Slow Mohs for Sebaceous Carcinoma of the Scalp

Introduction

Sebaceous carcinoma (SC) is a rare epithelial neoplasm derived from the adnexa which can be classified into two subtypes: ocular (75% of cases) and extraocular (25% of cases).[1] Extraocular SCs are usually found in the head and neck region and can occur sporadically or in the setting of Muir-Torre Syndrome (MTS). SCs of the scalp are aggressive, have an 83.3% recurrence rate, and often metastasize if not identified early.[2] Extensive scalp lesions usually require a local scalp flap transposition or graft.[2,3] We report a case of an extensive sporadic SC of the scalp treated with slow Mohs and healed by secondary intention.

Case Presentation

An 85-year-old Caucasian female presented to clinic with a fixed, nontender, exophytic 4.7cm plaque on the scalp first noticed by the patient one year prior (Image 1). No local or distant lymphadenopathy was appreciated. A shave biopsy of a representative portion of the lesion was sent for histopathological examination. It showed an invasive tumor extending from the epidermis into the dermis with atypical cells containing enlarged basaloid nuclei and frequent mitotic activity. The tumor was consistent with sebaceous carcinoma.

Given the patient's age, the tumor size, and the anatomic location, it was determined that the patient would benefit from a slow Mohs approach. A circumferential excision to the level of the deep adipose with 6mm margins was performed under local anesthesia. A second stage excision with an additional 2 mm margin was performed following incomplete tumor resection (Image 2). The lesion was dressed with a collagen-based skin substitute to encourage tissue granulation. Healing was, however, complicated by bacterial infection treated with antibiotics. Unfortunately, the tumor margins were still not clear after this second stage, but the patient and family declined further procedures. Two months after initial encounter, the patient developed a mass in her left axilla which was a presumed metastasis from her scalp tumor. Workup for this mass was deferred in favor of a palliative approach. The patient was followed with weekly biologic dressing changes (Image 3).

