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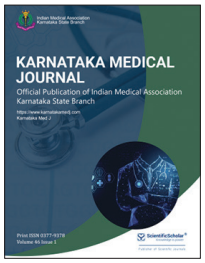

Case Report

Decoding persistent parotid swelling: A case of surgical resolution in a 35-year-old female

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ABSTRACT

This case report describes a 35-year-old female with a 1-year history of painless swelling in the left parotid region. The swelling, progressively increasing in size, was diagnosed as a pleomorphic adenoma based on clinical and cytological findings. This report provides an overview of the diagnostic evaluation and details the step-by-step surgical management of the patient.

Keywords: Chronic parotitis, Pleomorphic adenoma, Parotid swelling, Fine needle aspiration cytology, Parotidectomy

INTRODUCTION

Swelling in the parotid gland can result from various aetiologies, including benign tumours such as pleomorphic adenomas, infections and inflammatory processes. Pleomorphic adenomas are the most common benign tumours of the parotid gland and accurate diagnosis is crucial for effective management.[1,2] Chronic parotitis, while less common, can present similarly and requires differentiation through clinical examination and imaging.[3] This case report highlights the diagnostic and surgical management of a pleomorphic adenoma, illustrating the need for a comprehensive approach in treating parotid gland tumours.

CASE REPORT

A 35-year-old female presented with a progressive, painless swelling in the left parotid region that had been present for 1 year. Initially small, the swelling gradually increased in size [Figure 1]. The patient sought consultation at a private clinic and was subsequently referred to our casualty. Clinical examination revealed a mild, non-tender swelling approximately 5 × 5 cm in size, located in the left parotid region. Fine-needle aspiration cytology was performed, which confirmed the diagnosis of pleomorphic adenoma. The patient was then scheduled for surgical intervention.

Histopathology report

Histopathological examination revealed a well-encapsulated tumor composed of epithelial and myoepithelial cells arranged in duct-like structures, with areas of chondromyxoid stroma, confirming the diagnosis of pleomorphic adenoma. No evidence of malignancy was detected.

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Surgical procedure

The patient was prepared for surgery under general anaesthesia. A modified S-shaped incision was made from the preauricular region to the upper neck, following natural skin lines to minimise scarring [Figure 2]. Dissection of the skin and subcutaneous tissues was carried out to expose the parotid gland [Figure 3]. The superficial lobe of the gland was identified and careful dissection was performed to isolate the tumour. The pleomorphic adenoma was then excised along with a margin of surrounding glandular tissue to ensure complete removal [Figure 4]. Haemostasis was achieved by cauterising bleeding vessels. The parotid gland was inspected to confirm the absence of residual tumour. The incision was closed in layers with sutures, and post-operative care included pain management and antibiotic therapy [Figure 5].

Follow-up

The patient had an uneventful postoperative recovery with no complications. There were no signs of facial nerve

Figure 1: Initial swelling – A 35-year-old female presented with a progressive, painless swelling in the left parotid region, initially small but gradually increasing in size over 1 year.

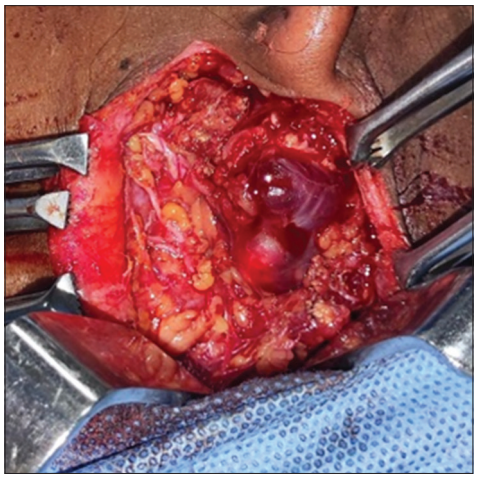

Figure 3: Exposure of parotid gland – dissection of the skin and subcutaneous tissues was performed to expose the parotid gland.

Figure 2: Surgical incision– A modified S-shaped incision was made from the preauricular region to the upper neck, following natural skin lines to minimise scarring.

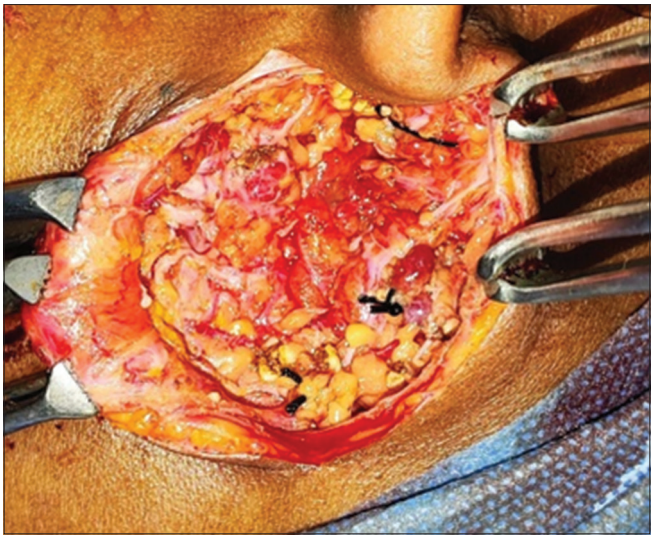

Figure 4: Tumour excised – The superficial lobe of the parotid gland was identified. The pleomorphic adenoma was excised along with a margin of surrounding glandular tissue to ensure complete removal.

Figure 5: Post-operative closure – the incision was closed in layers with sutures. Post-operative care included pain management and antibiotic therapy.

dysfunction, infection, or hematoma. The surgical site healed well, and the patient remained asymptomatic during the six-month follow-up period.

DISCUSSION

Pleomorphic adenomas are the most common benign tumours of the parotid gland, accounting for approximately 60–80% of all salivary gland tumours.[1,2] Surgical excision is the treatment of choice, as it reduces the risk of recurrence and ensures the complete removal of the tumour.[3] Recent literature emphasises the importance of meticulous surgical technique and long-term follow-up to manage these tumours effectively and monitor for potential complications or recurrence.[4-6] This case underscores the need for thorough evaluation and careful surgical planning to achieve optimal outcomes.

CONCLUSION

This case report illustrates the critical role of accurate diagnosis and surgical intervention in the management of pleomorphic adenomas. Detailed surgical planning and execution are essential for achieving successful results and reducing the likelihood of recurrence.

Authors' contributions

CHM: Conceptualization, methodology, writing original draft; KS: Data collection, formal analysis, writing review and editing; DPK: Investigation, resources, supervision; SD: Validation, visualization, project administration.

Ethical approval

Institutional Review Board approval is not required.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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