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A Rare Case of Asymptomatic Adenoid Cystic Carcinoma of the Minor Salivary Glands in an Elderly Patient

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Adenoid cystic carcinoma (AdCC) of the minor salivary glands (MSGs) is a rare cancer, accounting for less than 25% of all neoplasms of the salivary glands and 3% to 6% of head and neck tumors[1] with a higher prevalence in the elderly patients.[2] The MSGs are numerous (700-900) exocrine glands distributed in the submucosa of the oral cavity, nasopharynx, tonsils, hypopharynx, and larynx; the localization of the tumor can determine whether the disease is asymptomatic or symptomatic.[1]

An 87-year-old woman came to our attention in January 2018 lamenting the presence of a mass in the left side of the palatoglossal arch (tonsillar pillar). The patient reported that the mass suddenly appeared and grew quickly during the previous month. The mass was prevalently asymptomatic; the only symptom was occasional dysphagia. In her medical history, the patient reported hypertension under pharmacologic treatment.

At clinical examination of the oral cavity, a pink exophytic mass with a diameter near 2 cm was found adherent to the left tonsillar pillar (Figure 1A). The mass presented a regular surface without ulceration, but with a central white area. No palpable neck lymph nodes were present. A fiberoptic endoscopic evaluation of the upper airways did not highlight additional pathological findings.

The patient underwent computed tomography scan with contrast (Figure 2) that identified a solid expansive capsulated lesion without homogeneous contrast enhancement measuring 2.2 cm × 1.8 cm. The mass was located at the level of left tonsillar pillar with expansion into the left parapharyngeal space without muscle infiltration, despite the cleavage plan was not clearly delimited. Small pathologic lymph nodes were observed near the left internal jugular vein.

The mass was surgically removed via an intraoral approach (Figure 1B); histology was indicative of high-grade AdCC of a MSG. The tumor showed solid nests of small, monomorphic poorly differentiated cells with occasional cribriform

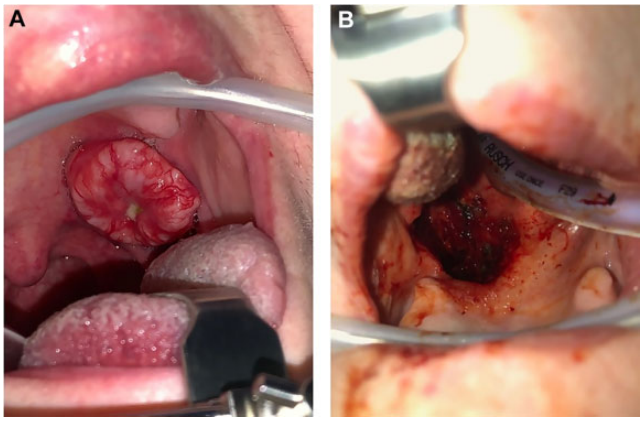

Figure 1. Intraoperative observation of the oral cavity showing a pink exophytic mass with a diameter near 2 cm adherent to the left tonsillar pillar; the mass presented a regular surface without ulceration, but with a central white area (A). The mass was completely excised via an intraoral approach (B).

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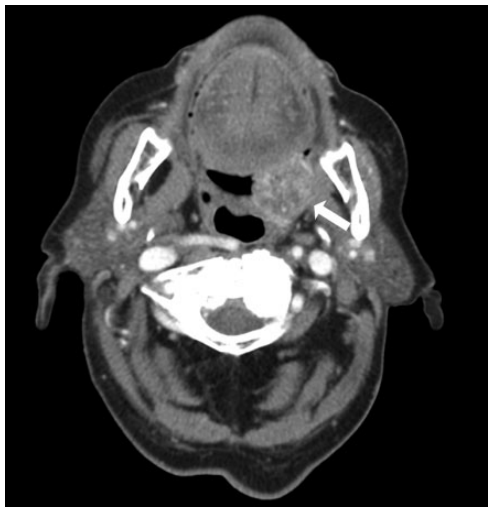

Figure 2. Computed tomography scan showed an expansive capsulated lesion without homogeneous contrast enhancement measuring 2.2 cm × 1.8 cm (white arrow). The mass was located at the level of left tonsillar pillar with expansion into the left parapharyngeal space without muscle infiltration, despite the cleavage plan was not clearly delimited.

arrangement (Figure 3A). Nuclei showed a high mitotic rate, dispersed granular chromatin, and inconspicuous nucleoli when present (hematoxylin and eosin ×430; Figure 3B). Immunohistochemistry showed a positivity for CD117 (Figure 3C), focal positivity for S100 (Figure 3D), and diffuse cytoplasmic positivity for CK7 (Figure 3E).

Postsurgery radiotherapy was not performed because the patient specifically refused additional treatments; a strict follow-up with clinical examination and fiberoptic endoscopic evaluation every 3 months was initiated. The patient was disease free at the last follow-up in July 2019.

