

# PRESENTATION OF NASOPHARYNGEAL CARCINOMA

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## ABSTRACT

**Objective:** To know the common and early presenting features and the presenting age of nasopharyngeal carcinoma.

**Material and Methods:** This was a descriptive study. The study was done at the ENT department Hayatabad Medical Complex, Peshawar from 1st January 2001 to 31st December 2001. A series of 50 patients admitted to the ENT department Hayatabad Medical Complex, Peshawar were included in the study. A questionnaire was made to collect all the necessary information and data regarding the disease from patients. All the patients had thorough physical examination and were subjected to all the available investigations.

**Results:** The average age of presentation for male patients was 42 years and females 35 years. Thirty-four were males and sixteen females. Out of 50 patients, 38 (76 %) presented with neck mass, 28(56) % with aural symptoms, 30(60%) nasal symptoms 22(44%) had other miscellaneous presentation like headache, diplopia, neuropathies, hoarseness, dysphagia etc.

**Conclusion:** Nasopharyngeal carcinoma can occur in both sexes with no age exemption. By knowing the various presenting modes of Nasopharyngeal carcinoma like neck mass, aural and nasal symptoms, we can make an early diagnosis and treat the patient with good results.

**Key words:** Carcinoma Nasopharynx, Malignancy

## INTRODUCTION

Nasopharyngeal carcinoma (squamous cell carcinoma) constitutes 85 % of all malignant tumors of the nasopharynx<sup>1,2</sup>. It is more common in Cantonese comprising 18 % of the head and neck carcinoma in these countries<sup>3</sup>.

However, the early diagnosis of nasopharyngeal carcinoma can be a difficult task because the post nasal space is relatively inaccessible to examination<sup>4,5</sup> and the frequent presence of normal lymph epithelium makes an accurate diagnosis even more difficult. This is compounded by the fact that the presentation of nasopharyngeal carcinoma is variable and patients consult doctors of different specialties who have little experience in managing nasopharyngeal carcinoma<sup>6</sup>.

It is, therefore, not surprising that the diagnosis of nasopharyngeal carcinoma in a patient is delayed.

The presenting complaints of patients with nasopharyngeal carcinoma are related to the location of the primary tumor and degree of spread<sup>7</sup>. Generally the array of the subtle

symptoms and signs is confusing until the disease has reached advance stages. Therefore the late diagnosis accounts for the poor outcome in many cases.

This study was conducted to know the commonest and early presenting feature of nasopharyngeal carcinoma and the common presenting age.

## MATERIAL AND METHODS

This study was carried out on a series of 50 patients admitted to E.N.T department of Hayatabad Medical Complex with Nasopharyngeal Carcinoma.

The duration of our study was from 1<sup>st</sup> January 2001 to 31<sup>st</sup> December 2001.

A questionnaire was made to collect all the necessary information and data regarding the disease from patients for later analysis and conclusion.

## RESULTS

A total of 50 patients with nasopharyngeal carcinoma admitted to our department were studied

over a period of one year. Thirty-four (68%) were male and sixteen (32%) female, with male and female ratio of 2.1:1.

The age of male patients was between twelve and seventy three years with an average of 42.09. The age of female patient was between ten and sixty years with an average of thirty-five. Most of the patients presented with neck mass (n=38). This was mainly due to lymph node metastases. Twenty-eight patients (56%) complained of deafness. Twenty patients (40%) had unilateral deafness of gradual onset. Deafness was associated with otalgia (n=5) and tinnitus (n=3).

Thirty patients (60%) had nasal complaints. Nasal obstruction (13 patients) with post-nasal drip was the main presentation. Twenty-two patients (44%) had other symptoms like facial paraesthesia, hoarseness, dysphagia, headache etc. Most of the patients had multiple symptoms at the time of presentation. In twenty-five (50%) patients the lesion was confined to nasopharynx (T<sub>1</sub>). Nineteen patients (38%) showed lesions which extended to nasal fossae, adjacent muscles of naso and oropharynx or nerves below skull base (T<sub>2</sub>). Six patients (12%) had lesion which was beyond the limits of T<sub>1</sub> and T<sub>2</sub>.

## DISCUSSION

Nasopharyngeal Carcinoma has a distinct epidemiological pattern. Its incidence among Chinese and other South East Asians is about 10 to 50 times higher than that of other countries.

In the present study we focused on the clinical presentation of patients with nasopharyngeal Carcinoma, to know the common and early presenting mode so that an early diagnosis can be made, treatment started in time and the late poor outcome avoided.

