

Atypical Presentation of Extraocular Sebaceous Carcinoma on The Cheek: A Case Report

Mohammad Alananzh M.D.¹, Saleh Abualhaj², Lina Alshadfan³, Leen Abuzaid⁴, Hasan Khashram⁵,
Abdallah Arabyat⁶, Dima Alhawajreh⁷, Basel Joseph Massad⁸

¹M.D., FRCSOrth (England), FEBOT (2), Department of Special Surgery/Faculty of Medicine, Al-Balqa Applied University, Al Salt, Jordan.

Email ID: Mohammad.alananzh@bau.edu.jo

²General Surgery Department, Faculty of Medicine, Al-Balqa Applied University, Al-Salt, Jordan, General Surgery Department, King Hussein Cancer Center (KHCC), Amman, Jordan

Email ID: Saleh.abualhaj@bau.edu.jo / <https://orcid.org/0009-0004-3243-9007>

³Al Balqa Applied University, Faculty of medicine, Department of pediatrics, salt, Jordan

Email ID: Lina.shadfan@bau.edu.jo

⁴Yarmouk University, Irbid, Jordan.

Email ID: leen.abuzaid12@gmail.com / <https://orcid.org/0009-0009-3260-4750>

⁵general surgery department, Al salt hospital, ministry of health, Amman, Jordan

Email ID: Hassankhashram999@hotmail.com

⁶Faculty of Medicine, Al-Balqa Applied University, Al-salt, Jordan

Email ID: Arababd75@gmail.com / ORCID: 0009-0005-1036-892X

⁷School of Medicine, The University of Jordan, Amman, Jordan

Email ID: dimaalhawajreh5@gmail.com

⁸University of Jordan, School of Medicine

Email ID: basel_massad97@hotmail.com

Cite this paper as: Mohammad Alananzh M.D., Saleh Abualhaj, Lina Alshadfan, Leen Abuzaid, Hasan Khashram, Abdallah Arabyat, Dima Alhawajreh, Basel Joseph Massad, (2025) Atypical Presentation of Extraocular Sebaceous Carcinoma on The Cheek: A Case Report. *Journal of Neonatal Surgery*, 14 (32s), 7981-7984.

1. INTRODUCTION

Sebaceous carcinoma (SC) is a rare but aggressive malignancy arising from sebaceous glands of the eyelids, called the Meibomian glands(1). It is classified by the WHO into two categories: periocular (75% of cases) and extraocular (25% of cases), typically seen in older adults, especially those in their seventh decade of life (2). One of the key challenges in diagnosing sebaceous carcinoma is in its considerable morphological variability, particularly when it occurs in atypical or extraocular locations, where it can be easily misidentified as more common primary neoplasms of the skin (3). Accurate diagnosis is essential, as sebaceous carcinoma carries a high propensity for local recurrence and regional lymph node involvement (3). The tumor's aggressive nature is highlighted by survival statistics: the five-year overall survival rate is approximately 78% for localized or regional disease, dropping to 50% in cases with distant metastasis (4). We report a case of extraocular sebaceous carcinoma lateral to the left eye. This case has been reported for its morphologic ambiguity as well as its unusual location. This case report has been reported in line with the SCARE Criteria (5). The aim of this paper is to improve early and appropriate diagnosis by expanding clinical understanding about this uncommon and severe skin cancer.

2. CASE PRESENTATION

A 69-year-old Arab man who is a farmer was referred to the outpatient clinic complaining of a yellow-tipped and hyperemic exophytic mass with a maximum dimension of 2 cm, on the left zygomatic bone region [Fig.1A] and [Fig.1B].

Fig.1A



Fig.1B



Clinical Features of the lesion before intervention.

He has Diabetes Mellitus Type 2, and no surgical history. He has no previous trauma to the region of the tumor.

On physical examination, there was no lymph node enlargement. The intervention was wide-excision of the lesion with free margins [Fig.2A]. The procedure was done under local anesthesia and there were no intraoperative complications.

Fig.2A



After wound closure by plastic surgeon (SAA)

Excisional biopsy report showed margins are free of tumor, with no evidence of lymphovascular or perineural invasion. The patient had an excellent clinical course with no complications intraoperatively or postoperatively, and was advised to follow up in 6 months.

The clinical differential diagnosis included squamous cell carcinoma, and basal cell carcinoma with sebaceous differentiation.

3. DISCUSSION

Sebaceous carcinoma (SC) is an uncommon malignant neoplasm of the skin, originally characterized by Dr. Straatsma in 1956 as a tumor of the meibomian glands, highlighting its initial recognition in the periocular region (1,6). Although rare, SC accounts for approximately 0.2% to 4.6% of all cutaneous malignancies, with variability in incidence likely due to differences in population demographics, diagnostic approaches, and geographic distribution (2).

