

An Alternative Approach to the Treatment of Nodular Basal Cell Carcinoma Using Cryosurgery and Imiquimod Cream: A Case Report

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Introduction

- *Basal cell carcinoma (BCC) arises in the basal layer of the skin. Nodular BCC (usually cystic in structure with aggregates of basaloid cells filled with mucin), a subset of BCC, occurs in sun-exposed skin
- *Prompt treatment of nodular BCC is important to avoid local invasion and destruction of surrounding skin
- *The first line of treatment for nodular BCC on trunk or extremities is usually surgical excision. However, surgical excision on sensitive areas such as eyelids and nose can lead to disfigurement.
- *Imiquimod is an immunomodulating topical cream that is approved by the FDA for treatment of superficial BCC under 2.0 cm. This case report documents successful use of Imiquimod for other classifications of BCC.

Case Presentation

- *68 years old F presented with a 4cm granulated lesion located on the right nasal ala. Patient showed recurrence of the lesion after treatment with 5-Fluorouracil (5-FU) 5 years earlier.
- *Nodular BCC was confirmed with shave biopsy of the lesion.
- *Patient was offered surgical excision (Mohs). Given the size and location of the lesion, surgery was expected to require extensive nose and upper lip reconstruction and/or permanent disfigurement.
- *Patient opted for less invasive approach — trial of cryosurgery and Imiquimod cream
- *Lesion was treated with cryosurgery during weekly office visits and Imiquimod cream three times daily at home.
- *After 4 weeks of treatment, the lesion size reduced by half. The lesion had visually resolved completely after 8 weeks of treatment.
- *Repeat punch biopsy at week 14 did not show recurrence of BCC



Discussion

- *This reports a novel application of cryosurgery and Imiquimod cream treatment for the following reasons:
 - Imiquimod is a standard treatment for superficial BCC up to 2 cm. In this application it was a component of the treatment of a 4cm nodular BCC.
 - The treatment cycle in this case was 8 weeks vs the typical 6 week treatment recommended by Imiquimod.
 - While these are promising results, treatment should be repeated in additional cases to confirm outcomes can be replicated. Considerations for application include non-surgical options, or in case of disfigurement or severe cosmetic outcomes.

Summary

- *Nodular BCC lesions in sensitive areas may be treatable with combination therapy of cryosurgery and Imiquimod
- *The selection of candidates for this approach should be based on special circumstances such as location of the lesion and availability of close follow up
- *Future studies could elucidate if this is a viable treatment option for select candidates, and if it can be replicated on similar lesions

Selected References

- *Oldfield, Vicki, et al. Imiquimod: in Superficial Basal Cell Carcinoma. *American Journal of Clinical Dermatology*, U.S. National Library of Medicine, 2005.

Acknowledgements

- *Dr. Scott's office staff & Scott Dermatology for help with images