The variable signs and symptoms are confusing and difficult to diagnose until the disease has reached advanced stages. In a study by M.F. Kamal<sup>8</sup> in 1999, 91 cases were studied. The most common single presenting symptom was neck swelling (45.5 %). R. Indudharan et al<sup>5</sup> studied 122 patients and noted the neck swelling as the commonest complaints (54.%). In our study 38 patients (76) had neck mass. In 32 (64 %) unilateral 6 (12 %) had bilateral neck masses. Most of these were due to cervical metastases. Only two cases of neck lumps were due to lateral extension of the tumor. Though neck swelling was the frequent finding but it was not the single complaint in most cases.

The second common presenting mode was unilateral hearing loss. Jonathan S.T Shan et al<sup>9</sup>, recognized otitis media with effusion as one of the early features in patients with nasopharyngeal Carcinoma. They studied 271 patients. Ninety-eight patients had otitis media with effusion. Seven of these had bilateral involvement and the rest unilateral. 77 patients had related symptoms such as tinnitus and deafness. R. Indudharan<sup>5</sup> 1997, reported 22 (18 %) patients with otological presentations mainly hearing loss with 15 (12.3 %) complaining of tinnitus. In our study 20 patients (40% complained of unilateral deafness. On examination all of them were found to have otitis media with effusion none complained of bilateral hearing loss. 5 patients (10) had associated otologia and 3 % tinnitus.

Blood stained nasal discharge and epistaxis has also been reported in patients with nasopharyngeal carcinoma. In our study fourteen patients (28%) complained of off-on blood stained nasal discharge. However none gave history of nose bleed. 13 patients had associated unilateral nasal obstruction and 3 patients complained of post-nasal drip.

## PRESENTING COMPLAINTS

Complaints	No of patient's	%
Neck Mass	38	76 %
Unilateral	32	64%
Bilateral	06	12%
Aural	28	56%
Unilateral deafness	20	40%
Oalgia	05	10%
Tinnitus	03	06%
Nasal	30	60%
Blood stained discharge	14	28%
Nasal obstruction unilateral	13	26%

Table 1

Tumour spreading upward to the foramen lacerum causes V,VI,III & IV cranial nerve paralysis, another mode of presentation. Posterolateral spread causes paralysis of IX,X,XII cranial nerves and carotid space. V.F.H Chong, Y.F.Fan<sup>(11)</sup> 1996 reported cases of nasopharyngeal carcinoma with jugular foramen involvement, causing paralysis of IX,XI cranial nerves. Cranial nerve palsies were evident clinically and were assessed radiologically. Cranial neuropathy may also follow curative chemoradiotherapy for carcinoma of the nasopharynx. Matt Y.Kang, et al<sup>(13)</sup> 2000, reported a case of XII cranial nerve palsy developing more than 5 years after curative chemotherapy and radiotherapy for carcinoma of the nasopharynx. King, -A-D; et al<sup>10</sup>, reported the hypoglossal nerve paralysis as one of the manifestation for nasopharyngeal carcinoma. In our study 4 patients had facial paraesthesia (V<sup>th</sup> nerve paralysis), 2 patients had hoarseness (X paralysis) and 2 patients complained of tongue changes (XII paralysis).

Many patients present with headache. This may be due to nasal obstruction or intracranial extension of the tumour. Ten patients out of 91 studied by M.F.Kamal, et al<sup>8</sup> complained of headache. This is usually generalized and associated with sensation of heaviness. In this study 6 patients (12%) gave history of headache.

Some rare manifestation for nasopharyngeal carcinoma like dermatomyositis, pseudohypertrophic osteoarthropathy and diffuse lymphatic infiltration has also been reported in literature.

Su,-C-T; Lui,-C-C<sup>12</sup> found ipsilateral palatal paralysis in 137 (52%) out of 264 patients with nasopharyngeal carcinoma. This was due to invasion of levator veli palatini by the tumour, restricting the palatal movements. The degree of paralysis corresponded well to the extent of tumour invasion of the levator muscle. In the present study 2 patients presented with hoarseness and 4 patients with dysphagia due to the vagus nerve involvement. 4 patients complained of diplopia due to VI nerve paralysis.

Because of the variable presentation and post nasal space being a difficult area to examine, the diagnosis of nasopharyngeal is usually delayed or may be missed. As early cases carry an excellent prognosis so attempts should be made to make an early diagnosis so that untoward complications can be avoided.

## CONCLUSION

Presentation of the nasopharyngeal carcinoma is variable. Patients can present with nasal, otological, neurological, neck and other

features. Majority of the cases presented with unilateral or bilateral neck masses.

Videoscopic examination with documentation of the nasopharynx is a valuable procedure. This facility should be provided to all the physicians and surgeons involved in the management of nasopharyngeal carcinoma, especially in areas where the disease is thought to be more prevalent.

The study stresses on the importance of full ENT examination in cases of persistent middle ear disease, recurrent or persistent nasal symptoms, headache or neck swelling. Health education and training for primary care physicians can also be of great help in early diagnosis of these cases.

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