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Case Report
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A RARE CASE OF SCALP MASS: CLEAR CELL HIDRADENOCARCINOMA

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Abstract: Clear cell hydroadenocarcinoma is a very rare sweat gland tumor. It has an aggressive course and has a high recurrence rate. Wide excision is the first option in the treatment of this tumor with a high rate of metastasis. Subsequent radiotherapy and chemotherapy are still controversial. In this case, we presented a patient who was operated on and presented with a lipoma-like appearance on the scalp. The pathology result of the patient was Clear cell hidradenocarcinoma. We emphasized that in operations performed with the preliminary diagnosis of lipoma on the scalp, this diagnosis should be included among the preliminary diagnoses and resection should be performed as widely as possible.

Keywords: Hidradenocarcinoma, Sweat gland, Scalp

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1. Introduction

Clear cell hydroadenocarcinoma is a rare sweat gland tumor seen in a very limited number in the literature. In the literature, there are names such as clear cell eccrine carcinoma, malignant clear cell acrospiroma, malignant nodular hidradenoma (Balaban et al., 2017). Although there is no typical localization, it is seen in the literature that it is described on the lip, neck, back, chest wall, breast, vulva, and scalp. It is known to be more common in the age range of 50-60 years (de Lima et al., 2021; Elbenaye et al., 2017). These tumors have a high recurrence rate of 50-75%. It has been reported that it metastasizes and its mortality is high. Its 5-year surveillance is around 30% (Elbenaye et al., 2017). Wide local excision is recommended for treatment. Although adjuvant radiotherapy is recommended afterward, it is controversial. Systemic chemotherapy is recommended in metastatic disease (Miller et al., 2015).

2. Case Report

In the physical examination of a 57-year-old male patient who applied with the complaint of swelling on the back of his head, a soft-consistent subcutaneous mass tissue was found in the right occipital region. A 4×3 cm mass without bone invasion was seen in the computed tomography (Figure 1a). Lipoma was considered in the foreground. The patient has no comorbid disease other than diabetes mellitus. The patient was operated and the mass tissue was excised. Histological examination revealed multinodular, solid-cystic, and poorly differentiated carcinoma located in the dermis. The stroma was fibrotic and partially hyalinized. On closer examination, a tumoral lesion consisting of atypical cell groups-lobules with prominent nucleoli, large, pleomorphic, partially hyperchromatic nuclei, eosinophilic and clear vacuolized cytoplasm in many parts was observed. Cystic degeneration was observed in a large area. In some areas, there were large areas of necrosis, some of which had the appearance of comedo necrosis. Ductal differentiation and keratinization, suggestive of squamous cell differentiation, were remarkable. Up to 10 mitoses were observed in 10 high-magnification fields, and the presence of atypical mitosis was also observed. In immunohistochemical analysis, tumor cells stained strongly for EMA, Cytokeratin AE1/AE3, Vimentin, P63, P53, and insufficient focal staining for S100. Ductal structures were stained positively with CEA. GCDFP-15 and Melan A were negative. The Ki-67 proliferation index was found to be approximately 60% (Figure 2). According to the histopathological findings and immunohistochemical examination results, the patient was diagnosed with a skin malignant adnexal tumor and hydradenocarcinoma. Thereupon, a systemic scan was performed by the oncology department. No metastases were found. No recurrence was detected in the 6-month follow-up of the patient. Contrast-enhanced brain tomography revealed a non-contrast-enhancing appearance compatible with postoperative changes (Figure 1b).

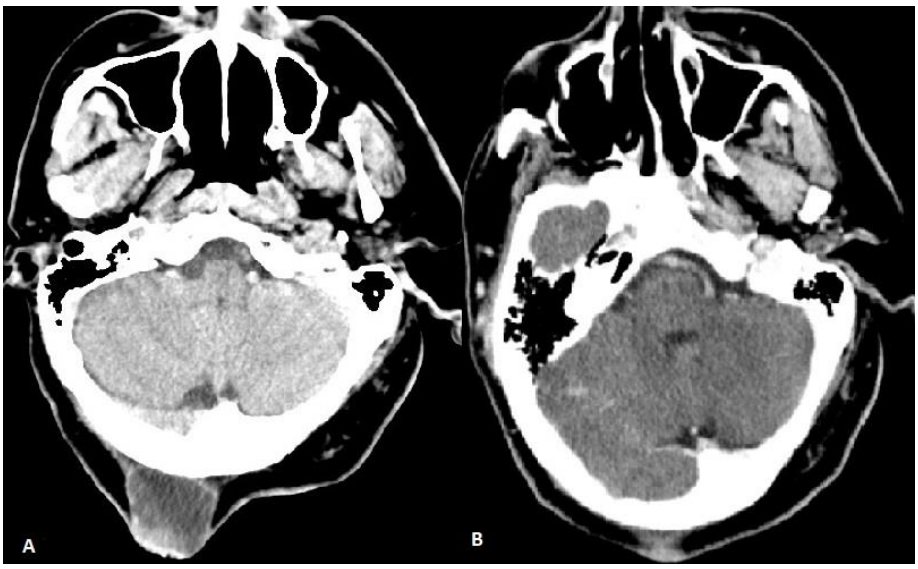

Figure 1. Pre-operative computer tomography image (A), Post-operative computer tomography image (B).

