CASE REPORT

# Pleomorphic Adenoma: A Report of Two Cases

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## Abstract

**Introduction:** Pleomorphic adenomas (PA) are the most common benign salivary gland neoplasm and they can occur in the submandibular, sublingual and minor salivary glands. The most common areas in the mouth are the palatal region, upperlip, buccal mucosa, floor of the mouth, lingual tonsil and retromolar regions. The aim of this case report is to present cases of PA in two different locations.

**Clinical presentation:** Case 1: A 58-year-old female patient without any systemic disease was referred to our clinic with complaints of swelling and pain in the retromolar region. Excisional biopsy was performed under local anesthesia. The lesion was diagnosed as PA as a result of histopathological examination. Case 2: A 34-year-old male patient with out any systemic disease was referred with the complaint of swelling in the palatal region. The lesion was removed under local anesthesia and the pathology result was PA.

**Management and prognosis:** No recurrence or complication was observed during the follow-up of the patients. If no medical intervention is made in the early stages, PA can reach very large sizes and transform into a malignant form.

**Keywords:** Pleomorphic adenoma, Salivaryglands, Swelling, Tumor

## Introduction

Salivary gland tumors are rare and account for 3% to 4% of tumors of the head and neck region. About 80% of salivary gland tumors are benign[1]. Pleomorphic adenoma (PA) is the most common benign salivary gland neoplasm and they can occur in the submandibular, sublingual and minor salivary glands, often in the parotid gland. PA usually presents as a slowly progressive, asymptomatic swelling[2,3]. Neck lymphadenopathy and nerved am age are not usually seen[(1)].

The most common areas in them out hare the palatal region, upper lip, buccal mucosa, floor of the mouth, lingual tonsil and retromolar regions(4). It is most common between the ages of 40-60 (5). The occurrence of PA in children is extremely rare(6, 7). Diagnosis of PA is made by radiographic and tissue samples(8).

The aim of this case report is to present PA cases in two different locations in patients of several ages and genders.

## Case Reports

**Case 1:** A 58-year-old female patient without any systemic disease was refer red to Ordu University Oral and Maxillofacial Surgery Department with complaints of swelling and pain in the retromolar region (Figure 1. -A). The patient reported that the swelling progressed slowly. In the extraoral examination of the patient, there were no findings and enlarged lymphnodes. It was observed that there was no fluid in the aspiration made from the area with swelling area 1 cm wide. The absence of fluid from aspiration eliminated diagnoses such as cyst, abscess, mucocele. The mucosa over the lesion was seen normally. Lipoma or pleomorphic adenoma was considered as provisional diagnosis. Excisional biopsy of the lesion was planned. Excisional biopsy was performed under local anesthesia. The lesion was enuclated with the capsule (Fig. 1. -B,C). The wound was sutured primarily with the 3-0 Vicryl suture. The patient was prescribed antibiotics, analgesic and mouthwash postoperatively. The lesion was diagnosed as PA with clear margins as a result of histopathological examination (Fig. 3. -A,B). In the sections, myoepithelial and ductal cells are observed in the chondromyxoid stromal ground with capsule structure.

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**Case 2:** A 34-year-old male patient without any systemic disease with the complaint of swelling in the palatal region to Ordu University Oral and Maxillofacial Surgery Department (Figure 2. -A). The patient was referred to us with the diagnosis of palatal abscess from the primary health care center. The patient reported that there was no pain in the swelling area 3 cm wide. It was observed that there was no fluid in the aspiration made from the area with swelling area. This eliminated the option of cyst or abscess. The overlying mucosa of the lesion was seen normally. Pleomorphic adenoma and schwannoma were considered as preliminary diagnosis. Excisional biopsy of the lesion was planned. The lesion was removed under local anesthesia with the capsule and overlying mucosa. The wound area was left for secondary healing by suturing gauze-iodoform (Figure 2. -B, C). Histopathological examination result was PA with clear margins (Figure 3. -B,C). Histopathological examination shows, chondromysoidmatric epithelial, myoepithelial and stromal components were observed together. Any complications were not observed at the 1st postoperative month (Figure 2. -D).

