

Evaluation of Polymem for Radiotherapy Induced Skin Reactions

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Introduction

In England, over 275,000 people per year are diagnosed with cancer and more than half of these should receive radiotherapy as part of their treatment.¹ One of the most common side effects arising from radiotherapy is a skin reaction ranging from mild (dull erythema and tightening of the skin) to severe (moist desquamation with open wounds and oedema). An RTOG Acute Radiation Morbidity Scoring Criteria is commonly used to classify the skin reaction ranging from 0 – 4. Whilst it is unlikely that most skin reactions can be prevented, the aim should be try to prevent skin reactions, or where they do occur, to minimise the symptoms. Although wound care dressings have evolved over recent years, many UK radiotherapy departments are using a variety of products from guidelines published in 2011. This study has highlighted concerns over products that are potentially contraindicated for use with radiotherapy.² Bart's Health NHS Trust radiotherapy department sees approximately 1000 patients per year for radiotherapy treatment. A current skin care protocol is in place which consists of Aquaform hydrogel, covered with a non-adhesive dressing and secured with bandaging. Post treatment, flamazine is applied. In clinicians' experience, most patients with RTOG of 2 – 2.5 will progress onto RTOG 3. With a current average healing time of 4 – 6 weeks, a clinical evaluation of PolyMem was undertaken to determine its efficacy and potential to improve patients' quality of life during radiotherapy treatment.

Method

Full consent was obtained and any patient was able to withdraw at any time during the study. A bespoke evaluation form was used to capture detailed information on the patient's age, gender, radiotherapy dosage, nutritional status, cancer type and location, RTOG rating, wound pain score and pain at dressing change. Patients were provided with a diary to keep a daily record of their wound pain score using the Wong and Baker Face scale, type and level of analgesia taken and sleep patterns. A free text diary for the patient to record further in depth information was provided. The evaluation consisted of baseline details and continued for a maximum of 4 weeks. Each week, the RTOG rating, wound size, location and description, pain score of wound, pain associated with dressing change and dressing wear time was completed by the clinician and patient.

Results

A total of 25 evaluations were complete consisting of 8 patients with a mean age of 63.6 years. The location of the cancer was recorded; 4 head and neck, 2 vulva, 1 breast and 1 anal. All patients presented with an RTOG rating of 2 or above. The onset of skin reaction from the start of radiotherapy treatment varied from 21 days into treatment to post treatment. By week one, 2 patients discontinued PolyMem due to difficulty in fixating the dressing; 1 patient had partial healing and continued standard treatment for RTOG1; 1 patient achieved healed (RTOG of 2) and 1 patient could not continue with the trial due to travel difficulties. The remaining three patients continued to week 4 with two patients achieving healing and one patient documented significant skin improvement. Patients free text diary comments included **"good pain relief", "soothing and comfortable", "I have no problem endorsing this product given that it is essential", "a product truly fit for purpose"**. Clinicians were impressed by the healing rates compared to standard treatment.

Discussion

This study into the treatment of radiotherapy induced skin reactions demonstrates the successful symptom management in regards to pain, exudate control and patient comfort. Training on securing techniques has been shown to be of importance for certain anatomical locations.

Results Continued.....



Fig. 1 Chemorad Vulva



Fig. 2 Chemorad Vulva 7 Days Post Radiotherapy



Fig. 3 Chemorad Vulva 5 Weeks Post Radiotherapy



Fig. 4 Chemorad Vulva 5 Weeks Post Radiotherapy

All images presented with kind permission of Karen Morgan, Macmillan Specialist Radiographer, The Beacon Centre, Radiotherapy Dept, Musgrove Park Hospital, Taunton.

Conclusion

Whilst the evaluation of PolyMem was conducted on a small number of patients, the anatomical areas, severity of skin reaction and patients experience demonstrate that PolyMem has provided additional benefits over the standard dressing practice within Bart's Health NHS Trust radiotherapy department. Following this evaluation, a further 13 patients have been given PolyMem dressings in order to collate data on sustained efficacy in a variety of patients undergoing radiotherapy with various wound locations.

References

1. Delaney G et al: The role of radiotherapy in cancer treatment. Cancer 2005
2. Harris R et al: Radiotherapy skin care: A survey of practice in the UK. Radiography 2011