We report here on a case of fibrovascular polyp arising in the hypopharynx of a 62-year-old man. Laryngomicroscopic surgery with laser ablation was performed to excise the mass. Histopathologically, the surface of the polyp was covered with mature squamous epithelium. The polyp showed a characteristic lobular proliferation of mature adipose tissue that was separated by myxoid or collagenous connective tissue. Some scattered skeletal muscle bundles were seen in the central portions of the polyp and these bundles were surrounded by a concentric proliferation of the spindle cells; this was reminiscent of Pacinian corpuscles. Regarding their location and the intermingled pattern of proliferating tissues, it is more plausible that the skeletal muscle is a hamartomatous component rather than entrapped, preexisting tissue.

Key Words: Polyp; Hypopharynx; Adipose tissue; Skeletal muscle

Fibrovascular polyps of the upper aerodigestive tract are rare benign tumors that usually arise at the level of the cricopharyngeus. They histologically consist of fibrous tissue, adipose tissue, and vascular structures, which are covered with squamous epithelium. They can grow to extreme sizes over several years, resulting in their common designation as “giant fibrovascular polyps”. These patients present with nonspecific symptoms that are associated with esophageal and respiratory obstruction that can often progress to potentially catastrophic airway complications. Timely diagnosis and management are essential to prevent the morbidity and mortality associated with these lesions.

We report here on a case of 62-year-old man with an asymptomatic fibrovascular polyp that arose in the hypopharynx.

CASE REPORT

A 62-year-old man was admitted to our hospital with a hypopharyngeal mass that had been incidentally found on a health check-up. The flexible fiberoptic laryngoscopy and physical examination revealed a polyp arising from the right pyriform sinus. A computed tomography scan of the neck showed an intraluminal, protruding, well defined mass in the pyriform sinus. Laryngomicroscopy surgery with laser ablation was performed and the mass was excised.

Pathologic findings

The resected mass was fragmented and the aggregate measured $3 \times 2 \times 1.8$ cm. Its outer surface was glistening and tan-pink. The cut surface showed various sized lobules of adipose tissue admixed with fibrous tissue (Fig. 1). Histologically, the surface of the polyp was covered with mature squamous epithelium. The polyp showed a characteristic lobular proliferation of mature adipose tissue that was separated by myxoid or collagenous connective tissue (Fig. 2). Some scattered skeletal muscle...
bundles were seen in the central portions of the polyp. These bundles were surrounded by a concentric proliferation of the spindle cells, which was reminiscent of Pacinian corpuscles, with peripheral lymphoplasmacytic cuffing being noted as well (Fig. 3A). The skeletal muscle component had preserved cross striations, and these were highlighted by immunostaining for desmin (Fig. 3B). A proliferation of thick-walled blood vessels and capillaries was also present. The areas between or within the lobules showed a diffuse proliferation of elongated spindle stromal cells with mild nuclear atypia, and these cells were positive for vimentin and negative for S100 protein or HMB45 on immunostaining.

**DISCUSSION**

Fibrovascular polyps are expansions of the lamina propria, and they are composed of a mixture of loose, collagenized, highly vascularized tissue and adipose tissue in various proportions. Depending on the predominant histologic components, these lesions have been called lipomas, fibromas, fibrolipomas, fibro- myxomas, fibroepithelial polyps or myxoid neurofibromas. To avoid potential misdiagnoses, the World Health Organization's international histologic classification of tumors recommends that the term fibrovascular polyp be used to classify all the lesions with the aforementioned characteristics. Caceres et al. analyzed the world literature and reported on 110 cases of polyps originating in the esophagus and hypopharynx under the terms that included fibrovascular polyp, hamartoma, lipoma, fibrolipoma and fibroma. Sixteen percent of these polyps were found to originate in the hypopharynx. We were able to find 7 cases of esophageal fibrovascular polyp and one case of hypopharyngeal fibrovascular polyp in the Korean literature. Among these reports, Hwang et al. described the detailed pathological findings of typical fibrovascular polyp of the esophagus in a patient...
with a history of dysphagia.\textsuperscript{15}

According to the histologic description of the previous reports, the constituents of fibrovascular polyps were adipose tissue, stromal cells, variable sized vessels and lymphoid tissue. Aside from those common components, a skeletal muscle component was found in the center of the lesion in our present case. Regarding the skeletal muscle component’s location and its intermingled pattern with the other proliferating tissues, it is more plausible that the skeletal muscle should be considered as the hamartomatous component rather than as entrapped preexisting tissue. There have been several previous reports of oral and/or pharyngeal rhabdomyomas, which are benign and highly differentiated tumors of striated muscle. However, Patterson \textit{et al.} reported one case of a hamartoma that showed aberrant skeletal muscle accompanied with proliferations of fibrous tissue and fat in the hypopharynx.\textsuperscript{3,8,15} The possibility of hamartomatous proliferation can be supported by the present case with its skeletal muscle component.

The discovery of fibrovascular polyp is usually preceded by a history of progressive dysphagia, regurgitation of the mass or the sensation of having a persistent lump in the throat. By contrast, the patient in our present case had not complained of symptoms related to esophageal or respiratory obstruction. Seshul \textit{et al.} also reported on a case that was incidentally found during a cervical ultrasound evaluation.\textsuperscript{17} These findings would imply that even those patients with a history of symptoms related to the fibrovascular polyp must have gone through an asymptomatic period before the mass attained a size sufficient to merit clinical attention.

Fibrovascular polyps of the esophagus and hypopharynx should be recognized as uniformly benign lesions that are cured by excision. Malignant transformation of this lesion is extremely rare. Three cases of fibrovascular polyp with squamous cell carcinoma of the overlying mucosa and one case with liposarcoma have been reported in the literature.\textsuperscript{3,8,15,18}

\textbf{REFERENCES}