Images

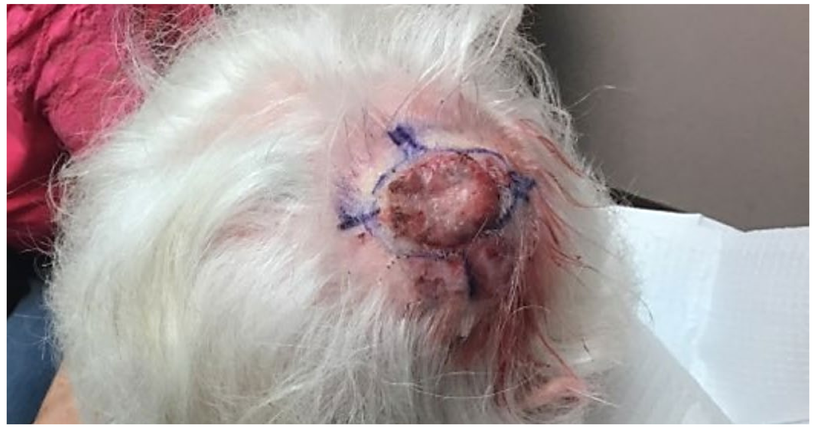

Image 1: Biopsy confirmed SC of the scalp with slow Mohs markings

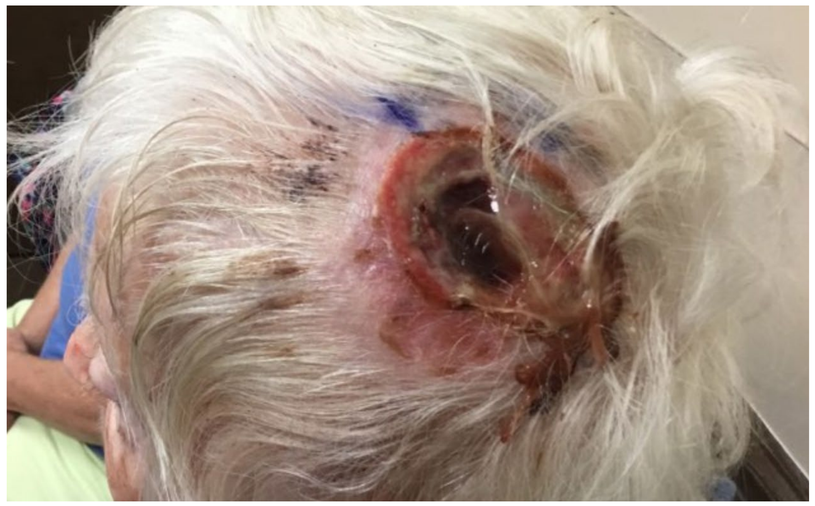

Image 2: Scalp SC after second stage excision down to galea

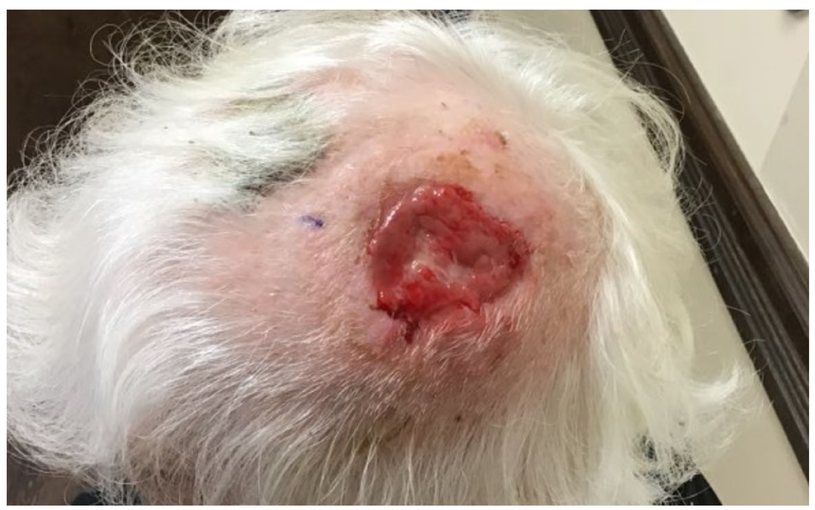

Image 3: Scalp SC two months post op with granulation tissue

Discussion

Sebaceous carcinoma carries a known risk of extensive local invasion as well as high risk of distant metastasis. SCs are nonencapsulated dermal tumors that often display pagetoid spread. This growth pattern can be difficult to assess on the frozen sections of traditional Mohs surgery, which is where the paraffin-embedded sections of slow Mohs show utility. Slow Mohs is a surgical approach which combines necessary tissue sparing in special anatomic sites and the precise histopathological analysis paraffin-embedded section provides. Utilization of slow Mohs for treatment of such a tumor is rarely discussed in the literature and has only been reported once before for a SC on the eyelid, but it is a very useful modality.[4] As demonstrated in this case, slow Mohs allows for improved cosmesis and excellent margin evaluation. Unfortunately, this tumor had likely already metastasized at initial presentation.

Wound management choice was based on 1) patient desire for minimally invasive procedures and 2) decreased pain with healing. Secondary intention is a well-studied modality for the scalp. Wounds that extend to the aponeurosis (galea layer) or deeper can take 6-8 weeks to heal by secondary intention.[3] This patient showed expected levels of granulation tissue and wound contraction with the aid of a collagen matrix biologic dressing.

Conclusion

This case highlights the importance of early clinical intervention for these rare, aggressive cutaneous malignancies. It also emphasizes the utility of the slow Mohs approach and healing by secondary intention in anatomically sensitive sites such as the scalp. In general, patients benefit from adjunct imaging and oncological workup given the significant risks of metastasis.

References

1. Albayati A, Ozkan B, Ayva ES, Uysal AC, Ertas NM. Extraocular Sebaceous Carcinoma in Muir-Torre Syndrome. Indian J Dermatol. 2022;67(2):207. doi:10.4103/ijd.ijd_2_21
2. Li G, Shen J, Huang H, Chen R, Zhou G. Aggressive sebaceous carcinoma of the scalp: a case report and literature review. *Transl Cancer Res*. 2021;10(9):4237-4242. doi:10.21037/tcr-20-3443
3. Alvi S, Jenzer AC. Scalp Reconstruction. In: StatPearls. Treasure Island (FL): StatPearls Publishing; September 19, 2022.
4. Arora, A., Barlow, R., Williamson, J. et al. Eyelid sebaceous gland carcinoma (SGC) treated with 'slow' Mohs' micrographic surgery. Eye 18, 854–855 (2004). https://doi.org/10.1038/sj.eye.6701330

This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

HCA Healthcare®