Pleomorphic adenoma in an adolescent

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ABSTRACT

Pleomorphic adenoma generally occurs in the 4th and 5th decade of life. The adenoma is an uncommon presentation and is exceedingly rare in children and young adolescents. This case report deals with the diagnosis and surgical management of pleomorphic adenoma in the soft palate region in a young adolescent patient.

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Salivary Gland neoplasms are rare in the pediatric population. Benign tumors make up 80% of salivary masses. Of these, pleomorphic adenomas, also known as mixed tumors (or benign mixed tumors) are the most common solid parotid tumors in children. While pleomorphic adenomas are benign,they have a predilection for recurrence. Additionally, they have the risk of malignant degeneration over time. These properties of pleomorphic adenoma necessitate their accurate diagnosis and appropriate management in children. The purpose of this case report is to present our experience with one pleomorphic adenoma in an adolescent and we hope to contribute to existing guidelines already present for the evaluation and management of these benign lesions throught his clinical experience.[1]

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Case Report

A 19-year-old male patient reported with a swelling in the posterior portion of his palate, which was present for the past 3 months. On examination, the swelling was 2 × 2 cm in dimension, extending anteriorly from the posterior portion



Figure 1: Preoperative intraoral picture of the lesion

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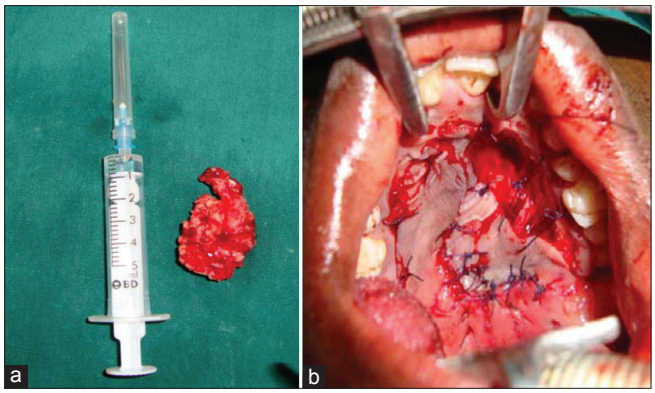


Figure 2: (a) Excised tumor mass (b) Intraoperative picture after reconstruction

of the hard palate, laterally 6 mm away from the left alveolar margin, medially 2 cm from the right alveolar margin, and posteriorly 1 cm anterior to the uvula [Figure 1]. The swelling was firm in consistency, nontender, and had no fixity to the overlying palatal mucosa or the underlying bone. The occlusal radiograph did not reveal any bony erosion.

Incisional biopsy was done, and the lesion was diagnosed as pleomorphic adenoma arising from the minor salivary glands in soft palate region after histopathologic examination and clinical correlation findings.

Treatment plan was formulated. Under general anesthesia, tumor excision with marginal clearance was done [Figure 2a]. Reconstruction of the soft palate defect after the tumor excision was done by using bipedicle rotational and advancement of palatal pedicle flaps [Figure 2b], following which prefabricated surgical splint was placed.

The postoperative recovery was uneventful. The palatal splint was removed after 1 week. On reviewing the patient after 1 month, the reconstructed surgical defect with bipedicled rotation and advancement flaps were healing uneventfully [Figure 3].

Discussion

Pleomorphic adenoma is a mixed salivary gland tumor originating from the epithelial and mesodermal elements.[1] It consists of acini, cords, and thin strands of epithelial cells suspended in a stroma which often has a myxomatous appearance. Pleomorphic adenomas are usually painless, slow-growing tumors. However, some cases exhibiting rapid growth have been reported.[2-4] Lopez-Ce-Drun *et al*. reported a case of pleomorphic adenoma in the palate of a 16-year-old male patient which was noted only 2 weeks before his presentation.[3]

Most cases of palatal pleomorphic adenoma cause not only a bulge in the palatal mucosa, but also erosion of the palatal bone as well.[5] In our case report, the patient presented with a painless swelling in the soft palate, which was noted 3 months before his presentation. There was no palatal bone erosion. There was no associated pain or bleeding or ulceration of



Figure 3: One month postoperative intraoral picture

the lesion. The noninvasive diagnostic aids for salivary gland tumors include ultrasound, computerized tomography, and magnetic resonance imaging. These are useful methods in determining the size of the lesion as well as verifying any bony involvement.[6-8] Overall, the prognosis for pleomorphic adenomas of minor salivary glands is generally considered to be better than that for those arising in the parotid salivary gland.[9] Treatment of pleomorphic adenoma in children is the same as that in adults. We did wide excision of the tumor with clear margins, followed by reconstruction of the defect created by the surgical excision.

The reconstruction technique used was bipedicled palatal rotation and advancement flap, which was used to cover the surgical defect. This technique is versatile for reconstruction of soft palatal defects created by surgical excision of the tumors. Hence, we conclude that this particular case report occurring in a young adolescent is rare and the technique used for reconstruction was versatile and at the same time simple to perform.

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