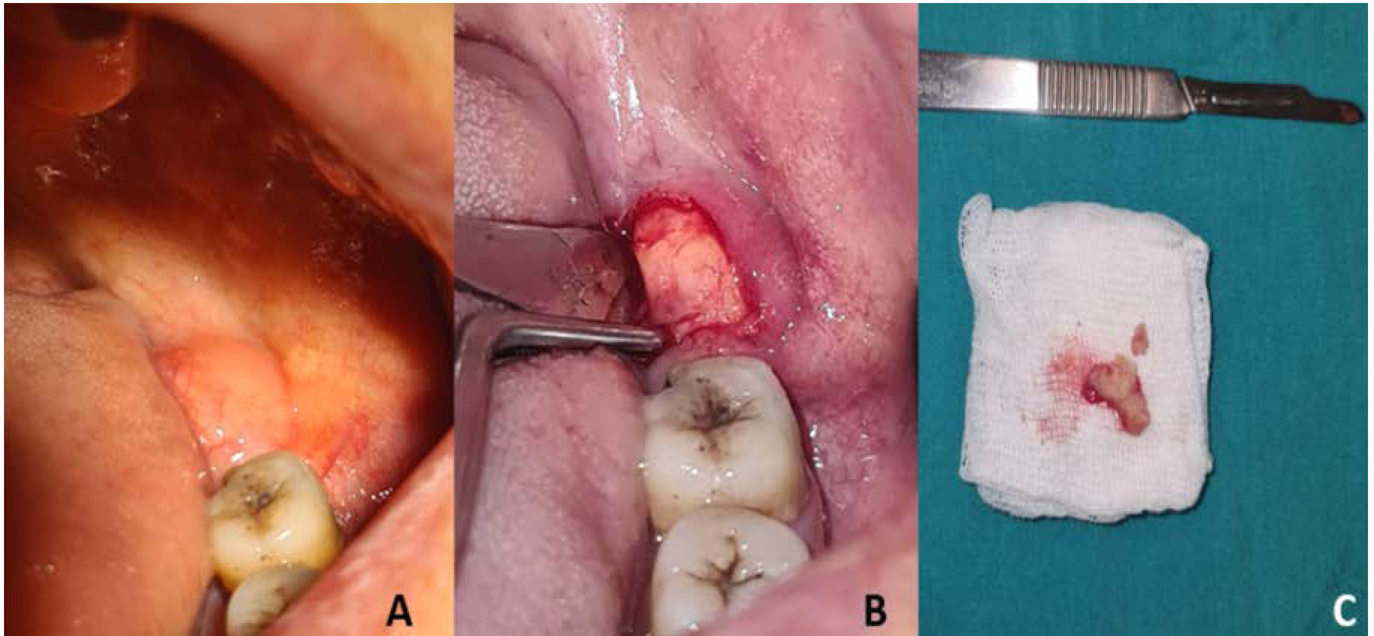


**Fig. 1: A)** Preop photography, **B)** Dissection of the tumor without perforating the capsule, **C)** Enucleated tumour.

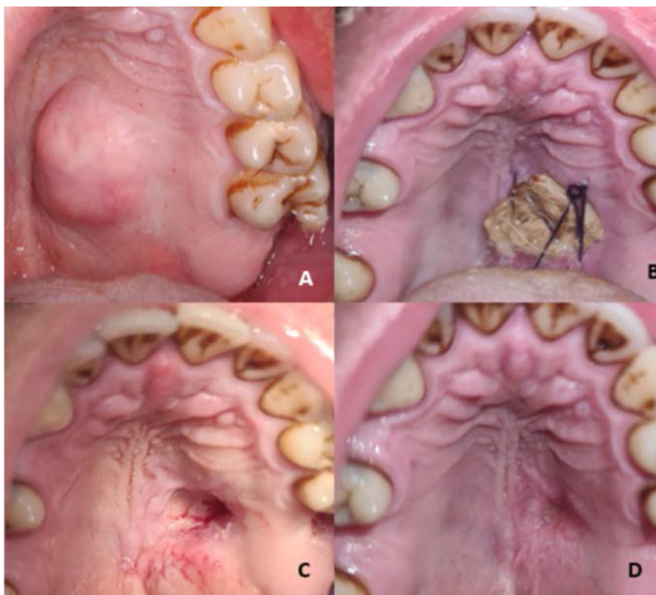


**Fig. 2: A)** Preoperative image, **B)** Postoperative first week control, **C)** Postoperative second week control, **D)** Postoperative first month control.

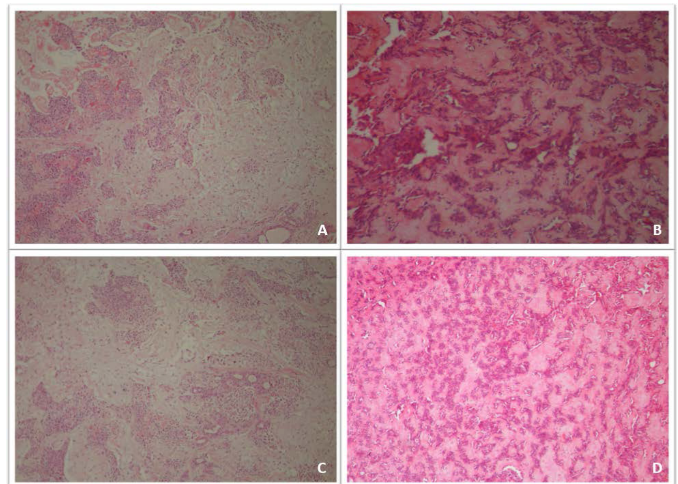


**Fig. 3: A)** Case 1-HE x100, **B)** HE x200, **C)** Case 2 HE x100, **D)** Case 2 HE x200. Chondromyxoid matrix epithelial, myoepithelial and stromal components are observed together.

## Discussion

Salivary gland tumors usually involve the major salivary glands (usually parotidgland) and rarely the minor salivary glands. The most common areas in the minor salivary glands are the palate (42. 8-68. 8%) and the upper lip (10%). Few cases have been reported in rare intraoral locations such as the oropharynx (2. 5%) and retromolar area (0. 7%)(5, 9, 10). One of our cases was in the palatal region, which is the most common in the mouth, while the other was in the retromolar region, which is very rare. Radiographically, computed tomography scanning is ideal for detecting lesion size, bone resorption, and invasion, while magnetic resonance imaging (MRI) is helpful in detecting soft tissue extension(11).

Recurrence of PA is mainly due to rupture of the tumor capsule or incomplete resection during surgery(4). In general, recurrence is rare after total resection of intraoral PA (12). In our surgeries the lesion was enucleated with capsule. No recurrence was found in the 3-month follow-up of the female patient and the 1-year follow-up of the male patient. In Almeslet's literature review, the incidence of PA was found to be in gender 8:13 (male:female) (13). Although PA is more common in the 4th and 6th decades, and in females, one of our patients was male and 34 years old.

If no medical intervention is made in the early stages, PA can reach very large sizes and transform into a malignant form (13, 14). However, the risk of malignant transformation is low; 1. 5% in the first 5 years, 9. 5% in the next 15 years(15).

## Conclusion

As a result, PA is found in different regions of the mouth. It can also be seen in patients outside the age ranges reported in the literature. It should be kept in mind in the preliminary diagnosis. In the operation, attention should be paid to its enucleation with its total capsule.

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