

## Letter to the Editor

### A new perspective in the treatment of radiodermatitis

Sir,

Radiotherapy (RT) is a common modality in the treatment of cancer patients. One of the most common adverse reactions in the sites of radiation is Radiodermatitis.<sup>[1]</sup> Skin toxicity induced by RT is a clinical problem that plagues the

majority of patients with breast cancer receiving adjuvant RT and this can lead to a temporary treatment interruption.<sup>[2]</sup> The lesions may vary from erythema to severe ulceration. Patients often have pain, itching, and anesthetic appearance and consequently there is a quality life decrease.<sup>[1]</sup>

It is recommended as the best method to prevent and minimize skin reactions the radiated area hydration.



**Figure 1:** The patient showed injuries classified as grade IV

Occlusive strips, ointments, creams and others, using herbal *Aloe Vera* and corticosteroids or other hydrophilic products without lanolin are recommended.<sup>[3]</sup> The®Aspercreme is an anti-inflammatory cream containing Trolamina salicylate 10% and can be employed like a radiodermatitis prophylactic substance.<sup>[4]</sup> There isn't any evidence which indicates a specific agent to be used in radiodermatitis prevention and management, in the literature review.<sup>[1]</sup>

We evaluate the hypothesis that the use of a topic agent containing *Aloe Vera*, Andiroba and Papaya extracts (Radiamix®) in radiated skin areas could prevent and/or decrease a radiodermatitis course already installed. The Radiamix® is compound by- Andiroba Oil (*CarapaGuianensesAubl.*), Aloe Oil (*Aloe*), Papaya Extract (*Carica Papaya L.*), got by biotechnological process, rich in hyaluronic acid. The Andiroba oil is a strong anti-inflammatory and cicatrizing; beside the *Aloe vera* oil presents several properties, such as anti-inflammatory activity, cicatrizing, the skin pH restorer, inducing the stimulation, because of Giberlino presence, that is a growing up phytohormone, and multiplication of the fibroblasts and modulator of immunologic system. The *Caricaapaya* extract works as anti-inflammatory, cicatrizing, emollient and exfoliative.

A 40 year old female patient diagnosed as infiltrative ductal carcinoma C-erb-B2 + 3 positive on right breast started the treatment and underwent a radical mastectomy, starting six cycles of adjuvant chemotherapy with the AC-T (Doxorubicin, Cyclophosphamide, Taxol) protocol. After six months, she was submitted to radiation therapy. The female breast tumor treatment was done by telecobaltoterapia in one total dose of 5000cGy, with 200cGy of daily dose, not being realized orthovoltage. The Radiation was done in the internal and external plastron (4 × 5,2 inches) as well as in the *supra* – clavicular cesspit (6 × 4 inches).

After all, there were signs of osteoblastic activity in bone scintillography compatible with vertebral column metastasis in ribs, humerus head, lower limb cingulum and proximal femur epiphysis. Then, the patient started a skin area irradiation into four fields. The metastatic area irradiation was about 4000cGy of total dose with daily fragment of 200cGy and energy of 6MeV.



**Figure 2:** After a twenty days period of cream use, the ulcerations and discomfort had been drastically reduced

During this radiation treatment, the patient showed injuries classified as grade IV (scale RTOG), [Figure 1] and the previously established treatment had to be suspended. The patient didn't present any comorbidity. For the treatment of the injuries it was used ®Radiamix cream, for immediate use and applied three times a day; after twenty days of the cream usage, ulcerations and discomfort had been drastically reduced [Figures 1 and 2].

Encouraging results have been observed from this case and we suggest the Radiamix® use in the prevention and/or reduction of the course of radiodermatitis already installed.

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#### References

1. Salvo N, Barnes E, van Draanen J, Stacey E, Mitera G, Breen D, *et al.* Prophylaxis and management of acute radiation-induced skin reactions: A systematic review of the literature. *CurrOncol* 2010;17:94-112.
2. Morganti AG, Cilla S, Valentini V, Digesu' C, Macchia G, Deodato F, *et al.* Phase I-II studies on accelerated IMRT in breast carcinoma: Technical comparison and acute toxicity in 332 patients. *RadiotherOncol* 2009;90:86-92.
3. Harper JL, Franklin LE, Jenrette JM, Aguerro EG. Skin toxicity during breast irradiation: Pathophysiology and management. *South Med J* 2004;97:989-93.
4. Simard PF, Bolton RM, Tarbell NJ. Anti-Inflammatory cream reduces skin damage Induced by ionizing radiation. *Oncologist* 2009;14:197-8.

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