

A GIANT NEGLIECTED PLEOMORPHIC ADENOMA OF THE SUBMANDIBULAR SALIVARY GLAND: A CASE REPORT

Adriana Muradás Girardi¹, Fábio Muradás Girardi²,
Marcele Oliveira dos Santos¹

A 73-year-old Brazilian man from the countryside of Rio Grande do Sul State presented to our head and neck surgery department because of a large tumor on the right submandibular zone. The tumor had increased in size over a 40-year period. There was no manifestation of pain nor signs of dysphagia or dysphonia. The patient was otherwise healthy, but had a history of tobacco use since the age of 12. On examination, the tumor was multinodular, hard, and mobile, and measured about 12 centimeters in its largest diameter (figure 1). Submandibular lymph nodes could not be palpated due to the tumor mass. No other nodes were palpable. The skin had no signs of infiltration. There were no signs of facial palsy or hypomobility of tongue. The clinical diagnosis was of a pleomorphic adenoma (PA). Computerized tomography (CT) showed a large heterogeneous mass involving the right submandibular space and neck levels II-III, crossing the midline about 1 cm, with diffuse calcifications and central hypodensity suggesting necrosis. The epicenter of the tumor was within the right submandibular gland (figure 2). Bony surface of the mandible was within normal limits, although lesion was in contact with it. As tumor seemed resectable on imaging tests and the authors considered lymphoma an unlikely hypothesis, any kind of biopsy was unconsidered. An en bloc resection of the tumor was done with resection of a segment of the overlying skin. During dissection, it was found that the tumor was in intimate contact with the right internal jugular vein, but this structure was able to be preserved. There were no transoperative or postoperative

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¹ Faculdade de Medicina, Universidade Federal do Rio Grande do Sul (UFRGS). Porto Alegre, RS, Brasil.

² Serviço de Cirurgia de Cabeça e Pescoço, Hospital Ana Nery. Santa Cruz do Sul, RS, Brasil.

Corresponding author:

Adriana Muradás Girardi

E-mail: adriana.m.girardi@gmail.com

Universidade Federal do Rio Grande do Sul

Av. Independência, 354, ap 1602.

90035-070, Porto Alegre, RS, Brasil.



Figure 1: Clinical image of a right submandibular mass.

complications, except for inferior permanent palsy of inferior portion of the right side of the orbicularis oris muscle. The surgical specimen weighted 392g, was brownish and opaque, with $10 \times 8.5 \times 8$ cm in greatest dimensions (figure 3). The cut surface was gray and firm, with a huge central area of hyaline degeneration. The diagnosis of PA was confirmed in histopathological examination.

PA is the most common tumor of salivary glands, representing 60-80% and 40-70% of benign major salivary gland and minor salivary gland tumors, respectively¹. There are few cases of giant PA described in literature. Gupta et al.² described several giant PA varying from 1 to 27 kg. Perumal et al.¹ described the largest PA reported until 2012, with $16 \times 15 \times 12$ cm in its greatest diameter. A huge non-salivary gland PA was also already described in nasal septum, with 7.5×3.5 cm in its largest dimension³. In cases of neglected PA the major concern is related to the risk of malignant degeneration¹, which may occur in 1.9 - 20% of cases, especially among long-standing lesions, elderly individuals, and painful or ulcerated tumors in major salivary glands⁴. Submandibular masses make differential diagnosis with salivary gland tumors, soft tissue neoplasms, metastatic cancers, and lymphomas. The long time interval, location and physical examination suggest benignity in the case reported here. Image examinations usually reinforce the clinical diagnosis and help to determine resectability and signs of malignant degeneration. Cytological examination is usually unnecessary, especially in situations like the one presented in this report, since it does not change surgical indication and rarely modifies surgical techniques of tumor resection⁴. With complete resection and no capsule rupture during dissection, surgical treatment is curative in the majority of cases, with low recurrence rates⁵.

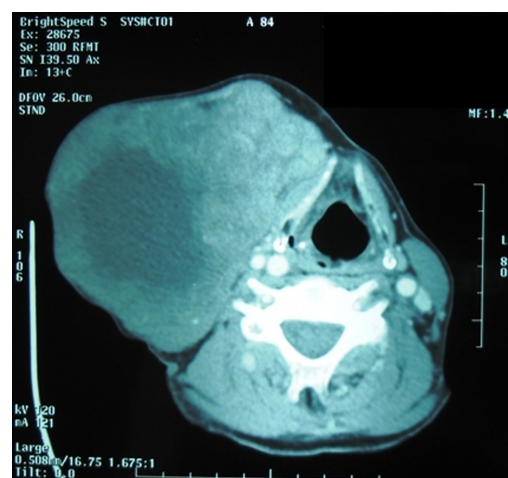


Figure 2: Computerized tomography axial cut of right submandibular mass. Note central hypodensity suggesting necrosis.

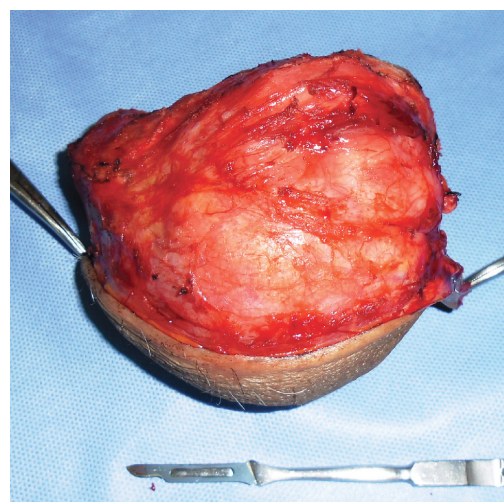


Figure 3: Surgical specimen after removal.

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