Tracheal Lobular Capillary Hemangioma*

A Rare Cause of Recurrent Hemoptysis

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Lobular capillary hemangioma (LCH) is a polypoid form of capillary hemangioma occurring on the skin and mucosal surfaces. While LCH of the oral and nasal cavity is a well-known entity, tracheal localization is extremely rare. We present the case of a 72-year-old woman with recurrent hemoptysis due to a small tumor of the proximal trachea. By endoscopic removal of the tumor by flexible bronchoscopy, the diagnosis of LCH was made, and during the following year there was no recurrent hemoptysis. To our knowledge, this is the first case of histologically proven LCH of the trachea.

**Case Report**

A 72-year-old woman was in good health until she experienced an episode of cough and minor hemoptysis that lasted a few days. These symptoms recurred after an interval of 6 weeks when the patient was seen in our clinic for the first time. The patient had no history of previous intubation or other intervention in the upper airways. On physical examination, a goiter was found, but the lungs and heart were normal. The results of hematologic and chemical laboratory tests were unremarkable, and the levels of thyrotropin, free triiodothyronine, and free thyroxine were normal. A CT scan of the chest showed an asymmetric nodular enlargement of both lobes of the thyroid gland with a locally narrowed and displaced trachea. Bronchoscopy revealed a polypoid tracheal tumor, 0.2 to 0.3 cm in size, with a hyperemic overlying mucosa 3 cm below the vocal cords (Fig 1). The other parts of the trachea, which had a normal lumen, were unremarkable. With a flexible biopsy forceps, the tumor was completely removed, and the subsequent mild bleeding stopped a few minutes after the local instillation of adrenaline (0.1 mg/mL). Histologic examination revealed numerous capillaries arranged in a lobular pattern. The endothelial cells had a bland appearance, and occasional regular mitotic figures were present. The lobules were separated by fibrous stroma with mild accompanying inflammatory changes. The overlying epithelium was intact (Fig 2). There were no signs of malignancy (eg, of invading thyroid cancer), and the diagnosis of an LCH was made. During the ensuing year, the patient remained completely asymptomatic. She had no associated LCH of the skin or oral cavity.

**Discussion**

LCH is a common polypoid form of capillary hemangioma that, aside from the skin, occurs on mucosal surfaces such as the oral and nasal cavity, the tongue, the conjunctiva, the duodenum, or the colon. LCH has a distinctive lobular arrangement of capillaries of various sizes.
biopsies, or crush injuries. Drosnes and Zwillenberg\(^\text{10}\) had a history of trauma (hematoxylin-eosin, original \(\times 80\)).

Our patient had never undergone endotracheal intubation nor had she experienced another local trauma in the past. In addition, histologic appearance was typical for LCH and did not show the radial arrangement of capillaries that is seen in granulomatous polyps. To our knowledge, this is the first case of tracheal LCH reported in the literature.

For cutaneous LCH, many effective treatment modalities have been reported, including excision, curettage, electrodesiccation, chemical cauterization, and laser surgery.\(^\text{2}\) Mucosal LCH has been treated with snare cautery,\(^\text{6}\) excision biopsy,\(^\text{11}\) or plaque radiation.\(^\text{4}\) The recurrence of skin and mucosal LCH after local therapy is a well-known phenomenon; however, malignant transformation has not been reported. In our patient, the LHC was removed using biopsy forceps, and the patient remained asymptomatic subsequently.

Although not conclusively proven, the lesion was most likely the source of the hemoptysis. Recurrent bleeding is a well-known characteristic of LCH, and the patient had otherwise unremarkable endoscopy and CT scan findings. Because the patient had no further symptoms, repeat bronchoscopy was not performed.

**References**