

Clinical Presentation of Nasopharyngeal Carcinoma in Sarawak Malaysia

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Summary

Nasopharyngeal carcinoma (NPC) is a common cancer in Malaysia. The clinical presentation in Sarawak has not been well documented. A retrospective review of 243 selected NPC cases was undertaken on the clinical records in Sarawak General Hospital, Sarawak, from June 1999 to June 2003. There were 116 patients in Kuching and 97 in Serian. There were twice as many males as females. The youngest patient was 16 and the oldest 88 years old with a mean age of 51 years. The four most common symptoms in order of frequencies were cervical lymphadenopathy, epistaxis, hearing loss and diplopia. 89.8% of the patients presented with cervical lymphadenopathy and about 85% of the patients presented in the advanced stages. Very small percentages of the patients were found to have single presenting symptoms of epistaxis (2.4%) and hearing loss (0.5%).

Key Words: Nasopharyngeal carcinoma, Malaysia, Presentation, lymphadenopathy

Introduction

Nasopharyngeal carcinoma (NPC) is one of the common cancers in Malaysia^{1,2}. It tops the list of common malignancies in Sarawak^{3,4}. Preliminary studies of ENT patients seen in the ENT Department of Sarawak General Hospital (SGH) over the past few years indicate that the great majority (approximately 80%) of the NPC patients came from Kuching and Serian. They presented with ENT head and neck symptoms with some noticeable frequencies and tend to present late in the advanced stages. Although a few studies on clinical presentation^{5,6} had been done in Peninsular Malaysia in the past, no well-documented studies had been done in East Malaysian State of Sarawak.

Materials and Methods

A search was made for all NPC patients who were referred to SGH from various parts of Sarawak and

positively diagnosed on histology and subsequently treated in SGH from June 1999 to June 2003. All these patients were assessed and selection criteria included definite histopathological diagnosis during the period studied, residential addresses in the districts of Kuching and Serian and sufficient clinical data were applied.

The case records were obtained from the Departments of ENT and Radiotherapy on the approval from the Sarawak State Health Director. From the records, review was made on the patients' biodata, the findings of clinical history, physical examination, histological diagnosis, and relevant investigations, the disease staging and the follow-up management. The patients or their relatives, the clinicians or the pathologists were contacted to clarify details where necessary so that sufficient data for the studies were obtained. Staging is based on TNM staging system UICC(1987)¹² classifying NPC into four stages I to IV and the early stages refer to stages I and II and the advanced III and IV.

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Table I: Symptoms of NPC at presentation in 213 patients

Neck	R	L	RL	% total 213
Neck swellings	71	49	52	80.8 80.8%
Nose				
Epistaxis/ blood rhinorrhea	61			29
Blocked nose	37			17
Blood saliva	7			3.4
Bad smell	1			0.4
				49.8%
Ear				
Hearing loss	R 36	L 32	RL 11	37
Tinnitus	23			10.7
Otorrhea	1			0.4
Vertigo	1			0.4
				48.4%
Eye				
Visual loss	7 same side 2 opposite side			3.3 0.9
Diplopia	16			7.7
Ptosis	5			2.3
Proptosis	1			0.4
				14.6%
Headache				
	20 same side neck swelling			9.4 9.4%
LOW LOA				
	16			7.5%
Hoarseness	8			2.8
Dysphagia	3			0.9
				5.2%
XII palsy	3			1.4%
Facial palsy	3			1.4%
Fever	3			1.4%
Haemoptysis	3			1.4%
Trismus	1			0.4%
Facial numbness	1			0.4%

Results

The initial total number of the NPC patients under the study was 266 over the four years' period, 1999-2003. Fifty-three of these patients were excluded from this study and this consisted of 37 patients who did not have residential addresses in the districts of Kuching and Serian and 16 whose clinical data were incomplete. Therefore the total number in this study was 213 (80%). This consists of 116 patients in Kuching and 96 in Serian, and 145 males and 68 females. The male to female ratio was 2.1:1.0. There were 103 Bidayu (48.4%), 54 Chinese (25.3%), 29 Malays (13.6%), 23 Iban (10.8%), and 4 others (1.9%). The patients' ages ranged from 6 to 88 years old with a mean age of 51 years. In Kuching the NPC patients were mainly Chinese (43%) and in Serian majority were Bidayu (86%).