AdCC is the most common malignant tumor in the MSG and the second most frequent malignancy in the major salivary glands. The more common location of AdCC of the salivary gland is hard/soft palate,[2-4] as observed in this patient. In the present case, the tumor was characterized by an indolent course and was locally not invasive and well capsulated. The total resection of the mass was sufficient—although in the short term—to avoid disease persistence/recurrence.

AdCC is commonly known as an aggressive and initially asymptomatic tumor,[5] although in our case we did not observe locoregional recurrence or distant metastasis. The initial absence of symptoms may expose patients to the risk to present

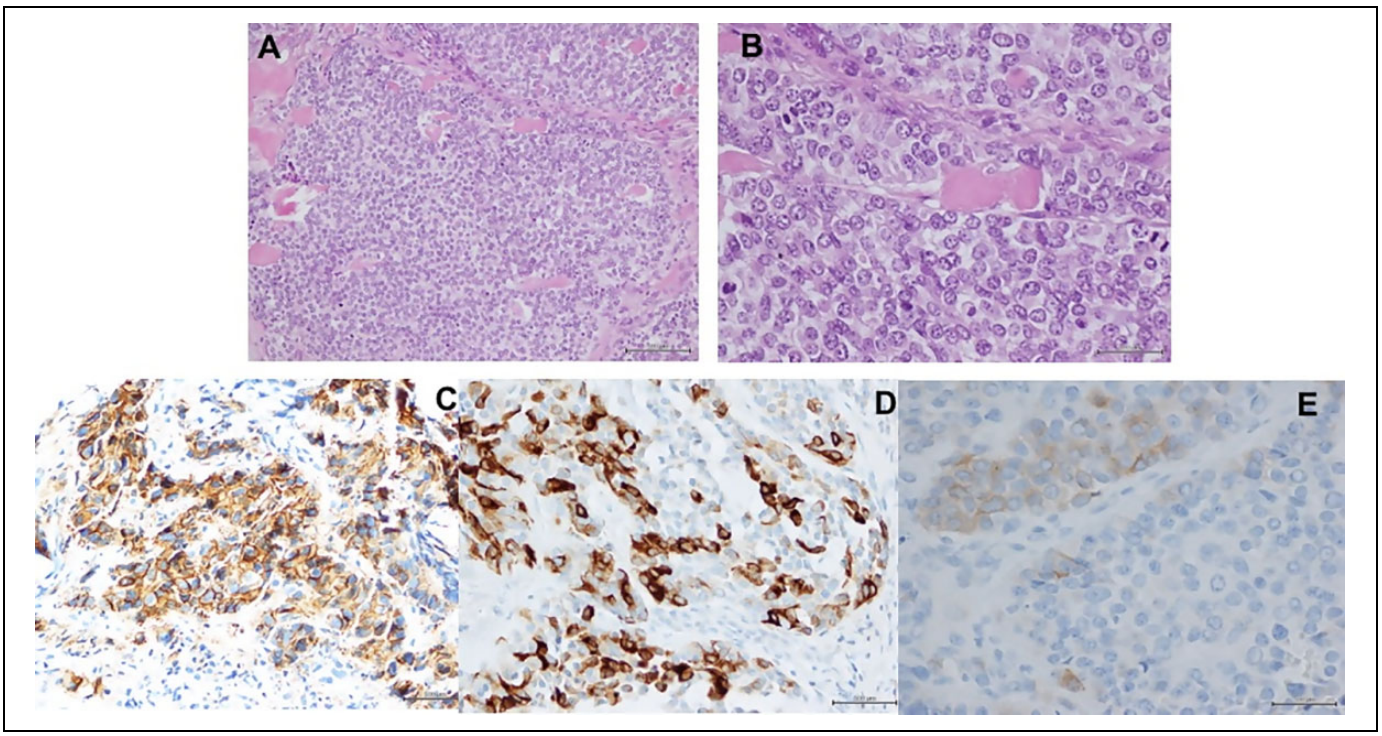

Figure 3. Pathologic features of the tumor. The tumor showed solid nests of small, monomorphic poorly differentiated cells with occasional cribriform arrangement (A). Nuclei showed a high mitotic rate, dispersed granular chromatin, and inconspicuous nucleoli when present (hematoxylin and eosin ×430) (B). Immunohistochemistry showed a positivity for CD117 (C), focal positivity for S100 (D), and diffuse cytoplasmic positivity for CK7 (E).

with tumors in more advanced stages.[1,5,6] Early diagnosis and treatment of AdCC of the MSGs are of utmost importance for the management of this malignant tumor. Radical surgery is the preferred treatment, followed by postoperative radiotherapy for an optimal disease control.

Authors' Note

The data sets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declaration of Conflicting Interests

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