Introduction

Surgery, chemotherapy and radiotherapy are major cancer treatment modalities. It is estimated that approx 87% of patients will get a moderate to severe skin reaction (RT0G 2 and above), this is with around 10-15% of patients developing more desquamation.1 Concordant chemoradiotherapy regimens can increase the risk of a skin reaction.2

Severe skin reactions can be extremely painful, significantly decrease quality of life, and have the potential to be dose-limiting.3 It is essential that appropriate management interventions are used.4 There is a lack of data evaluating prophylactic skincare and treatment of radiotherapy skin reactions on which to base our practice.5 Patient pathways involve clinicians outside of radiotherapy as severity of skin reactions may increase for 7-10 days after radiotherapy has finished, yet knowledge of skin reactions among non-radiotherapy health professionals is low.

Aims

- To improve awareness about radiotherapy-induced skin reactions and appropriate interventions among staff outside of Radiotherapy departments.
- To ensure treatment recommendations remain current we clinically review use of polymeric membrane dressings.

Method

- Present background information and treatment guidelines aimed at non-radiotherapy staff
- Clinical audit of polymeric membrane dressing use in our review clinic February-April 2011
- Case study presentations of 3 head and neck cancer patients

Results

Clinical Audit Summary:

- Polymeric membrane dressings used in 17 patients between February and April 2011: 13 with treatment to head and neck area, 4 to the pelvic area. Roll flat dressing cut to size and shape for genital / groin areas, worn inside underwear to promote comfort and reduce skin to skin friction, or the same format dressing was made into a collar dressing for use around the neck area. (Fig 3).

- In 5 patients, polymeric membrane dressings applied from RT0G stage 2 (dry desquamation), when application of aqueous cream no longer providing sufficient relief from symptoms. In 3/5 patients, dressing applied slightly moistened with saline as no moisture produced from the area of damaged skin. In one patient, the treatment area was in anal cleft and it was naturally moist, therefore no additional moistening required. Patients felt it was comfortable and provided a cooling, soothing effect and the area remained clean.

- In 11 patients, polymeric membrane dressings applied from RT0G 2.5 (patchy moist desquamation).

- In one patient polymeric membrane dressings applied from RT0G 3 (confluent moist desquamation).

- Overall observations: All 17 patients reported a soothing effect / increased comfort in area being treated, and the areas covered remained clean. Patients who managed their own dressing changes at home found it easy to do. In general, the dressings handled the moisture levels well.

Discussion

- Acknowledging the lack of randomised controlled trials within this field, what we do for patients is frequently based upon observation, clinical experience and most importantly from patient feedback, and is aimed in minimising further problems and improving comfort and quality of life.

- Use of dressings on radiotherapy skin reactions is rarely cost-effective during treatment as dressings need to be removed prior to radiotherapy treatment each day and for the same reason, ensuring minimal trauma on removal as well as ease of application is essential. An ideal dressing is also conformable for difficult to dress areas e.g. pelvis and head and neck, alleviates discomfort and pain, prevents further skin damage from trauma, friction or infection and, post-treatment, promotes healing.

- Polymeric membrane dressings are thin, soft, flexible, absorbent and non-adherent. The unique provision of a surfactant within the dressings continuously cleans the skin and means additional manual cleansing is rarely indicated, making for easy and pain free dressing changes. This allows patients to change their own dressings as needed. Also, the provision of glycerine within the dressings soothes and hydrates, further decreasing discomfort and pain and assists healing post-treatment. Polymeric membrane dressings have been used successfully for patients with skin reactions graded RT0G 2 and above, both during and after treatment, as demonstrated in the 17 patients audited. It is hard to say if the dressings additionally prevented further exacerbation of reactions, more research into determining the preventative effects would be required. This was outside the scope of this audit.

- Training and dissemination of best practice in skin reaction management is required for appropriate clinicians.

References