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EYELID CHONDROID SYRINGOMA: UNVEILING A RARE EYELID TUMOR

Ophthalomology

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ABSTRACT

Chondroid syringoma is a rare, benign mixed tumor featuring sweat gland elements within a cartilaginous stroma. It predominantly affects middle-aged adults and is usually found in the head and neck region. Its occurrence in the eyelid is exceedingly rare. We report the case of a eighteen-years-old female with a slow-growing painless mass in the left lower eyelid over five years. Her rest ocular examination was within normal limits. Mass was successfully excised surgically under local anesthesia. Histopathological examination confirmed the diagnosis of chondroid syringoma. This case highlights the importance of recognizing this rare tumor in the differential diagnosis of eyelid lesions and emphasizes the necessity of complete excision to prevent recurrence or malignant transformation.

KEYWORDS

Chondroid syringoma, benign mixed tumor, slow growing mass, histopathological examination, complete excision.

INTRODUCTION

Chondroid Syringoma was initially described by Billroth and subsequently named by Hirsch and Helwig[1] in 1961, this benign tumor is characterized by a proliferation of tubular and ductular eccrine or apocrine epithelium set within a cartilaginous stroma. It consists of both epithelial and mesenchymal components, with glandular structures embedded in a distinctive chondroid matrix. Histologically, chondroid syringoma features nests of cuboidal or polygonal cells, interconnecting tubuloalveolar structures, ductal formations, occasional keratinous cysts, and a variable stroma. The apocrine variant, which is more common than the eccrine type, exhibits branching lumina lined by a double layer of epithelial cells[2,5]. Although malignant transformation is rare, it can occur, particularly in larger tumors, with signs such as rapid growth, ulceration, and necrosis indicating potential malignancy. Accurate diagnosis of chondroid syringoma depends on histopathological evaluation, which is crucial for differentiating it from other benign adnexal tumors and malignant conditions. The benign nature of the tumor necessitates complete surgical removal to prevent recurrence or possible malignant change. This case highlights the rarity of chondroid syringoma in the eyelid and the necessity of including it in the differential diagnosis of eyelid tumors.

CLINIVAL SUMMARY

An eighteen year old female visited the ophthalmology outpatient department with a history of mass in the lower lid of left eye since last five years. The mass was 1×0.5 cm, gradually increasing in size and painless in nature. The mass was firm to hard in consistency and was not adherent to any underlying tissues (Fig.1). No evidence of similar lesions elsewhere were seen on her body. Therewas no significant history of any ocular trauma or any surgical intervention done recently. Patient was well built and adequately nourished without any systemic disease. On ocular examination vision in both eyes was 6/6 on Snellen's chart. Both eyes rest anterior segment examination was within normal limits & extraocular movements were present in all gazes without any complaints of pain or diplopia in any gaze. Both eyes intraocular pressure was also within normal limits. Dilated fundus examination and Ultrasonography (B- scan) showed no abnormality. Her infectious and autoimmune workups were grossly negative. The clinical presentation favored a benign etiology, but excisional biopsy was deemed necessary for definitive diagnosis.

Complete surgical excision of the mass was performed under local anesthesia. A meticulous dissection was performed to ensure complete removal of the lesion with clear margins (Fig.2). The mass was excised in toto and sent for histopathological examination. The surgical site was closed with fine sutures, and an antibiotic ointment was applied. The excised specimen was processed and examined histologically. Histopathological analysis revealed a well- circumscribed, firm to hard,bosselated, ovoid tissue mass of diameter 1cm.

Fig.1 Mass 1×0.5 cm present on lower eyelid of left eye.

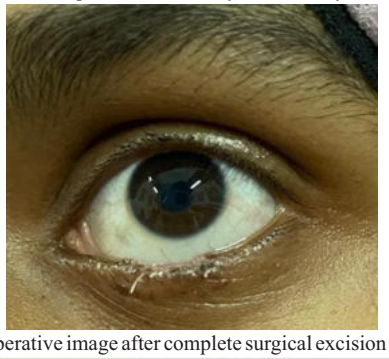

Fig.2 Postoperative image after complete surgical excision of mass

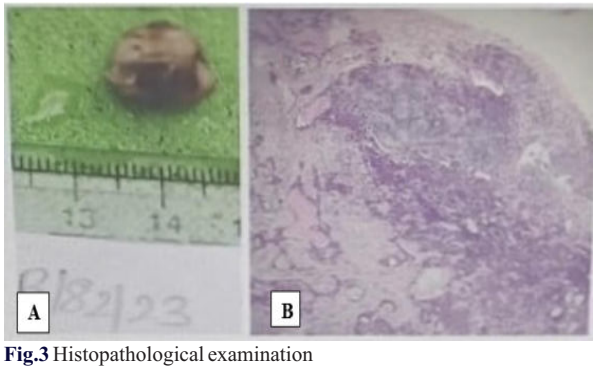

Fig.3 Histopathological examination

A) Gross Findings: Firm to hard, bosselated, ovoid tissue mass of diameter 1cm

B) Histopathology: Bilayered epithelium with tubules and cystic areas seen in chondroid and myxoid stroma.

