

## CASE REPORT

# Angiolipoma of the larynx

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**A**ngiolipoma is a benign lesion of soft tissue. It is a histologic variation of lipoma that occurs in approximately 6% to 17% of the cases of lipoma.<sup>1</sup> Although lipomas are the most common soft tissue tumors, they occur in the head and neck region in 16% of cases.<sup>2</sup> In particular, the cervico-facial location of angiolipoma has been presented in the literature in only 18 cases, with none in the laryngeal area.<sup>1</sup>

We present a unique case of angiolipoma of the larynx with a review of the literature concerning clinical, pathologic, and therapeutic aspects of angiolipomas in the head and neck.

A 71-year-old man arrived to our observation with a 7-month history of a sensation of a foreign body in the throat, dysphonia, and dysphagia.

Fiberoptic laryngoscopy revealed a 2-cm mass located on the left aryepiglottic plica and occupying the piriform sinus of the same side (Fig 1). This lesion was round, rosy in color, and rich in vessels; vocal cord mobility and conformation were preserved. The rest of the head and neck examination was normal. CT scan with contrast demonstrated a homogeneous, solid, round, and low-density mass occupying the left piriform sinus.

Excision of the lesion was performed using a carbon dioxide laser with microscopic techniques. We incised the ipsilateral aryepiglottic plica mucosa to reach the capsule of the mass; submucosal resection of the mass was then performed. Histology revealed “mature adipose tissue with numerous vascular channels and perivascular and interstitial fibrosis (Fig 2).”

Our patient presented no postoperative problems and during the follow-up of seven years no recurrences were revealed.

## DISCUSSION

Angiolipoma is a histologic variation of lipoma, the most common soft tissue tumor. It occurs in 6% to 17% of the cases of lipoma and its predominant characteristic is the presence of proliferating blood vessels.<sup>1,2</sup>

Angiolipoma occurs between 20 and 30 years of age, most commonly in the trunk and extremities, in young men.<sup>3</sup>

Clinically and histologically, this neoplasm can be divided into two groups: noninfiltrating and infiltrating.<sup>3</sup>

The noninfiltrating type is the most common type, presenting as painful subcutaneous nodules; it occurs in multiple sites (79% of cases) and in patients greater than 16 years of age.

Infiltrating angiolipoma is a poorly encapsulated lesion that can infiltrate surrounding tissues and lead to muscular pain and neural deficits. It occurs most commonly in patients about 30 years of age and is usually localized in the lower extremities.<sup>3</sup>

We present a case of noninfiltrating angiolipoma. In the literature there are 18 reported cases of head and neck angiolipoma. The most common site was the cheek (5/18; 27.7%). Other sites were the jaw (3/18; 16.6%), neck (3/18; 16.6%), palate (2/18; 11.1%),<sup>4</sup> nose (1/18; 5.5%), parotid (1/18; 5.5%),<sup>5</sup> tongue (1/18; 5.5%), oropharynx (1/18; 5.5%), and eyelid (1/18; 5.5%).<sup>1-3</sup>

No other case of laryngeal angiolipoma has been previously reported.

Head and neck angiolipomas, if compared with other sites of angiolipoma, present with these unique features: no adolescent patients, male sex predilection, negative family

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**Figure 1** Mass localized on the left aryepiglottic plica.

history of angiolipoma, and absence of multiple tumors or trauma.

Computed tomography of head and neck angiolipoma is characterized by a central low-density mass (lipomatous component) surrounded by areas of contrast enhancement (vascular component). Computed tomography is important to define the extent of angiolipoma. A conclusive diagnosis of angiolipoma is made only after microscopic examination of the resected specimen; fine-needle aspiration is rarely helpful because it is unable to define the vascular component.

Surgical excision is the gold standard for the treatment of the noninfiltrating type, with low rates of recurrence.

We performed surgical excision with the carbon dioxide laser using microlaryngoscopic techniques. The principal advantage of use of the laser in this particular situation was believed to be the ability to obtain excellent hemostasis because angiolipoma is highly vascular.

## CONCLUSIONS

Our case report describes a unique laryngeal localization of the noninfiltrating variety of angiolipoma. Fine-needle aspiration is rarely diagnostic. Surgical removal should effect complete removal to avoid recurrences. Our case demon-



**Figure 2** Thick-walled vessels are seen surrounded by mature adipose tissue. Hematoxylin-eosin staining; original magnification  $\times 40$ .

strates that microlaryngoscopy with the carbon dioxide laser is useful for its advantage of hemostasis. This approach has allowed an enduring result with no recurrence over 7 years.

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