

Palatal Pleomorphic Adenoma Mimicking a Subperiosteal Abscess: A Case Report

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Abstract

Case Report

Background: Pleomorphic adenoma is the most frequent benign salivary gland tumor and commonly involves minor salivary glands of the palate, where it can mimic infectious processes and delay appropriate management. **Case presentation:** A 25-year-old patient presented with a firm palatal mass initially treated as a palatal/subperiosteal abscess with antibiotics and incision–drainage; imaging showed no osseous abnormality adjacent to the lesion and intraoral excision under local anesthesia achieved en bloc removal of a well-encapsulated mass. Histopathology revealed a biphasic proliferation with small basaloid epithelial cells and elongated spindle cells arranged in poorly circumscribed clusters within an abundant remodeled stroma, consistent with pleomorphic adenoma. **Outcome:** Healing was uneventful at day 10, with no early complications. **Discussion:** Palatal pleomorphic adenoma often presents as a firm submucosal mass on the posterolateral hard palate with frequently normal overlying mucosa, and may be mistaken for acute infections; MRI is the imaging modality of choice for large lesions to assess extent and benign versus malignant features. **Conclusion:** Early consideration of salivary tumors in palatal masses, timely biopsy, and complete surgical excision are essential to avoid diagnostic delay and reduce recurrence risk.

Keywords: Pleomorphic adenoma, Minor salivary glands, Case report.

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INTRODUCTION

Pleomorphic adenoma is the most common benign salivary gland neoplasm and constitutes a large share of salivary tumors in clinical practice. [1]

On the palate, it often arises from minor salivary glands and can clinically overlap with infectious entities.

Typical palatal presentation is a firm, submucosal mass along the posterolateral hard palate, with intact mucosa in many cases and occasional erythema or superficial ulceration. This appearance can mimic palatal or subperiosteal abscesses, prompting drainage or antibiotics as initial management. [2]

Early differentiation between neoplastic and infectious lesions is essential to avoid delays and incomplete treatment.

This case report presents a palatal pleomorphic adenoma initially managed as a subperiosteal abscess and emphasizes diagnostic pitfalls and key surgical principles, including biopsy strategy, complete excision with clear margins, and recurrence prevention

CASE REPORT

A 25-year-old male in good general health was referred for a persistent palatal swelling that failed to resolve after antibiotic therapy and incision-drainage performed for a presumed palatal abscess.

Extraoral examination showed no lymphadenopathy, while intraoral assessment revealed a firm palatal mass with slightly ulcerated mucosa on the posterolateral palate. (fig.1)

¹ Masson s. d.-b

² Khurram et al., 2017



Figure 1: Intraoral view. A firm palatal mass covered by slightly ulcerated mucosa

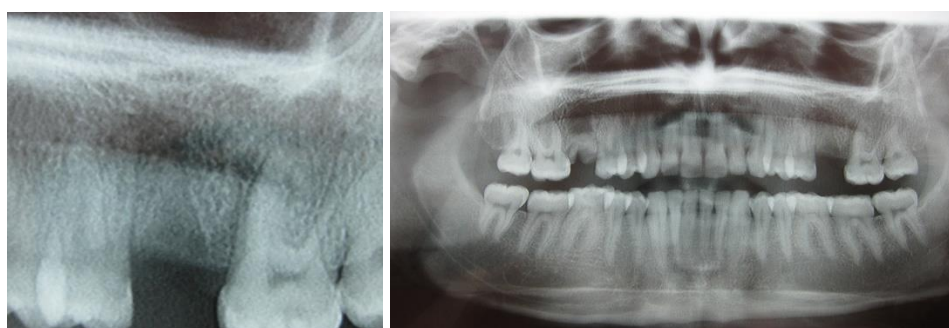


Figure 2: Panoramic and periapical radiographs. Healing extraction site of tooth 16 with no osseous abnormalities adjacent to the lesion

The socket of the recently extracted maxillary first molar (16) was healing without radiographic bone changes adjacent to the lesion. Panoramic and periapical radiographs demonstrated no osseous involvement beneath the lesion, supporting a minor salivary gland origin rather than an odontogenic infection. (fig.2)

Under local anesthesia and intraoral approach, a linear superficial incision was made with a No. 11

blade over the most prominent aspect of the lesion, permitting atraumatic, en bloc removal of a well-encapsulated mass.