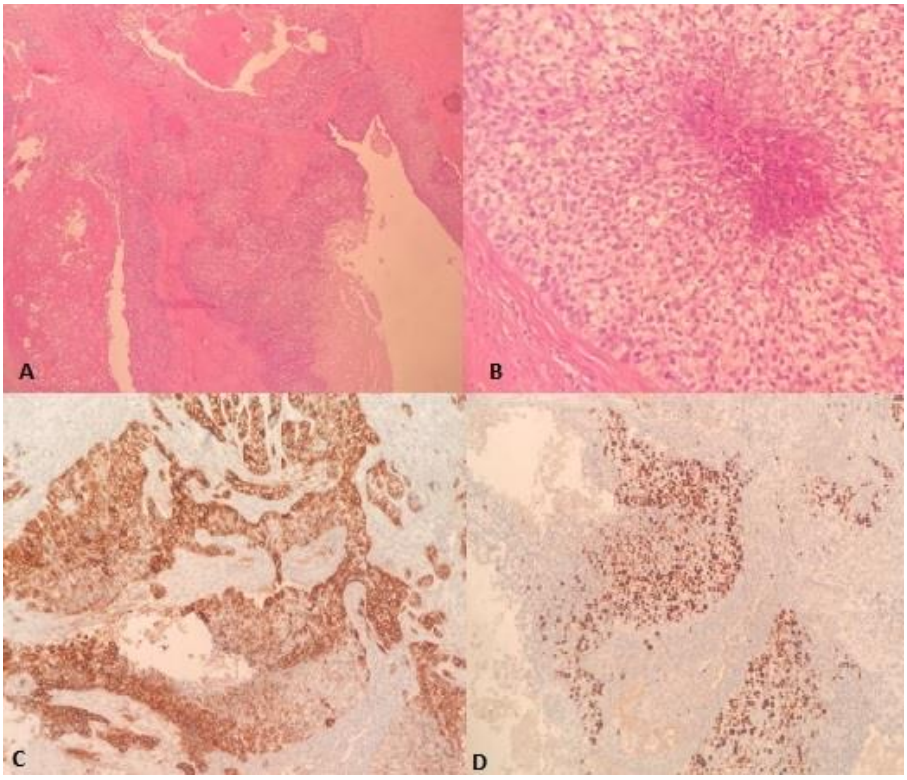

Figure 2. Tumor cells arranged in nodules with comedonecrosis (H&E, ×40) (A), Atypical cell groups with prominent nucleoli, eosinophilic, and mostly clear vacuolized cytoplasm (H&E, ×200) (B), EMA positivity in neoplastic cells (EMA, ×100) (C), Ki67 staining in %60 of neoplastic cells (Ki67, ×100) (D)

3. Discussion

Hidradenocarcinoma is a rare, aggressive, metastatic tumor of eccrine sweat glands. It constitutes less than 0.01% of all skin cancers and is mostly seen between the ages of 50-60, as in our case.(Elbenaye et al., 2017; Soni et al., 2015) In the literature, recurrence rates and metastasis rates have been reported as over 50%, and in our 6-month follow-up, no significant findings and radiological images were found in terms of metastasis and recurrence.(de Lima et al., 2021) In empirical treatment, wide resection is considered first.(Elbenaye et al., 2017; Soni et al., 2015) However, in our case, we performed total resection because we did not consider a malignant skin appendage tumor in the preliminary diagnosis. After learning the pathology result, we decided not to consider a surgical intervention again and to follow up closely. Although adjuvant radiotherapy after surgery is recommended in some sources, there is no definite consensus on it.(Soni et al., 2015) We did not consider radiotherapy because of the good clinical

condition of our patient and the absence of recurrence and metastasis in the early and 6-month follow-ups. It is stated in the literature that systemic chemotherapy can be given to metastatic hidradenoma. Since no metastasis was detected in our case, systemic chemotherapy was not considered.

Author Contributions

Concept: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Design: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Supervision: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Data collection and/or processing: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Data analysis and/or interpretation: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Literature search: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Writing: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Critical review: G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%), Submission and revision G.K. (25%), S.T. (25%), S.D. (25%) and A.K. (25%). All authors reviewed and approved final version of the manuscript.

Conflict of Interest

The authors declared that there is no conflict of interest.

Ethical Approval/Informed Consent

Written an informed consent form was obtained from the patient/s for the case presentation, and necessary information was given to the family.

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