

HYDROACTIVE COLLOID GEL VS HISTORICAL CONTROLS FOR THE PREVENTION OF RADIOTHERAPY-INDUCED MOIST DESQUAMATION IN BREAST CANCER PATIENTS: PRELIMINARY RESULTS

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INTRODUCTION & OBJECTIVES

ACUTE RADIATION DERMATITIS [1-3]:

- Affects **more than 90%** of breast cancer patients treated by radiotherapy
- **Impacts patients' quality of life** (causing discomfort, pain, and distress)
- **Compromises treatment outcome** (severe forms such as moist desquamation might cause treatment interruption)
- Represents a major clinical challenge to radiotherapy departments BUT to date, there is **no gold standard approach**.

IN A 1ST STUDY [4]:

- **Curative use of a hydroactive colloid gel** (vs dexpanthenol) **significantly reduced the incidence of radiotherapy-induced moist desquamation (RIMD).**

OBJECTIVE OF THIS 2ND STUDY:

- **To investigate the efficacy of this same hydroactive gel in the prevention of RIMD.**



Radiotherapy-induced moist desquamation

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METHODS & PARTICIPANTS

INCLUSION/ EXCLUSION CRITERIA

- Breast cancer patients scheduled for conventional radiotherapy after breast-conserving surgery
- No concomitant chemotherapy, no bolus

RADIOTHERAPY REGIMEN

- 25 fractions of 2 Gray (Gy) to the whole breast followed by a 8-fraction boost to the tumour bed, for a total dose of 66 Gy.

GROUPS & SKIN CARE

- 1 Experimental Group (N = 258):**
applied hydroactive colloid gel (Flamigel®, Flen Pharma) from start to end of radiotherapy (3x/ day)
= Preventive Hydrogel Group
- 2 Historical control group 1 (N = 147):**
applied 5% dexpanthenol cream (Bepanthal®, Bayer AG) from start to end of radiotherapy (3x/ day)
= Dexpanthenol Group^[4]
- 3 Historical control group 2 (N = 119):**
applied first Bepanthal® then Flamigel® (from fraction 11-14, after 1st signs of radiation dermatitis)
= Curative Hydrogel Group^[4]

ENDPOINTS & STATS

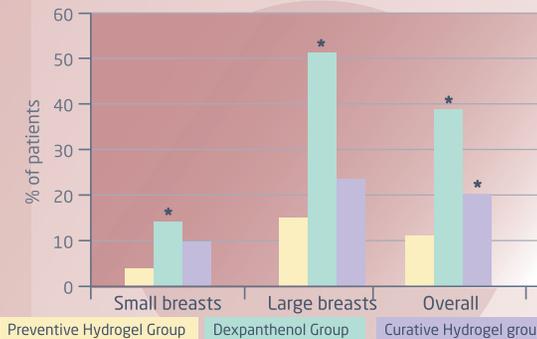
- **Incidence of RIMD** analysed through **proportion tests** and **logistic regressions** (two-tailed, p-value = .05) per group and breast size*

* well-known risk factor of radiation dermatitis, with large-breasted woman at higher risk ^[5]
(= distance between the two entrance points of the beams: small/ large breasts < or ≥ 20 cm).

RESULTS

- The incidence of RIMD was the lowest in the preventive hydrogel group.

INCIDENCE OF RADIOTHERAPY-INDUCED MOIST DESQUAMATION PER GROUP AND BREAST SIZE



* Significant difference with the Preventive Hydrogel group (proportion tests, p < 0.5, two-tailed).

Logistic Regression on the Incidence of RIMD

	Chi-square	p	Odds Ratio	95% CI
Preventive Hydrogel vs Dexpanthenol	39.59	< .0001	0.18	0.11 - 0.31
Preventive vs Curative Hydrogel	3.99	.046	0.54	0.29 - 0.99
Breast size (small vs large)	23.62	< .0001	4.65	2.50 - 8.64

CONCLUSIONS

The preventive use of a hydroactive colloid gel significantly **REDUCES THE RISK OF RIMD**, particularly compared with dexpanthenol and in patients with larger breast who are at higher risk.

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