Submucosal dissection was carried out in the extracapsular plane with careful preservation of the capsule, followed by circumferential release and delivery of the specimen in one piece. (fig.3)

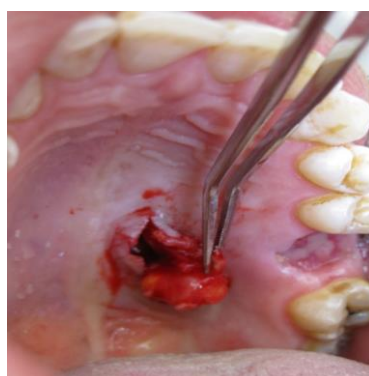


Figure 3: A superficial incision with a No. 11 blade enabled en bloc removal of a well encapsulated mass

Hemostasis was secured, the field was irrigated, an impression on the underlying bone was noted, followed by conventional suturing and uneventful early

healing and the mucosal flap was repositioned and closed with interrupted resorbable sutures (fig.4)



Figure 4: Repositioning of the mucosal flap and closure with 3-0 interrupted sutures

Histopathology showed a polymorphous cell proliferation composed of small, dark epithelial cells and spindle-shaped elongated cells forming poorly circumscribed clusters, with foci of squamous metaplasia

and keratin and a very abundant remodeled stroma, consistent with pleomorphic adenoma; no features of malignancy were identified. (fig.5)

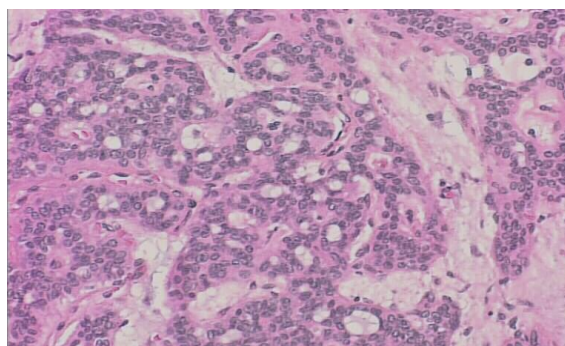


Figure 5: Hematoxylin-eosin stain showing cytologic pleomorphism with small basaloid epithelial cells and elongated spindle cells arranged in poorly circumscribed clusters

The postoperative course at day 10 demonstrated satisfactory mucosal healing without complications, corroborating adequate local control after complete excision.

DISCUSSION

Minor salivary gland pleomorphic adenoma of the palate often presents as a slow-growing, firm submucosal mass that can be mistaken for a palatal abscess when small and recent; lack of response to antibiotics and drainage should prompt reconsideration of a neoplastic process and appropriate imaging or excision biopsy. [3]

For large lesions, CT and especially MRI are recommended to delineate local extension and contribute to benign versus malignant characterization, although in compact, resectable palatal masses, primary excision with histology is frequently both diagnostic and therapeutic. [4] Recurrence risk relates to pseudopodial extensions and variable encapsulation, and although malignant transformation to carcinoma ex-pleomorphic

adenoma is uncommon (<5% overall; higher rates reported in long-standing cases), complete excision with attention to palatal margins and, for some authors, removal of overlying mucosa and electrocautery of the bony bed is advocated to minimize recurrence in this site. [5]

CONCLUSION

Pleomorphic adenoma of the palate can closely mimic a palatal abscess, leading to inappropriate incision-drainage and delayed definitive care; persistent palatal swellings unresponsive to antibiotics should prompt consideration of a minor salivary gland tumor and timely surgical management. En-bloc excision with attention to palatal margins, followed by histopathological confirmation, achieves local control and minimizes recurrence, while long-term surveillance remains prudent given the uncommon but recognized risk of malignant transformation in long-standing or recurrent disease

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³ Khurram *et al.*, 2017

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REFERENCES

1. Khurram, S. A., Barrett, A. W., & Speight, P. M. (2017). Diagnostic difficulties in lesions of the minor salivary glands. *Diagnostic Histopathology*, 23(6), 250-259. <https://doi.org/10.1016/j.mpdhp.2017.04.008>
2. Masson, E. (s. d.-a). *Affections vélopalatines*. EM-Consulte. Consulté 5 octobre 2025, à l'adresse <https://www.em-consulte.com/article/20286/affections-velopalatines>
3. Masson, E. (s. d.-b). *Profil épidémiologique des tumeurs des glandes salivaires dans un CHU tunisien*. EM-Consulte. Consulté 5 octobre 2025, à l'adresse <https://www.em-consulte.com/article/173836/profil-epidemiologique-des-tumeurs-des-glandes-sal>
4. [한문] *Stomatologie gériatrique*. (s. d.). Consulté 5 octobre 2025, à l'adresse <https://scienceon.kisti.re.kr/srch/selectPORSrchArticle.do?cn=NART67561251>