical procedure.

## OBJECTIVE

To identify the existing nursing interventions in scientific literature for the management of surgical wound complications in the postoperative period of colorectal cancer resection.

## METHOD

This study consists of a systematic literature review, with an electronic search for publications in the databases PubMed, LILACS, Web of Science, CINAHL, Cochrane, and Scopus, in addition to free searches in Scielo, Revista Estima, and Google Scholar.

## CONCLUSION

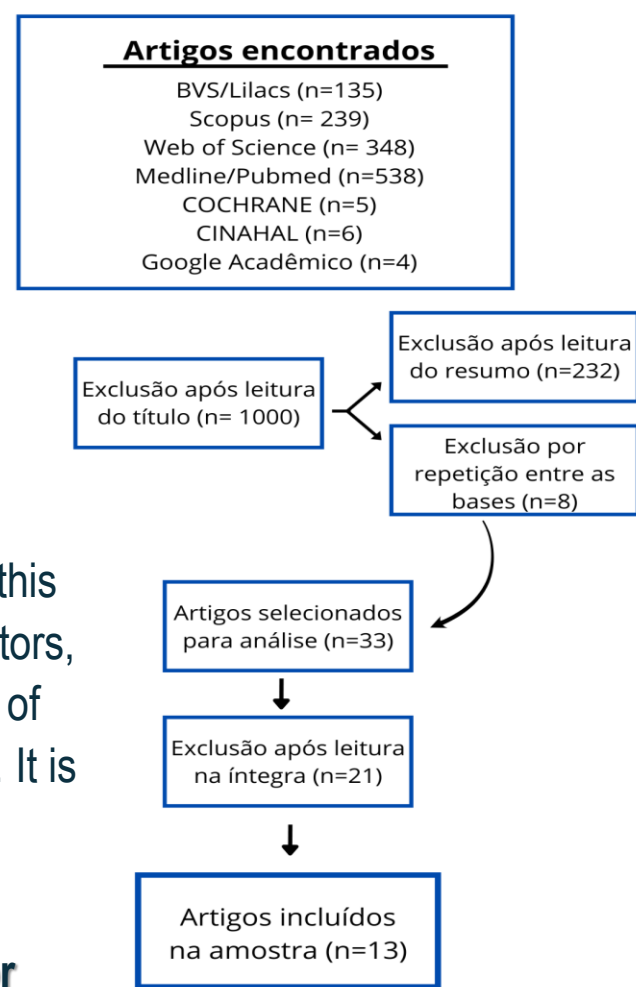
Silver-impregnated dressings and Negative Pressure Therapy (NPT) show promise in managing postoperative complications after When it comes to managing postoperative wound complications following colorectal tumor resection, the use of silver-impregnated dressings as a primary prophylactic covering has been shown to reduce infection rates; however, the literature still lacks strong evidence. Regarding wound dehiscence, the use of Negative Pressure Therapy (NPT) is indicated, but it also requires further research. The importance of preventing surgical site infection through knowledge of risk factors was evident. Nevertheless, there is a noticeable scarcity of publications focused on the role of nursing in managing complications associated with complex surgical wounds, particularly in cases of colorectal cancer resection. The management of these wounds may still rely solely on the individual experiences of healthcare professionals due to the lack of scientific evidence. This work highlights the need for more studies and publications by the nursing field to deepen our understanding of clinical practice and improve the quality of care provided

## RESULTS

Of the articles analyzed, only three addressed the management of colorectal surgical complications: one on silver-impregnated dressings, one on Negative Pressure Therapy (NPT) as treatment, and one on NPT as a preventive measure. Only one study discussed surgical wound dehiscence.

Eight articles were selected for their focus on surgical site infections, due to the relevance of this complication. These studies highlighted risk factors, prognosis, the infection itself, and the influence of surgical technique and site on the complication. It is worth noting that two of the articles focused on perineal surgical approaches.

**Within this theme, when using the descriptor "nursing care," the number of relevant articles significantly decreased, reaching zero.**



## DISCUSSION

Few articles address the management of SSIs after they occur, focusing mainly on systemic antibiotic therapy. In contrast, there is a large volume of studies focusing on the prevention of surgical wound infections. The articles identified risk factors such as obesity, sedentary lifestyle, poor diet (high in red meat, fats, and carbohydrates, and low in fiber), as well as alcoholism, smoking, hyperinsulinemia, and gastrointestinal inflammation. Other factors included prolonged surgical time, potential wound contamination, use of immunosuppressants, extreme ages, and the surgical team's technical skill. Higher risks of complications and mortality are associated with emergency procedures compared to elective ones, and with open surgeries compared to laparoscopic procedures. During our research, it became evident that most studies emphasize preventive measures to reduce surgical wound complications after colorectal cancer resection rather than investigating therapeutic approaches and decision-making in the event of such complications.