Dermatology Practical & Conceptual

# "RT STRIKES BACK": Radiotherapy in Ultra Elderly with Cutaneous Basal Cell Carcinoma

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## Introduction

Basal cell carcinoma (BCC) is the most common human cancer and, recently, its clinical management among elderly patients represents an important issue [1].

We present the case of a 99-year-old patient affected by an advanced and heavily pre-treated BCC that was successfully treated with radiotherapy.

## Case Presentation

The reported patient presented an ulcerated skin lesion in the left subnasal region for several years.

The patient underwent in June 2019 a skin punch biopsy that showed solid nested basal cell carcinoma with morphoeic aspects. Noted the clinical condition, a surgical approach was excluded and was referred to upfront curettage plus electrode-dissecation. Due to disease progression, the patients in the subsequent months also underwent cryotherapy and administration of topical imiquimod, with little efficacy.

In October 2021 (Figure 1A), the patient was discussed in the multidisciplinary tumor board (MTB) of skin cancers, evaluating the possibility of a radiotherapy approach.

The patient came to our hospital in November 2021 (Figure 1B) with a locally advanced morphoeic lesion (>5 cm).

We proposed hypofractionated radiotherapy (twice weekly, for a total duration of 5 weeks of therapy, total dose of 60Gy) [2], using a 6MeV electron beam with a treatment field included the lesion with a free margin of 2 cm.

After each session the skin lesion was medicated with saline solution, betadine and hyaluronic acid medication.

The patient finished radiation treatment in December, reporting no acute toxicities except grade 1 mucositis (CTCAE v.5) (Figure 1C).

The follow-up was postponed due to increase of COVID-19 pandemic, following the patient choice.

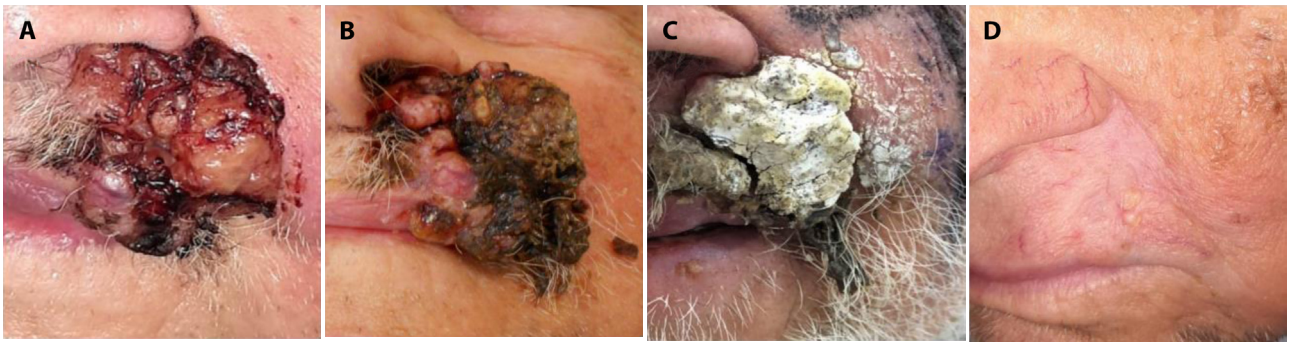


**Figure 1.** Evolution of the reported case. (A) Discussion of the patient in the multidisciplinary tumor board. (B) Locally advanced morphoeic lesion (>5 cm), that was contiguous to nasal vestibule and upper lip, photo taken at the beginning of RT. (C) Photo taken at the end of radiotherapy, the lesion showed an initial response. *Panel D*: (D) At 4-month follow-up visit, complete resolution of the basal cell carcinoma.

We saw the patient only in April 2022 (Figure 1D), and the patient presented a clinical and dermoscopical complete response of the skin lesion, with the presence of only residual area of alopecia in the irradiation area.

All procedures performed were in accordance with the ethical standards of the institutional and national research committees and with the Helsinki Declaration.

## Conclusions

Radiotherapy can be safely used if imaging procedures can define the tumor area and the depth of invasion [3], in patients with a high risk of uncomplete surgical resection or if surgery is contraindicated.

RT has been reported as a valid alternative to surgery, with a negligible risk of developing secondary skin cancer [3-5]. A recent systematic review investigating the efficacy of different strategies for BCC reported an estimated recurrence rate of 3.8% for surgery, 3.8% for Mohs surgery and 3.5% for radiotherapy [6]. Higher doses per fraction lead to higher rates of late toxicity, therefore accelerated fractionation schedules should be reserved for a limited subset of patients.

In fact, elderly patients may not be able to attend hospital daily, especially in the pandemic era that we are experiencing, therefore they can benefit from hypofractionation schemes that can still reach an high control rate (92.4% of complete response rate) [2].

Our patient responded excellently to hypofractionated RT treatment after the failure of several local treatments.

Although blind techniques and topical therapies can be easier to perform, "difficult to treat" BCC should be always discussed in MTB, in order to choose and to tailor the most efficacious therapy, especially for elderly patients.

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