

# Successful Treatment of Advanced Squamous Cell Carcinoma Achieved Through Immunotherapy



Bahir Al-Anbari; Thang Nguyen Ngoc; Hai Duong; Hai Doung Nguyen; Pham Thao Vy Le; Van Tuong Nguyen; Huong Tran Pham; Alexandra Nguyen; Hoai Nguyen; Pham Nhu Hai; Van Mai; Philip Tran, DO MD.

#### INTRODUCTION

- Cutaneous squamous cell carcinoma is the most common non-melanoma skin cancer (NMSC) in Caucasian populations.
- Standard treatments for cutaneous squamous cell carcinoma include surgical excision, chemotherapy, and radiotherapy.
- The use of immunotherapy has been implemented for the treatment of cutaneous squamous cell carcinoma and has shown great potential.

### CASE PRESENTATION

- 67-year-old male presents with an advanced case of squamous cell carcinoma on the nasal dorsum (Figure 1).
- A biopsy of the lesion showed infiltrating carcinoma with focal clear cell features, consistent with infiltrating moderate to well-differentiated squamous cell carcinoma.
- PET/ CT did not show metastasis of avid adenopathy.
- The patient refused following the standard treatment protocol.
- Patient was treated with Pembrolizumab 200mg IV solutions, with subsequent cycles every 21 days.
- The lesion showed an immediate response to treatment and was completely resolved by the 11<sup>th</sup> cycle (Figure 2A and 2B).





**Figure 1**. Patient presenting with advanced squamous cell carcinoma at the dorsum of the nose.





**Figure 2.** Skin lesion displayed a quick response to immunotherapy (A), and complete resolution was achieved by the 11<sup>th</sup> cycle (B).

#### DISCUSSION

- Gold Standard therapy for cutaneous squamous cell carcinoma is surgical intervention such as Mohs microscopic excision.
- Surgical resection can also be supplemented with chemotherapy and radiation therapy.
- Surgical excision can be challenging in cosmetically-challenging areas such as the face.
- Monotherapy with Pembrolizumab has shown great potential as an alterative treatment modality.
- Immunotherapy work best on tumors with high mutation burden and advanced tumor stage.
- Possible challenges include limited efficacy for percutaneous lesions and early cancer stages in addition to resistance to therapy.

## CONCLUSION

- Facial cutaneous cell carcinoma is a common diagnosis that can be made at various stages of development.
- Facial tumors pose a more cosmetically-challenging presentation in treatment, increasing the need for alternatives.
- Immunotherapeutic agents have shown a great potential in treating advanced cutaneous squamous cell carcinoma.
- Additional Studies and clinical trials are needed for a better understanding of this treatment modality.