Benign laryngopharyngeal lesions: a case series

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Abstract Benign neoplasms of the laryngopharynx are extremely rare. Hereby we present 3 such interesting cases managed at our institute. While one was managed by conventional endoscopic route the other two required external approach. Even in the present era of endoscopic surgery sometimes these lesions necessitates external approach owing to anatomical distortion causing difficulty in intubation and /or inadequate exposure of the lesion. All these cases highlights the need of a competent surgeon to treat benign laryngopharyngeal lesions.

Keywords Microlaryngoscopy · Laryngofissure · Schwannoma · Pharyngotomy

Introduction

Benign neoplasms of the laryngopharynx may rarely present to the practicing otolaryngologist with atypical manifestations. Hereby we present 3 such interesting cases managed at our institute. While one was treated by conventional endoscopic route the other two required external approach.

Case 1

A 48-year-old female presented with dry cough and gradual onset dysphagia to both solids and liquids since the last 3 yrs. She had change in voice of similar duration. There was no history of dyspnea or any other related complaint. Patient was emaciated, weighing only 30 kgs and had a *hot potato voice*. On indirect laryngoscopy a well circumscribed globular capsulated mass was seen arising from left aryepiglottic fold obscuring the glottic chink. Rest of the ENT examination was normal. CT scan was advised. It revealed a well defined capsulated, mildly enhancing lesion (Fig. 1) $3 \times 2.5 \times 3.5$ cm in the left supraglottic region arising from left aryepiglottic fold suggestive of a neoplasm. There was no calcification or any significant lymphadenopathy noted. Flexible fiberoptic laryngoscopy revealed distorted anatomy predicting a difficult intubation. Planned tracheostomy allowed induction of general anaesthesia. Left suprahyoid midline pharyngotomy approach was planned. After raising flaps and dissecting all suprahyoid muscles from hyoid bone, pharynx was entered. To facilitate excision in toto, the body of hyoid was excised and the mass completely removed (Fig. 2). Specimen was sent for histopathology. The pharynx was sutured in layers. Post-operative period was uneventful. Tracheostomy was decannulated within 1 week. Histopathologically the lesion was a Schwannoma.

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Fig. 1 CT scan of left supraglottic mass

Fig. 2 Excised specimen

Case 2

A 33-year-old male presented with complaint of hoarseness of voice which increased in severity gradually over a period of 1 year. No other complaints were noted. On indirect laryngoscopy examination a pedunculated mass was seen attached to right vocal cord. This was subsequently confirmed on flexible laryngoscopy. Other than a short thick neck, rest of ENT examination was normal. CT scan revealed an enhancing polypoidal soft tissue density lesion measuring 1.5 cm × 1.0 cm arising from the anterior surface of both vocal cords and hanging from the glottic into the subglottic region (Fig. 3). There was no mucosal attachment

Fig. 3 Pedunculated mass hanging into subglottis

in the subglottic region. On microlaryngoscopy the lesion could not be visualized in toto, hence the procedure was abandoned and a laryngofissure planned. After a planned tracheostomy a midline vertical incision was made over neck and flaps elevated. Infrahyoid muscles were dissected to expose the thyroid cartilage. External perichondrium was incised to enter larynx. The pedunculated polyp was seen hanging in the subglottis attached to the right vocal cord. It was excised completely at the peduncle (Fig. 4) and sent for histopathologic examination. Post operative period was uneventful. Tracheostomy was closed on 5th day. Patient developed normal speech. Histopathology confirmed lesion as an inflammatory polyp

Case 3

A 46-year-old male patient presented with complaint of intermittent dysphagia to solids for the last 6 months. There was an interesting history of protrusion of a globular mass into the oral cavity on retching (Fig. 5). No other complaints were noted and rest of the examination revealed no other abnormality. Barium study revealed a filling defect in the left vallecula (Fig. 6). CT scan showed soft tissue thickening in left hypopharynx & anterolateral wall of left vallecula. A provisional diagnosis of pharyngocoele was made. After complete workup patient was taken up for endoscopy. A triangular mass was seen at the entrance of the

Fig. 4 Excised pedunculated mass

Fig. 5 Globular mass protruding into oral cavity

esophagus on the left wall which was excised completely and the base cauterized. The specimen was sent for histopathology. Postoperatively patient was completely free of dysphagia. Histopathology showed polypoidal tissue lined

Fig. 6 Barium swallow showing left vallecular filling defect

by stratified squamous epithelium with acanthosis and underlying mixed inflammation and granulation tissue and was suggestive of fibroepithelial polyp. We were justified in diagnosing this lesion as pharyngocoele since patient could bring out the air filled mass in the oropharynx.

Discussion

Schwannoma [1] of the larynx are extremely uncommon. They arise from the aryepiglottic fold close to the apex of the arytenoid cartilage at the laryngeal ventricle, arising from the internal branch of the superior laryngeal nerve. They usually occur in the fourth and fifth decade of life and are more common in women. Symptoms tend to develop insidiously. The tumors are usually small and can be dealt with endoscopically but rarely a lateral pharyngotomy is required for access.

Accumulation of fluid in the subepithelial space of Reinke is called vocal fold edema. If the accumulation is concentrated at one point and balloons the epithelium out

in front of it, this is known as vocal fold polyp. Polyps can occur along the whole membranous part of the vocal cords but are most common near the anterior commissure. Etiology includes vocal abuse, allergy and infection. Eventually in growth of new connective tissue makes the polyp firm in consistency. Treatment initially is medical. After organization surgical intervention is required along with postoperative voice rest, steroids and speech therapy.

Tumors of the hypopharynx are mostly malignant in nature, the vast majority being squamous cell carcinoma. Benign tumors are very rare, the most common being lipoma(1%) [2], fibrolipoma and leiomyoma. Fibroepithelial polyps are usually intraluminal occurring in 80% of cases in upper esophagus and are associated with cricopharyngeus muscle. 75% of the patients are males in 6th to 7th decade of life. They are also called fibrovascular polyp or fibrous hyperplasia and may be upto 15 cm in length. Vascularity may be scarce or very abundant. In the latter case it may be difficult to differentiate the lesion from a hemangioma with secondary inflammatory signs or from a pyogenic granuloma. Most common symptoms are dysphagia, regurgitation of polyp, weight loss and anorexia. Biopsy is not recommended as it may be vascular. Diagnosis depends on Barium study and endoscopy. Treatment is

surgical by external approach-transcervical with vertical esophagotomy.

Conclusion

All these three cases discussed, highlights the need of a competent surgeon to treat benign laryngopharyngeal lesions. Owing to anatomical distortion causing difficulty in intubation and /or inadequate exposure, the lesion may warrant an external approach with preoperative tracheostomy. Even in present endoscopic era some of these lesions needed external approach for complete removal. Decannulation of tracheostomy is usually uneventful.

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