The durations of presenting symptoms ranged from 2 days to 4 years with a mean of 176 days. Symptoms of the ear, nose, throat and eye at the time of presentation with their percentage frequencies were shown on Table I. The percentages in decreasing order were neck (80.8%), nose (49.8%), ear (48.4%), and eye (14.6). All the neck swellings were lymphadenopathy due to metastatic NPC. More patients (71) had lymphadenopathy in the right side than the left side (49) or both sides (52). Majority (61/106) of the patients with nose symptoms had epistaxis, and majority (36/51) of those with ear symptoms had hearing loss. There were more patients who had diplopia (16) than visual loss (9) in eye symptom group. Of those presenting with a single presenting symptoms, 28.2% had lymphadenopathy, 2.4% had epistaxis, and 0.5% had hearing loss. 18.3% of the patients had both lymphadenopathy and epistaxis, 17.0% had both lymphadenopathy and hearing loss, and 16.4% had lymphadenopathy, epistaxis and hearing loss. The percentage of patients presenting with the four most common symptoms over the periods of time is shown on Table II. Majority (>50%) of these patients presented in the first 90 days.

The patient distribution of TNM stages in Kuching and Serian is shown in Table III. Shown in Table IV are the early and late stages of the NPC cases found in this study, being 85% advanced, 10.3% early and 4.7% unclassified.

Discussion

In this study, NPC mainly occurred in Bidayu (48.4%) and Chinese (25.3%), and to lesser percentages in

Malay (13.6%) and Iban (10.8%). In Peninsular Malaysia, NPC occurred mainly in Chinese (69.9 – 70.8%) and Malay (25.6-27.6%) and less frequently in Indians (1.8-3.1%)^{10,11}. The male to female ratio of NPC in this study (2.1:1.0) is slightly lower than those of Peninsular Malaysia, 70:30 (that is 2.3:1) in 2002, and 73.3:26.7 (that is 27.5:1) in 2003, as reported by Lim^{10,11}. The mean age (51 years) of NPC patients in this study is lower than those in Peninsular Malaysia (age group 60-69)^{10,11}. Forty-three percent of NPC patients in Kuching were Chinese. This could be due to the fact that the majority of the Chinese in Kuching district are descendants of Southern Provinces of China, mainly Canton and Fujian. In the Serian district, 86% of NPC patients were Bidayu with no obvious possible reason.

Symptoms of the ear, nose, throat and eye at the time of presentation in this study appeared to be the same and in the same decreasing order of frequencies as those reported in Peninsular Malaysia (neck 40%, nose 28%, ear 28% and eye 14.8%)⁹. However, this study had almost twice as many patients with symptoms of the neck, nose and throat. As the presence of cervical lymphadenopathy implies advanced stages of NPC, the very high percentage (80.8%) of lymphadenopathy would have accounted for the very high percentage (about 85%) of the advanced stages of NPC in this study. As epistaxis and hearing loss when occurring alone are often the symptoms of early stages of NPC, the very small percentages of patients with single presenting symptoms of epistaxis (2.4%) and hearing loss (0.5%) in this study could have accounted for the low percentage of the early stages of NPC (about 10.3%). The very high percentage (80.8%) of neck swelling in this study is higher than the one (70%) reported in Hong Kong⁷.

The cervical lymphadenopathy was found to be more frequent in the right than either left side or both sides. There was no explanation found in this study. It is noted in Table II that significantly large number of the cases presented late many months after. This compares favourably with the study in Hong Kong from Lee who found more than half of their cases treated having symptoms of 6 months or longer⁸.

