Malignant Nodular Hidradenoma of the Scalp: A Case Report

Kafa Derisinde Malign Nodüler Hidradenom

Malignant Nodular Hidradenoma of Scalp

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Öz

Malign nodüler hidradenoma (MNH) nadir bir deri eki tümörüdür. Kafa derisi bu tümör için alışılmadık lokalizasyonlardan biridir. Bu çalışmada, kafa derisinde yavaş büyüyen kitle ile başvuran ve histopatolojik değerlendirme sonucu malign nodüler hidradenom tanısı alan 80 yaşında kadın hastayı sunmayı amaçladık. MNH mümkün olduğu kadar erken tanı alması ve cerrahi olarak geniş rezeksiyon yapılması gereken agresif bir tümördür. Buna karşın erken rekürrens sık olduğundan yakın klinik takip gerektirir.

Anahtar Kelimeler

Deri Eki Tümörü; Kafa Derisi; Karsinom; Malign Nodüler Hidradenom

Abstract

Malignant nodular hidradenoma (MNH) is a rare sweat gland tumor of the skin. The scalp is an uncommon site of occurrence. We, herein, present an 80-year-old woman whose slow-growing subcutaneous nodule on her scalp was diagnosed as malignant nodular hidradenoma after histopathologic examination. MNH is an aggressive tumor and should be diagnosed and excised as early as possible. Wide local excision is the treatment of choice. As early recurrence is common despite the wide excision close follow-up is necessary.

Keywords

Carcinoma; Malignant Nodular Hidradenoma; Scalp; Skin Appendage.

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Introduction

Malignant nodular hidradenoma (MNH) is an infrequent, highly malignant, primary skin tumor which may have both apocrine and eccrine variants [1]. Several synonyms have been described in the literature, like malignant clear cell myoepithelioma, malignant acrospiroma, clear cell hidradenocarcinoma, clear cell eccrine carcinoma, clear cell hidradenoma, solid-cystic hidradenoma and eccrine acrospiroma. Occurrence in the scalp is rare but well-known [2]. Most reported cases are in elderly individuals over 50 years of age, though they may occur at any age. MNH has a very poor prognosis, high recurrence and a high rate of metastases [3]. We presented one case of MNH managed at our clinic.

Case Report

An 80-year-old woman presented to our hospital with an enlarging painless nodular mass on the scalp. Gross examination showed 3 cm in size, pinkish, firm, nodular mass.

Histopathological examination showed tumor cells with clear cytoplasm arranged in nodules infiltrating the superficial dermis with comedonecrosis (Figure 1A). There were frequent mitotic figures (Figure 1B). The findings were suggestive of MNH. Many of the tumor cells were positive for high molecular weight cytokeratin (Figure 1C) and CAM5.2; and negative for BER-EP4, CD10, Androgen receptor, Estrogen receptor and p63. Ki67 was stained in 30% of neoplastic cells (Figure 1D).

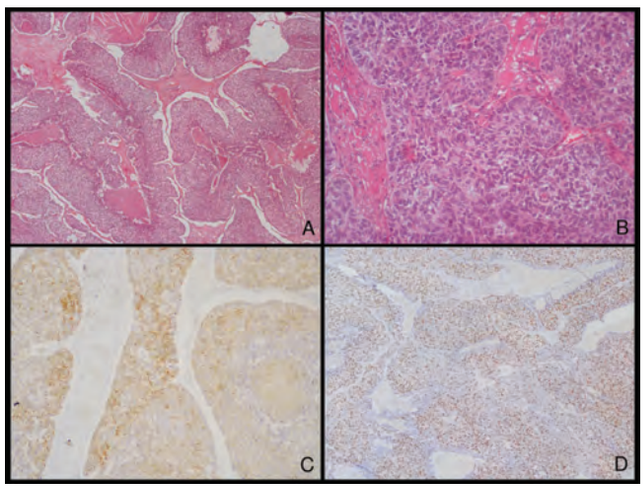


Figure 1. Tumor cells with clear cytoplasm arranged in nodules with comedonecrosis (H&E, x40)(A), Frequent mitotic figures in neoplastic cells (H&E, x200)(B), High molecular weight cytokeratin (HMWCK) positivity in neoplastic cells (HMWCK, x100)(C), Ki67 staining in 30% of neoplastic cells (Ki67, x100)(D).

Discussion

Tumors of the epidermal appendages are historically classified into four groups that exhibit histologic features analogous to hair follicles, sebaceous glands, apocrine sweat glands, and eccrine sweat glands [4]. Sweat gland tumors are mostly benign. Primary eccrine carcinomas are rare tumors and make up less than 0.01% of all skin cancers. Hidradenocarcinoma accounts for approximately 6% of malignant eccrine tumors and accounts for less than 0.001% of all tumors [5].

Malignant nodular hidradenomas are rare, and usually malignant from their inception; however, malignant lesions may arise from benign nodular hidradenomas. While nodular hidradenomas are typically well demarcated, malignant nodular hidradenomas are usually larger, asymmetrical, and show invasion into the surrounding tissue [4]. Nuclear changes may be absent, slight, or moderate [6]. The MNH displays atypical mitosis, necrosis, and angiolymphatic invasion. There are nodular or lobulated architecture of clear cells with glycogen containing cytoplasm and tubular or ductal structures. There may be a large or small representation of cells showing squamoid differentiation. However, a diversity of cell types, such as polygonal cells, clear cells, and spindle cells may be seen [1,2]. The cells express the high molecular weight cytokeratins CK5/6 and CK7, as well as p63, androgen receptor, estrogen receptor, and sometimes Her-2/neu. Ki-67 and p53 staining may be useful histologic parameters [3,6]. Even after the complete excision MNH has a potential for local recurrence, tends to metastasize, and often cause death [7]. In a report of seven cases from Italy, six patients died within 15-45 months of diagnosis [1]. Wide local excision is the treatment of choice with clearances of 2 cm recommended. Selective lymph node dissection is often used. The value of adjuvant radiotherapy has not been confirmed [3]. As early recurrence is common despite the wide excision close follow-up is mandatory [2].

Competing Interests

The authors declare that they have no competing interests

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Authors do not have any conflict of interest.

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