

# HYPHARYNGEAL TUMOUR: LASER EXCISION OF PRIMARY WITH RADICAL NECK DISSECTION

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## ABSTRACT

A 43 years old patient, Pesh-e-Imam by Profession, presented with 6 months history of neck swelling. He had a small lesion in the lateral wall of left pyriform fossa. Biopsy report revealed squamous cell carcinoma and was staged T<sub>1</sub>N<sub>3</sub>M<sub>0</sub>. As per patients requirement of saving his larynx, laser excision of the primary and radical neck dissection was done instead of standard partial pharyngeal and neck dissection. Two years follow up showed no recurrence.

**Key words:** Hypopharyngeal Tumour, Laser Excision, Radical Neck Dissection.

## INTRODUCTION

The hypopharynx forms an important component of the upper aero-digestive tract since it acts as a common conduit for both respiration and deglutition. Any disease process affecting the area and its treatment will definitely result in disturbances in swallowing and inevitable aspiration.

In order of frequency the hypopharyngeal tumours are divided into pyriform fossa tumours, post-cricoid tumours and posterior pharyngeal wall tumours. Tumours of the hypopharynx continue to have one of the most dismal prognosis of all tumours of the upper aerodigestive tract<sup>1,2</sup>.

Alcohol, tobacco and iron deficiency have been found the main carcinogens.

The hypopharyngeal tumour usually present late, because the capacity of hypopharynx allows considerable tumour growth before the aero-digestive tract is hindered.

The common clinical presentation are dysphagia, pain, hoarseness, neck mass, haemoptysis and weightless.

Neck mass may be due to nodal metastases or may be due to direct extension of tumour in neck.

Approximately 2/3 of patients with pyriform fossa tumours present with palpable neck nodes affecting level II, III and IV. 5% will have bilateral neck nodes at the time of presentation.

The hypopharyngeal tumours are treated at our unit usually by partial or total laryngopharyngectomy with or without neck dissection. We present this case because the patient was treated in a mode contrary to the standard mode, keeping in mind his needs and demands. The 2 years follow up shows disease free status.

## CASE REPORT

Mr. M. Daud, pesh-Imam by profession, 43 years old male from Alpuri Swat attended ENT OPD, Post Graduate Medical Institute Hayatabad Medical Complex, Peshawar with the complaint of swelling left side neck for last six months. It was smooth, non-tender, hard, fixed to the underlying structures, more than 6cm in size, ovoid in shape, at the junction of level II, III.

There was no other palpable node in the neck. He also complained of pain left side neck radiating to ipsilateral ear. He had also on and off odynophagia and was losing weight. His past history was un-remarkable. He looked generally well and was not suffering from any systemic illness. On indirect laryngoscopy the left pyriform fossa was obliterated with slough on the lateral wall, both vocal cords were normal with normal movements. He was admitted to the ward for pan-endoscopy. His baseline investigations were within normal limits including U/S abdomen. LFTs, Urea, electrolytes and creatinine.

C.T. Scan showed a soft tissue mass

in the left side neck having areas of degeneration. Fat planes of the neck on the ipsilateral side were disrupted with no definite encasement of the blood vessels. The thyroid gland, laminae and larynx were intact. No changes were seen in the in-viewed bones. No extension was demonstrated into the oropharynx.

He was put on list for pan-endoscopy under G.A. His nasopharynx, esophagus, oropharynx were normal. Vocal cords, epiglottis and Rt. pyriform fossa were normal. In the Lt. pyriform fossa there was a whitish lesion less than 2cm on lateral wall. Biopsy was taken and sent for histopathology.

Biopsy report came to be squamous cell carcinoma and the tumour was staged as T1N3M0. The present illness was discussed with the patient and relatives in detail and made clear to them that his only option to clear disease was surgery. Different options of surgery were: endoscopic excision, lateral pharyngotomy, partial pharyngectomy and partial supraglottic laryngectomy, total pharyngolaryngectomy, total pharyngolaryngoesophagectomy.

Our patient was reluctant to lose his larynx as he was dependent on his voice for his job and even his near relatives were reluctant and stressed to remove the neck mass only, which was evident to him, as his sole illness. In view of the above and our selves of the opinion to save the larynx, we did local excision of the primary with Diode laser followed by Lt. radical neck dissection.

Patient was put on monthly OPD follow up for six months and then after every four months for two years. After two months of treatment patient was reexamined under G.A. and rebiopsied. The biopsy report was clear. After one year he was readmitted and another senior colleague surgeon was asked to have a look but no recurrence was noted on histopathological study.

Patient benefited from the procedure. Hospital stay was short, retained his voice as he was pesh imam. Second, he was not exposed to the potential complications of standard procedure, like aspiration and tracheostomy.

## DISCUSSION

Hypopharyngeal tumours are

frequently advanced at the time of diagnosis. Pyriform fossa tumours which constitute two-third of the total hypopharyngeal tumours, have been treated with surgery alone, radiotherapy alone or in combination<sup>3</sup>. Role of chemotherapy, though attempted, is not yet established<sup>1,4</sup>.

Depending upon the size, site and extent of tumour the various surgical options are: Endoscopic excision, Transhyoid partial pharyngectomy, Lateral pharyngectomy and partial laryngectomy, total pharyngolaryngectomy, total pharyngolaryngoesophagectomy<sup>5</sup>.

In the neck, a selective neck dissection will suffice, for tumours of the pyriform sinus level II, III, IV should be dissected<sup>6</sup>. In case of palpable neck disease radical neck dissection will be needed. Primary Radiotherapy has given excellent form of radical treatment for small volume disease. The inclusion criteria for radiotherapy is vertical length of the tumour should not exceed 5cm, the vocal cords must be mobile and No neck<sup>1</sup>.

Hyperfractionated radiotherapy has been advocated as a logical and standardized approach for the management of pyriform sinus tumours reducing the significant morbidity associated with the use of surgery as a primary treatment<sup>2,7</sup>.

Curative radiotherapy with surgical salvage in reserve is also reported with two year survival rates significantly better, when results of stage III and IV lesions are taken together from all sites of hypopharynx<sup>8,9</sup>.

The patient Mr.Daud in this case report had a small lesion in the lateral wall of Lt pyriform fossa. The stage was T1, N3, M0 and biopsy from the primary and F.N.A.C from the node was squamous cell carcinoma. We did laser excision of the primary and radical neck dissection on the same side, contrary to standard mode of treatment that is partial pharyngeal and radical neck dissection.

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