# An unusual presentation of squamous cell carcinoma of the pyriform fossa as a pedunculated polypoidal mass — a case report

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# Abstract

A rare case of a squamous cell carcinoma of the left pyriform fossa is presented. It was found as a pedunculated polypoidal mass in a 17-year-old Hindu girl. A review of literature is included.

Key words: Laryngeal neoplasms; Carcinoma, squamous cell

## Introduction

A squamous cell carcinoma of the hypopharynx usually presents as an ulceroproliferative or an infiltrative lesion. Pedunculated polypoidal tumours are usually benign and arise from the tonsit, soft palate or posterior wall of the oropharynx. It is rare to find a



Lateral X-ray of soft tissue of the neck showing a large well defined shadow in the hypopharynx.

squamous cell carcinoma masquerading as a benign polypoidal pedunculated tumour.

# **Case report**

A 17-year-old Hindu girl presented to a gastroenterologist with complaints of bleeding from mouth and vomiting blood. He tried to insert a gastro-duodenoscope but on seeing a mass in the hypopharynx he referred the case to us.

Clinical examination revealed mild stridor and a 'hot potato voice' and examination of the throat a mass on the left side of the orohypopharynx. Indirect laryngoscopy showed a smooth, pinkish, mass on the left side of hypopharynx which was occluding the view of the rest of larynx. Her neck nodes were not palpable.

A lateral X-ray of the soft tissue of the neck (Figure 1) showed a large, well defined, shadow in the hypopharynx. X-ray of the chest, blood count, blood sugar, urea and electrolytes were normal but VDRL was negative. The clinical diagnosis of a



Photograph of excised mass from the left pyriform fossa. A is the smooth upper portion and B the lower ulcerated portion with an irregular surface.

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### Fig. 3

Histopathology of the excised mass showing clusters and ribbons of malignant epithelial cells separated by a fibrous stroma containing sparse mononuclear cells. The malignant cells have scanty cytoplasm with darkly stained pleomorphic nuclei showing mitotic activity. The diagnosis was a moderately differentiated squamous cell carcinoma. (H & E; × 100).

benign polypoidal lesion of the larynx laryngopharynx was made. Because of continued bleeding the tumour was removed as an emergency.

A tracheostomy was carried out and through the tracheostoma a cuffed endotracheal tube was inserted under general anaesthesia. Direct laryngoscopy revealed a large, pedunculated, polypoidal, pinkish, mass arising from the left pyriform fossa completely filling it, displacing the left aryepiglottic fold medially and completely covering the left half of supraglottic larynx. The vocal folds were mobile. The lesion was bleeding from an ulcerated area. A suprahyoid-pharyngotomy was performed and the pharynx entered via the right vallecula. The mass was excised by its pedicle where it arose from the lateral wall of left pyriform fossa. The pedicle was about 0.5 cm wide. The surrounding mucosa was excised resulting in a raw area  $(1.5 \times 1.5 \text{ cm})$  which was stitched by undermining and mobilizing the surrounding mucosa. The incision was closed in layers, and a Ryle's tube was inserted. On the 10th post-operative day she developed a pharyngocutaneous fistula which healed spontaneously after dressing it for another 10 days.

The excised mass was  $9 \times 2$  cm in size (Figure 2). The upper portion of the mass (A) was smooth while the lower portion (B) was ulcerated with an irregular surface. Multiple constrictions were found on the mass. Histopathological examination (Figure 3) showed clusters and ribbons of malignant epithelial cells, separated by a fibrous stroma containing sparse mononuclear cells. The malignant cells had scanty cytoplasm with darkly stained pleomorphic nuclei showing mitotic activity. On the basis of these microscopic findings it was diagnosed as a moderately differentiated squamous cell carcinoma. The patient was advised to undergo further surgery which she refused. She therefore received curative doses of post-operative radiotherapy and after completion of the radiotherapy she was decannulated. One year later she was disease free and could swallow normally.

### Discussion

The usual symptoms of a squamous cell carcinoma of the pyriform fossa are metastatic neck nodes, a foreign body sensation in the throat and difficulty in swallowing. Hoarseness of voice and difficulty in breathing are later symptoms. Examination usually reveals an ulcerative or infiltrative growth in the pyriform fossa (Snow 1986).

Our case presented as an emergency, in a 17-year-old girl, with bleeding from the throat and a pinkish pedunculated polypoidal mass in the hypopharynx which was masquerading as a benign tumour.

Lesions with a similar presentation are cysts of the epiglottis, aryepiglottic folds, vascular malformations and epithelial benign tumours e.g. pedunculated squamous papilloma of the hypopharynx (Desai and Rajaratnam, 1989). Adenomas and mesodermal benign tumors e.g. haemangioma, angioma, myxoma, lipoma (Ranger, 1979), and also pseudosarcoma present as a smooth pedunculated mass (Maisel, 1986). These pedunculated lesions may be life-threatening as they may occlude the laryngeal inlet and cause sudden death.

In our case, the large size of tumour suggested that it had been present for a long time but the bleeding could have been due to trauma caused by rough solid food.

The suprahyoid-pharyngotomy approach was sufficient for complete excision of this tumour. If the diagnosis of squamous cell carcinoma had been known previously, the surgical treatment of choice would have been partial or total laryngectomy with partial pharyngectomy. However, the clinical situation in which the patient presented herself necessitated complete excision without a proven histopathological report.

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