Management of a Dehiscence Laparoscopic Wound using Flaminal® following Lower Lobectomy Secondary to Adenocarcinoma

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Introduction

Adenocarcinoma is the most common type of non-small cell lung cancer (NSCLC). It develops from cells that make mucus. It is more often found in the outer area of the lung. Although the main cause is still smoking, this type of NSCLC is more common in non-smokers[1].

Treatment options are dependent on several factors including, the type of lung cancer, size and position, the cancer stage and the individual's overall health state. The most common treatments include surgery, chemotherapy, radiotherapy and immunotherapy, a combination of these treatments may also be considered. If the cancer is located in only one part of the lung, a lobectomy which involves the removal of one lobe, is the recommended surgery option and may be performed using the laparoscopic method. This involves a small surgical incision and the insertion of a long tube with attached camera, allowing surgery to be performed whilst monitoring the progress on a screen[3].

Method

This case study focusses on a 58-year-old female who has a past medical history of Lymphoedema, obesity and Non-Hodgkins Lymphoma. She had a recent diagnosis of Adenocarcinoma of the right lower lung, requiring a pneumonectomy. The patient underwent laparoscopic surgery for a lower lobectomy which resulted in a dehisced wound at the stage of suture removal. The wound presented with the dimensions of 2.5cm length x 2cm width x 2.5cm depth and 95% devitalised slough and 5% granulation tissue was noted at the wound bed. There was evidence of undermining with moderate volumes of exudate and no obvious signs of infection.

18th Feb 24

25th Feb 24

3rd Mar 24

The Tissue Viability Nurse Consultant's aims were to select a primary dressing that would facilitate the debridement process, reduce the risk of infection, manage exudate appropriately, reduce pain and offer versatility to enable wound bed coverage including the hard to access undermining areas. A hydrofibre primary dressing had initially been applied, but the patient had experienced pain during dressing changes, scoring 9/10 on the pain score scale, which led to raised anxiety.

Flaminal® Forte was chosen as a primary dressing and was introduced with a foam adhesive secondary dressing. Dressing changes were initiated on alternate days and the frequency was reduced after one week of Flaminal® Forte treatment to every 3-4 days. Flaminal® Forte was selected for its antimicrobial properties and its ability to support the autolytic debridement process. It contains a higher level of alginate than its counterpart Flaminal® Hydro, expediting the management of moderate to high levels of exudate, and creating an optimum moist environment to facilitate the intended debridement process in this case study. Flaminal® Forte is also acknowledged for its atraumatic dressing changes.

Result

The wound management regime continued for a period of two weeks and was then discontinued as wound closure was almost complete with epithelised tissue evident. The Tissue Viability Nurse Consultant concluded that Flaminal® Forte successfully delivered on all aspects of the wound management objectives and that its introduction had facilitated a shared care approach to care delivery, with its simplistic application process and ability to reach all areas of the wound bed, including the undermining regions. The patient emphasised that Flaminal® Forte had supported pain free dressing changes and that this had had a positive impact on her mental state and quality of life.

Discussion

In 2018, a total of 47,838 people in the United Kingdom had lung cancer diagnoses with 35,137 deaths recorded. Lung cancer continues to be the most common cause of U.K. cancer death, accounting for 21% of all cancer deaths. There is significant mortality discrepancy by sex: female rates decreased by 5%, whereas male rates decreased by 22%. Early detection is the most promising way to substantially reduce lung cancer mortality and in recent years, a key U.K. ambition has been faster diagnosis and standardization of lung cancer care[2].

Conclusion

Post operative wound healing is pivotal to a patient's recovery and mental well-being, especially in patients undergoing surgery for cancer. Wound dehiscence impacts on mortality and morbidity and despite many studies investigating the risk factors and efforts to control them, patients continue to experience this issue[4].

This case study illustrates the importance of appropriate wound assessment and management and demonstrates the effectiveness of Flaminal® Forte in delivering the expected wound management aims that were defined by the Tissue Viability Consultant Nurse.

References

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