

EFFECTIVENESS OF PALINGEN CREAM IN THE PREVENTION OF RADIODERMATITIS IN PATIENTS WITH BREAST CARCINOMA SUBJECT TO RADIATION THERAPY

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Radiation treatment of the mammary gland has side effects in both the acute and late stages. The organs at greatest risk are the skin, the homolateral lung, the contralateral breast, the ribs, and in the case of radiation of the left breast, the heart and the anterior descending coronary artery.

The most frequent side effect found in breast cancer patients undergoing radiation therapy and skin toxicity.

Clinical data show that despite the use of advanced technologies, about 90% of patients experience adverse skin reactions, such as erythema and dryness up to possible ulcerations and loss of substance. [1]

In recent years, a reduction in skin toxicity has been observed due to the use of hypofractionated radiotherapy treatments compared to conventional fractionation.

The purpose of this study is to describe how the use of Palingen cream has limited acute radiodermatitis and delayed the use of corticosteroids in patients undergoing radiation therapy for breast cancer.

METHODS

In post-operative radiation treatment of the mammary gland, the skin is not generally part of the target, despite the fact that the skin tissue is inevitably irradiated, causing both tissue damage and the recruitment of inflammatory cells, in addition to the reduction of Langerhans cells. [2]

The degree of skin toxicity is influenced by multiple factors related to radiation treatment and the patient. Among many needs, consideration should be given to the location of the treatment, the total dose, the type of fractionation, the type of radiation used and the energy of the beam, in addition to any association with previous or concomitant systemic treatments.

Risk indicators linked to the patient include, among others, age, the level of local hygiene, possible infections of the surgical wound and the healing process.

In our study, 10 patients undergoing adjuvant radiotherapy from March to September 2019 were selected. The patients enrolled in the study were older than 50 and had undergone conservative surgery for breast cancer at pathological stage T1-T2.

The radiation treatment provided for a hypofractionation scheme characterized by delivery of a total dose on the residual breast of 40.05 Gy in 15 fr. [3]

Topical therapy with Palingen included application of the cream three times a day on the breast subjected to radiation therapy, from the first day and for the duration of the radiotherapy treatment.

The cream was prescribed to one of our patients before radiation therapy to facilitate the consolidation process of the surgical wound. (img.1)

Acute skin toxicity was assessed weekly based on the Pathak et Al criteria. [4]

For each of the patients, an evaluation form was created for use by the oncologist radiotherapist within which to record the degree of skin toxicity before the radiation treatment, halfway through treatment and at the end of the therapeutic process [5].

Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
Without Change	Light and/or painless erythema, epilation, flaking, dryness	Sensitive and/or intense erythema, flaking, partial oozing, moderate edema	Flaking, widespread exudation, marked edema	Ulceration, hemorrhage, necrosis

RESULTS

The incidence of skin manifestations in the group of selected patients was in line with the data reported in the literature. [5]

All of the patients we observed reported immediate benefits from Palingen therapy.

Of the 10 patients enrolled, 1 patient had Grade 0 skin toxicity; there were 8 Grade 1 patients; 1 Grade 2 patient (graphic 1)

In the patient who presented with Grade 2 skin toxicity, it was considered appropriate to intervene with the addition of Bromelain in therapy.

In no case was corticosteroid therapy used.

In addition, healing of the surgical wound occurred in the patient with unconsolidated surgical wound. (img. 2);

Palingen has favored the healing and re-epithelialization processes through its anti-redness and soothing action. (img. 3 - 4)



Img.1 :ferita chirurgica non consolidata post intervento chirurgico (5 luglio 2019)

Img. 2: situazione after treatment with Palingen Cream (August 21, 2019)

Img. 1:

CONCLUSIONS

Experience and data suggest that few targeted and competent topical measures can avoid acute radiodermatitis and prevent it at a distance.

The use of moisturizing and emollient emulsions in the irradiated sites can maintain optimal trophism and the integrity of the radio-exposed skin.

Our data suggest the use of Palingen in the treatment of radiodermatitis in patients undergoing radiation therapy for breast cancer.

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