



Malignant Nodular Hidradenoma of Pinna: A Case Report

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ABSTRACT: Malignant tumors of the sweat glands are very rare. Malignant nodular hidradenoma are rare and aggressive tumour arising from eccrine or apocrine sweat glands. Sweat gland tumours that are malignant are quite rare. The histological features of clear cell hidradenoma are similar to those of eccrine poroma and eccrine spiradenoma. The tumor's biological activity is aggressive, with local recurrences occurring in more than half of surgically treated patients

Keywords: Pinna, Sweat gland, Malignant hidradenoma, Soft tissue tumor.

I. INTRODUCTION:

Also known as Malignant clear cell hidradenoma or Clear cell hidradenocarcinoma or Malignant acrospiroma. It is a rare and aggressive tumour arising from eccrine or apocrine sweat glands. It usually presents as a slow growing, solitary, firm, asymptomatic, pink to purple or blue intradermal nodule with or without overlying ulceration. It occurs in 6th or 7th decade of life. Commonly seen in females. Frequent sites of the tumor are head, trunk and extremities. Sweat gland malignant tumours are extremely rare neoplasms

with no distinct clinical features. Any lesion that shows signs of expansion should be suspected and its status confirmed through histological examination. Because surgery is the only effective treatment, more resection is usually required, with at least 2-cm clear margins.

II. CASE REPORT:

A 62yr old female who is a housewife presented with a verrucous mass on the right ear for 6months which is of size 1.5x1cm in cymba concha. It has irregular surface, sessile, non tender and does not bleed on touch, without any palpable lymph node. Sections show skin with an ulcerated tumour composed of large polygonal cells forming nests and occasional glands. The cells have round to oval vesicular pleomorphic nuclei and abundant eosinophilic cytoplasm with prominent squamous metaplasia. Many mitotic figures are seen. Report was suggestive of Malignant nodular hidradenoma. Patient underwent wide local excision with 2cm margin and reconstruction of pinna with postauricular flap and specimen sent for biopsy. Biopsy report was suggestive of malignant nodular hidradenoma. Patient was followed up for 1 year.



Fig 1: Malignant Hidradenoma of pinna

III. DISCUSSION:

Malignant hidradenoma is usually found in the scalp, face or anterior surface of the trunk. These tumours typically occur as solitary nodules measuring 1 to 5 cm, with or without central

ulceration. Histologically, it is a multinodular solid malignant neoplasm, showing ductal structures and intracytoplasmic tubular vacuoles, with areas of tumour necrosis. The tumour cells have similar morphology as those of nodular hidradenoma, but



may also show cytonuclear atypia and increased mitotic activity. Apocrine differentiation is frequently seen. Evidence of nodular hidradenoma remnants may be present. An infiltrative growth pattern is not universally seen, and the carcinoma is distinguished from benign hidradenoma by the presence of brisk mitotic activity and cellular pleomorphism. The tumour cells stain positively for LMWK, and the ductal structures/luminal surfaces are highlighted by EMA(Epithelial Membrane Antigen) an CEA(Carcinoembryonic antigen). Although these rare tumours do not always behave aggressively, they may have an aggressive course with metastasis and/or local recurrence. The primary treatment is wide local excision with or without lymph node dissection.

Mostly involving the extremities, however, involvement of the trunk, abdomen, and pelvis has been reported with a peak incidence in the sixth decade (1). Rare occurrences in the salivary and thyroid glands have been reported and only a single case of an external ear lesion appears in the literature (2).

Soft tissue tumor recurrence rates following surgery are comparatively much lower, 6%. Given the benign nature of most lesions, the recommended approach to treatment involves conservative surgical resection with free margins and follow-up for surveillance (3).

For both initial disease and local recurrences, Wong et al. (4) advocated for a wide surgical resection with at least 2 cm of clear margins.

IV. CONCLUSION

Clear cell hidradenoma itself is a rare tumour and its malignant transformation being even more rare. Also, the pinna of the ear is an unusual site of presentation.

REFERENCES:

- [1]. O'Connell JX, Wehrli BM, Nielsen GP, Rosenberg AE. Giant cell tumors of soft tissue: a clinicopathologic study of 18 benign and malignant tumors. *The American journal of surgical pathology*. 2000 Mar 1;24(3):386-95.
- [2]. Ismail-Koch H, Ismail A, Heathcote K, Geyer M, Moore I, Prior M. Extrasosseous giant cell tumour of the pinna presenting in a child: case report and review of the literature. *Int J Otorhinolaryngol*. 2009;12:1-6.
- [3]. Folpe AL, Morris RJ, Weiss SW. Soft tissue giant cell tumor of low malignant potential: a proposal for the reclassification of

malignant giant cell tumor of soft parts. *Modern pathology: an official journal of the United States and Canadian Academy of Pathology, Inc*. 1999 Sep 1;12(9):894-902.

- [4]. Wong TY, Suster S, Nogita T, Duncan LM, Dickersin RG, Mihm Jr MC. Clear cell eccrine carcinomas of the skin. A clinicopathologic study of nine patients. *Cancer*. 1994 Mar 15;73(6):1631-43.
- [5]. Liapakis IE, Korkolis DP, Koutsoumbi A, Fida A, Kokkalis G, Vassilopoulos PP. Malignant hidradenoma: a report of two cases and review of the literature. *Anticancer research*. 2006 May 1;26(3B):2217-20.
- [6]. Biddlestone LR, McLaren KM, Tidman MJ. Malignant hidradenoma—a case report demonstrating insidious histological and clinical progression. *Clinical and experimental dermatology*. 1991 Nov;16(6):474-7.