**Introduction**

Epithelial inclusion cysts (EICs) are a rare otolaryngological finding with five prior reports: 1) two of the tongue, 2) one after a free gingival graft, 3) one after maxillary screw placement, and 4) one after uvulopalatopharyngoplasty. Of these five, only two cases are naturally occurring EICs. The pathogenesis of EICs is unknown, although there is concern of possible malignancy. No reports have described EICs of the pharynx or hypopharynx. Here, we report the first case of an epithelial inclusion cyst formed in the hypopharynx that was successfully treated with marsupialization.

**Case Presentation**

A 67-year-old man presented with a few month history of dysphagia. The patient had no documented fever or chills but had been waking up with sweats. The patient was positive for shortness of breath and a productive cough with yellowish, thick phlegm. He had a prior history of heavy tobacco and alcohol use which culminated 15 years ago. Physical examination revealed no abnormalities. On clinical examination with a flexible fiberoptic scope no mass was visualized in the nasopharynx or oropharynx. Interestingly, a cystic non-ulcerating mass was noted protruding from the right piriform sinus.

Computed Tomography (CT) scan of the neck revealed a uniform mass situated at the medial wall of the right piriform sinus (Figure 1). In addition, two modified barium swallow studies (MBSS) were conducted and aspiration was noted on the second study. No obstruction, perforation, or mass effect was noted in the cervical esophagus.

The patient underwent direct laryngoscopy visualizing a 3-cm cystic mass situated at the right vallecula and the medial wall of the piriform sinus (Figure 2). Upon applying pressure with the tip of the scope, a well-encapsulated benign looking round structure emerged from the right hypopharynx. Marsupialization of this cystic lesion was conducted (Figure 3). Histopathology of the biopsy tissue revealed sections of the cyst wall and the surrounding hypopharynx to be consistent with an epithelial inclusion cyst, ruling out malignancy (Figure 4A and B). At the two month follow-up the patient had bilateral vocal cord mobility visualized with fiberoptic laryngoscopy in the clinic, resolution of all symptoms, and no evidence of recurrence.

**Discussion**

Epithelial inclusion cysts (EICs) are a rare entity in the head and neck region. There have been a few reported cases of naturally occurring EICs in the oral cavity, especially associated with the tongue. Other reports have documented cystic lesion developments after various surgical procedures such as free gingival graft and maxillary screw placement. Several hypotheses in regards to the etiology of naturally occurring epithelial inclusion cysts have been suggested such as implantation of epithelium into the lamina propria or from squamous metaplasia of the glands. We believe this is the first reported case of an incidental finding of an epithelial inclusion cyst on the piriform wall that initially presented as a neoplasm. This report is in compliance with the TTDHSC institutional review board regulations.

**Conclusion**

This case report serves to raise awareness of this rare entity and suggest careful follow-up of the patient due to a prior case report suggesting the association of squamous cell carcinoma developing from a mucosal epithelial inclusion cyst.

**References**