A CLINICAL STUDY COMPARING A HYDROACTIVE COLOID GEL WITH A DEXPANTHENOL CREAM FOR THE TREATMENT OF SKIN REACTIONS IN BREAST IRRADIATION

Dermatitis is a frequent side effect of radiation therapy (see Figure 1). Optimal skin hydration is widely accepted to prevent radiation dermatitis but there is no general consensus on which hydrating agent to use, although the use of hydroactive colloid gels has been recommended. The objective of this retrospective study was to compare the efficacy of a hydroactive colloid gel (Flamigel®) and a dexpantenol cream (Bepanthol®) in preventing the development of radiotherapy-induced moist desquamation.

MATERIALS/METHODS

Data from two cohorts of patients undergoing radiotherapy for breast cancer at the Limburg Oncology Center was retrospectively analysed. The first cohort (Sept. 2009-2010) applied the dexpantenol cream throughout their radiation therapy (3 times a day, every day). The second cohort (Sept. 2010-2011) applied the dexpantenol cream during 12 days and replaced it from day 13 by the hydroactive colloid gel (i.e., after a received cumulative radiation dose of 26 Gy). Radiation treatment (technique, total dose, and equipment) was the same for the two cohorts. Patients were further categorized according to their breast size (i.e., distance between the two entrance points of the beams < or ≥ 20 cm), which is a well-known risk factor for radiation dermatitis. The presence of moist desquamation was recorded as the first signs appeared. Two-sample proportion tests were performed to compare the efficacy of the two treatments.

CONCLUSIONS

The use of a hydroactive colloid gel (as compared with a dexpantenol cream) significantly reduces the risk of radiation dermatitis (by almost half), particularly in patients with larger breast size who are at higher risk of developing moist desquamation.

REFERENCES


Note. Small/Large breast size = distance between the two entrance points of the beams < or ≥ 20 cm.
*p < .05, ***p < .0001 (two-sample proportion tests, one-tailed)