Conclusion

This study of 213 NPC patients in the districts of Kuching and Serian found high incidences of NPC in Bidayu and Chinese. It further showed the mean age, sex ratio and symptoms and their frequencies on

Table II: Shows the percentage of patients presented with the four most common symptoms over the periods of time

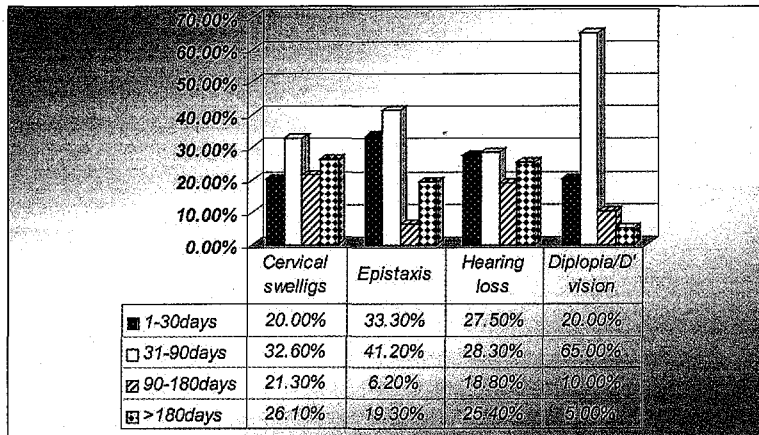


Table III: Shows the patient distribution of TNM stages in Kuching and Serian

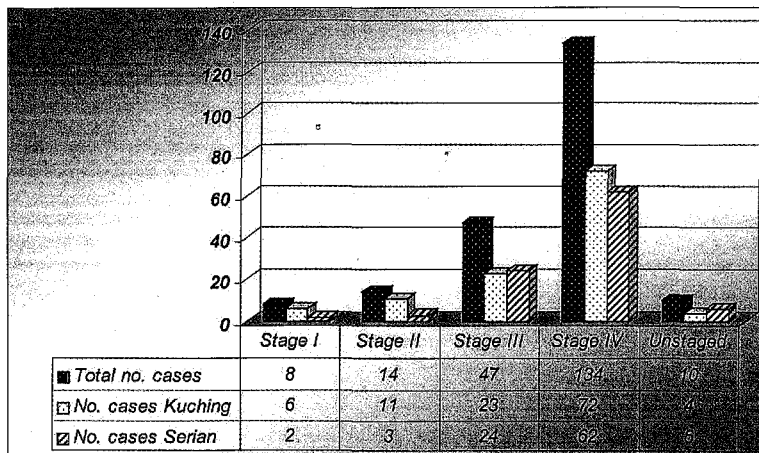
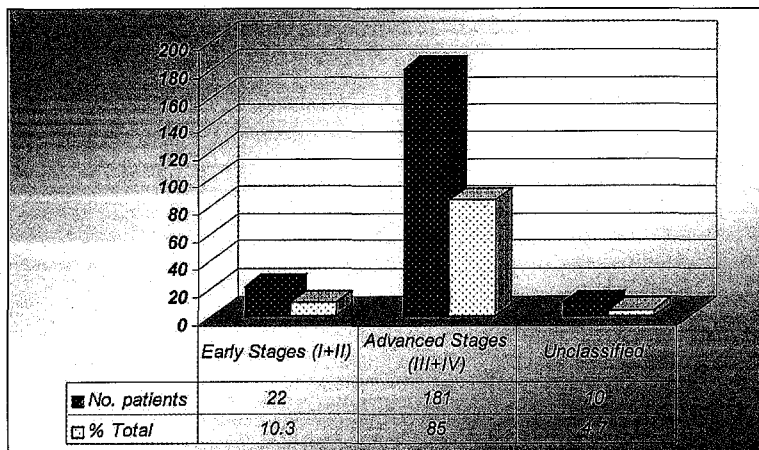


Table IV: Shows early and late stages 85% advanced, 10.3% early and 4.7 unclassified



presentation are in close proximity to those found in Peninsular Malaysia. The four most common symptoms in order of frequencies were cervical lymphadenopathy, epistaxis, hearing loss and diplopia. The great majority of the presenting symptom was cervical lymphadenopathy in the advanced stage of the disease, and the percentage of single symptom of epistaxis or hearing loss is very small.

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