Diagnosing SC presents considerable challenges. Clinically, it lacks distinctive features, and no pathognomonic gross characteristics have been consistently identified (3). The rarity of the disease, combined with the absence of universally accepted diagnostic criteria, further complicates timely and accurate diagnosis (3). These limitations can lead to misdiagnosis or delayed treatment, ultimately affecting patient outcomes.

The literature contains limited reference to sebaceous carcinoma, as it is infrequently encountered in extraocular locations (7,8). As such, this case report offers a primary perspective on a rare location and gross features of an aggressive form of skin cancer. Given the limited body of research and the ambiguity surrounding current diagnostic standards, there is a compelling need for increased collaborative research to establish standardized diagnostic tools and classification frameworks. Such efforts are essential for enhancing early recognition and optimizing management strategies for extraocular variants of SC.

We were able to identify one other article with a similar location of sebaceous carcinoma(9). Thus, we hope that the present case contributes to the growing body of literature on extraocular sebaceous carcinomas, providing additional insight into their clinical presentation and emphasizing the need for heightened awareness and clearer diagnostic pathways.

4. CONCLUSION

Sebaceous carcinoma is a rare and often under-recognized malignancy with non-specific clinical features that can delay diagnosis, especially when presented in an extraocular location. This case highlights the importance of considering SC in the differential diagnosis of cutaneous tumors, particularly in atypical locations, and with atypical clinical features. Increased awareness among physicians and collaborative efforts to refine diagnostic criteria are essential to improve patient outcomes. Surgery remains the mainstay of treatment, and in our case, where there was no lymphovascular or perineural involvement, wide excision of the lesion provided sufficient treatment and no extra diagnostic investigations or interventions were indicated.

Acknowledgements: None.

Author Contributions

Mohammad Alananzh and Saleh AbuAlhaj contributed to the conception, study design, execution and data collection. All authors contributed to critically reviewing the article, gave final approval of the version to be published and agreed on the journal to which the article has been submitted, and agree to be accountable for all aspects of the work.

Funding

This research did not receive any funding.

Consent for publication: Written informed consent was obtained from the patient for the procedure done as well as for the publication of this case report and accompanying images.

Conflict of interest: None.

REFERENCES

- [1] Dokic Y, Nguyen QL, Orengo I. Mohs micrographic surgery: a treatment method for many non-melanocytic skin cancers. *Dermatol Online J.* 2020 Apr 15;26(4):13030/qt8zr4f9n4. PMID: 32621679.
- [2] Torres-Laboy P, Schmieder SJ. Sebaceous Carcinoma. [Updated 2024 Nov 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan—. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK610689/>
- [3] Panjwani PK, Tirumalae R, Crasta JA, Manjunath S, Rout P. Extraocular sebaceous carcinoma: a series of three cases with varied presentation. *Dermatol Pract Concept.* 2012 Jan 31;2(1):39-44. doi: 10.5826/dpc.0201a07. PMID: 24765549; PMCID: PMC3997245.
- [4] Sargen MR, Starrett GJ, Engels EA, Cahoon EK, Tucker MA, Goldstein AM. Sebaceous Carcinoma Epidemiology and Genetics: Emerging Concepts and Clinical Implications for Screening, Prevention, and Treatment. *Clin Cancer Res.* 2021 Jan 15;27(2):389-393. doi: 10.1158/1078-0432.CCR-20-2473. PMID:

32907843; PMCID: PMC7854832.

- [5] Sohrabi C, Mathew G, Maria N, Kerwan A, Franchi T, Agha RA; Collaborators. The SCARE 2023 guideline: updating consensus Surgical CAse REport (SCARE) guidelines. *Int J Surg.* 2023 May 1;109(5):1136-1140. doi: 10.1097/JS9.0000000000000373. PMID: 37013953; PMCID: PMC10389401.
 - [6] Knackstedt T, Samie FH. Sebaceous Carcinoma: A Review of the Scientific Literature. *Curr Treat Options Oncol.* 2017 Aug;18(8):47. doi:10.1007/s11864-017-0490-0. PMID: 28681210.
 - [7] Mohamed M, Boussofara L, Slama A, Denguezli M, Belajouza C, Sriha B, et al. Extra-ocular sebaceous carcinoma of the skin: a report of five cases and a review of the literature. *Am J Med Case Rep.* 2015;3(9):291–6.
 - [8] Chica J, Cuevas L, Fuentes O, Ardila D, Sánchez E. Sebaceous carcinoma of the back: a case report and literature review. *J Med Case Rep.* 2024 Nov 26;18(1):570. doi:10.1186/s13256-024-04779-7. PMID: 39593180; PMCID: PMC11590488.
 - [9] Swali R, Nwannunu C, Tying S. Sebaceous Carcinoma: A Rare Extraocular Presentation of the Cheek. *EMJ Dermatol.* 2020. <https://doi.org/10.33590/emj/19-00202>
-