Section studies showed well circumscribed lesion composed of tubules and cystic areas lined by bilayered epithelium seen in chondroid and myxoid stroma. Few areas with metaplastic adipocytic tissue, keratinous cysts and lymphoid aggregates were seen. No mitotic activity or areas of necrosis were seen (Fig.3)

The analysis identified a benign adnexal tumor indicative of chondroid syringoma, The patient's postoperative course was uneventful. She was prescribed topical antibiotics along with a course of oral antibiotics and analgesics. Sutures were removed after one week, and the surgical site showed good healing with minimal scarring.The patient was followed up at regular intervals to monitor for any signs of recurrence. At the six months follow up visit, she remained asymptomatic with no evidence of recurrence or complications. Her visual function remained intact, and she expressed satisfaction with the cosmetic outcome.

DISCUSSION

Chondroid syringoma, also known as a dermal duct tumor, is a rare mixed skin tumor. The clinical presentation of chondroid syringoma is often non-specific, characterized by a slow-growing, painless, and firm nodule. Although the exact cause of chondroid syringoma remains unclear, genetic studies have suggested rearrangements involving the pleomorphic adenoma gene 1 (PLAG1), with recent research identifying fusion genes NDRG1-PLAG1 and TRPS1-PLAG1 linked to the tumor[4].

Due to its benign nature and indolent growth, it may go unnoticed for several years, as seen in this case[3]. Differential diagnosis includes other benign adnexal tumors, cysts, neurofibroma, dermoid cysts, sebaceous cysts, dermatofibroma, pleomorphic adenoma of the salivary glands, basal cell carcinoma and occasionally, malignant lesions. Accurate diagnosis of chondroid syringoma depends on histopathological evaluation, which is crucial for differentiating it from other benign adnexal tumors and malignant conditions[6]. Therefore, histopathological examination is crucial for accurate diagnosis. The surgical excision provided both therapeutic and diagnostic benefits, confirming the

benign nature of the lesion and alleviating the patient's concerns. Incomplete excision can lead to local recurrence, highlighting the need for thorough surgical intervention and long-term follow-up is recommended to monitor for any signs of recurrence or malignant change.

CONCLUSION

In summary, this case highlights the exceptional rarity of chondroid syringoma, especially in the context of eyelid tumors, and underscores the importance of considering this diagnosis in the evaluation of eyelid masses. Accurate and timely diagnosis, coupled with effective surgical intervention, is crucial for preventing recurrence and addressing the risk of malignant transformation. The successful management and follow-up of this case add valuable information to the existing literature on this rare tumor and stress the need for increased awareness among healthcare professionals. Although chondroid syringoma is typically benign, it has the potential to become locally invasive if the capsule is compromised, and, while rare, malignant transformation can occur. This case serves as a reminder of the importance of including rare benign adnexal tumors in the differential diagnosis of persistent eyelid swellings, particularly in younger patients, and underscores the necessity for comprehensive evaluation and management.

Acknowledgments

We would like to thank the patient for this cooperation and for consenting to the publication of the photographs.

Conflicts of Interest

The authors declare no conflicts of interest related to this case report.

REFERENCES

1. Hirsch, P., & Helwig, E. B. (1961). Chondroid syringoma: Mixed tumor of skin, salivary gland type. Archives of Dermatology, 84(5), 835-847. DOI: 10.1001/archderm.1961.01580110113018.
2. Gonzalez-Campora, R., Vázquez-Ramírez, F. J., & Burgos, E. C. (2002). Apocrine and eccrine mixed tumors of the skin (chondroid syringoma). American Journal of Dermatopathology, 24(4), 333-336. DOI: 10.1097/00000372-200208000-00005.
3. Barnes, L., & Pietruszka, M. (1978). Chondroid syringoma:Clinicopathologic study of 6 cases and review of the literature. Journal of Surgical Oncology, 10(4), 329-336. DOI: 10.1002/jso.2930100406.
4. Kazakov, D. V., Spagnolo, D. V., & Kutzner, H. (2012). Chondroid syringoma and its genetic underpinnings: The role of PLAG1 and its fusion partners NDRG1 and TRPS1. American Journal of Dermatopathology, 34(4), 356-361. DOI:10.1097/DAD.0b013e318234b0dc.
5. Walvekar PV, Jakati S, Bothra N, Kaliki S. Isolated eyelid chondroid syringoma: a study of two cases. BMJ Case Rep. 2021 Dec 30;14(12):e245354. doi: 10.1136/bcr-2021-245354. PMID: 34969791; PMCID: PMC8719128.
6. Varsori M, Dettwiler S, Chaloupka K. Syringome chondroïde de la paupière: à propos d'un cas [Eyelid chondroid syringoma: a case report]. J Fr Ophtalmol. 2007 Jan;30(1):e3. French. doi: 10.1016/s0181-5512(07)89556-8. PMID: 17287665.