

## CASE REPORT

# Lipoma of the Palatine Tonsil

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Lipomas are benign tumors composed of mature fat cells. They occur frequently in subcutaneous tissue but rarely in the upper aerodigestive tract. Tonsillar lipomas are rare. To our knowledge, there are only six documented cases in the English literature. Here, we present the case of a 46-year-old Taiwanese female with a submerged oval yellowish mass in her left palatine tonsil. She received tonsillectomy and the pathologic diagnosis was tonsillar lipoma. The clinical presentation, management and literature review are also presented. [*J Formos Med Assoc* 2007;106(8):673–675]

**Key Words:** lipoma, neoplasm, tonsil

Lipomas are benign, slow-growing neoplasms composed of an abnormal collection of mature adipose cells. They usually occur in subcutaneous tissues but rarely in the aerodigestive tract. Nevertheless, benign tumors of the tonsils occur infrequently. While approximately 25% of all neoplasms of the tonsil are benign, 75% are malignant.<sup>1</sup> Among the benign tonsillar tumors, most of them are squamous papillomas or lymphangiomas. Histologically, the normal tonsillar framework is usually devoid of adipocytes. To our knowledge, there are only six documented cases of tonsillar lipoma in the English literature.<sup>2–7</sup> We present the case of a female with a lipoma on her left palatine tonsil. The clinical diagnosis and histologic features are also discussed.

## Case Report

A 46-year-old Taiwanese female complained of a foreign body sensation over the throat area on and off for several years. She is neither a betel nut,

alcohol or tobacco consumer. On examination, a tumor about 1 × 2 cm in size was noted on the left tonsil. It was a whitish mass with smooth mucosa. On further questioning, the patient indicated that she had known about this lesion for at least 5 years but did not pay it any attention. Recently, she had noted that the tumor had slowly enlarged, so she sought medical help and was referred to our hospital for further evaluation and surgical intervention.

She received left tonsillectomy under general anesthesia. The whole course of the operation was smooth. On pathologic examination, grossly, the tumor was oval, yellowish, soft, with a smooth surface, and measured 1 × 0.4 × 0.2 cm. On low power microscopic view, the tumor was composed of an abnormal collection of mature adipose cells and covered by stratified non-keratinizing squamous cell epithelium (Figure). On high power view, the lipoma was surrounded by fibrous tissue and adjacent to a lymphoid aggregation. There was no evidence of malignancy. The postoperative course was smooth and there

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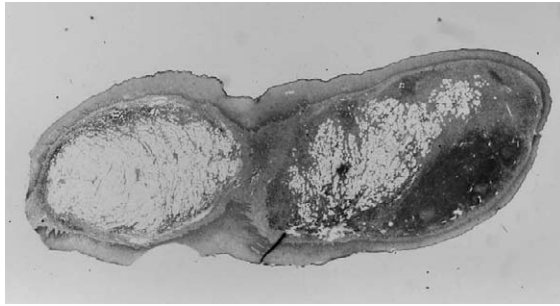
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**Figure.** Histologic view of cross-section of the whole specimen shows a tumor composed of an abnormal collection of mature adipose cells and covered by stratified non-keratinizing squamous cell epithelium (hematoxylin & eosin, 20 $\times$ ).

was no evidence of recurrence after 10 months of follow-up.

## Discussion

Lipomas are benign tumors composed of mature fat cells. They occur frequently in subcutaneous tissue and are the most common mesenchymal neoplasms in the body. Most of them grow insidiously and cause few problems other than those of a localized mass. Lipomas are not commonly found in the upper aerodigestive tract, but have been previously reported in the oropharynx<sup>8</sup> and larynx.<sup>9</sup> The incidence of tonsillar lipomas is low. To our knowledge, there are only six documented cases of tonsillar lipoma in the English literature.<sup>2-7</sup>

The etiology of tonsillar lipomas is still unclear. Several predisposing factors have been proposed, including chronic irritation and trauma. However, none of them is fully accepted. Histologically, the normal tonsillar framework is usually devoid of adipocytes. Begin and Frenkiel<sup>2</sup> proposed that tonsillar lipoma likely represents a benign neoplastic growth rather than a hamartomatous malformation due to lack of other germ cell elements in the tumor. In our case, microscopic examination revealed a collection of mature adipocytes surrounded by fibrous tissue and covered by stratified non-keratinizing squamous cell epithelium, but lack of other germ cell elements. Our finding seems to support their hypothesis.

Most tonsillar lipomas grow insidiously and cause few problems other than those of a localized mass. They may be asymptomatic, or manifest with soreness, cough or foreign body sensation. However, we should keep in mind that oropharyngeal tumors may cause airway obstruction when they grow significantly in size. Tonsillar tumors still pose a diagnostic challenge for surgeons. Tsunoda<sup>8</sup> demonstrated in 1994 that magnetic resonance imaging is a useful tool to diagnose a peritonsillar lipoma. He also mentioned that careful imaging and patient cooperation were needed for magnetic resonance imaging examination. In our patient, the tumor was located on the surface of the left tonsil without deep infiltration to the peritonsillar space. Tonsillectomy seemed a reasonable and adequate diagnostic and treatment procedure.

In the literature, most tonsillar lipomas present as a polypoid tumor with a thin pedicle connected with a palatine tonsil.<sup>2,4,6,7</sup> On the other hand, Tsunoda<sup>8</sup> and Benson-Mitchell et al<sup>10</sup> reported two cases of peritonsillar space lipoma. Our case was a lipoma in the tonsillar tissue, which is different from previous reports. Simple tonsillectomy seems an adequate management for tonsillar lipoma. Recurrence is unusual and the prognosis is excellent, although Masson et al<sup>11</sup> reported a case of hypopharyngeal lipoma with local recurrence or association with new lipoma elsewhere in the hypopharynx following resection.

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