

Factors Of Late Presentation And Diagnosis Of Nasopharyngeal Carcinoma In Sarawak Malaysia

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Abstract

Nasopharyngeal carcinoma (NPC) is a very common malignancy especially in male in Sarawak. Majority of the patients presented late and were diagnosed late with very poor prognosis. As early diagnoses help improve survival, a retrospective studies was done on the NPC patients treated in Sarawak General Hospital (SGH), Sarawak, over a period of 4 years form 1999 to 2003. This included 213 patients, 145 males and 68 females. 85% had late presentation and 61% survived up to 4 years at the time of interview.

Among many factors identified, the main ones were related to patients themselves being unaware of NPC and its seriousness, the relative painlessness of the NPC, and the inclination of the patients seeking traditional medicine first.

Other factors though relatively minor in percentages of the patients are however significant as they are so many and do have cumulative effects. These are therefore equally just as important to be addressed.

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INTRODUCTION

Nasopharyngeal carcinoma (NPC) is one of the most common cancers in Malaysia¹. It tops the list of common male malignancies in Sarawak^{2,3,4}. Preliminary studies of ENT patients seen in the ENT Department of Sarawak General Hospital (SGH), Sarawak, over the past few years indicate that majority of the NPC cases tend to present late in the advanced stages^{5,6} which are stages 3 and 4 in the TNM staging. These late presentations have greatly affected the patient survival⁷. The five year survivals for stages 3 and 4 are 55% and 45% respectively whereas those for stages 1 and 2 are 95% and 85% respectively⁷. As with all cancers, the best way to improve the survival is early diagnosis and treatment. It is therefore important to know the factors of late presentation and diagnosis with the hope that these factors once identified could be corrected towards early diagnosis. Therefore a retrospective studies was done in NPC patients diagnosed and treated in SGH over the 4 years from 1999 to 2003.

METHOD

The study was concentrated on the patients residing in the 2 districts Kuching and Serian and diagnosed and treated in SGH Sarawak. Their clinical records were examined for

clinical history, physical findings, histology diagnosis, staging, treatment and progress. This was followed up by telephone calls to the patients or their relatives or close friends. When sufficient data were not available on their records and telephone calls, personal interviews with the patients and or their relatives or close friends, or interviews with their relatives of the deceased patients, were conducted. Moreover, health care providers who consisted of the local doctors and medical assistants who referred the patients to the ENT Department SGH were also telephoned or personally interviewed. Subsequently some staff of the pathology and radiotherapy departments were also called or interviewed for clarification of the delay factors.

The NPC histology was classified according to World Health Organization into the three histology types (WHO I, WHO II, and WHO III) and the staging according to TNM staging system UICC (1987)⁸. Early presentation is when the staging is TNM stage 1 or 2 (early stages) and late presentation TNM stage 3 or 4 (advanced stages).

The patients qualified for this studies were the ones who had definite histological diagnosis during the period 1999-2003, residential addresses in the districts of Kuching and Serian, and sufficient clinical data from clinical records and interviews.

During the period of data analysis, some patients' clinical notes were re-examined for defaulters and other possible delays in diagnosis and treatment. Some questions of concern on delay in histo-pathological diagnosis and initiation of NPC treatment with radiotherapy and or adjunctive therapies were directed to the appropriate staff members concerned as well as checking on patients' clinical records.

RESULTS

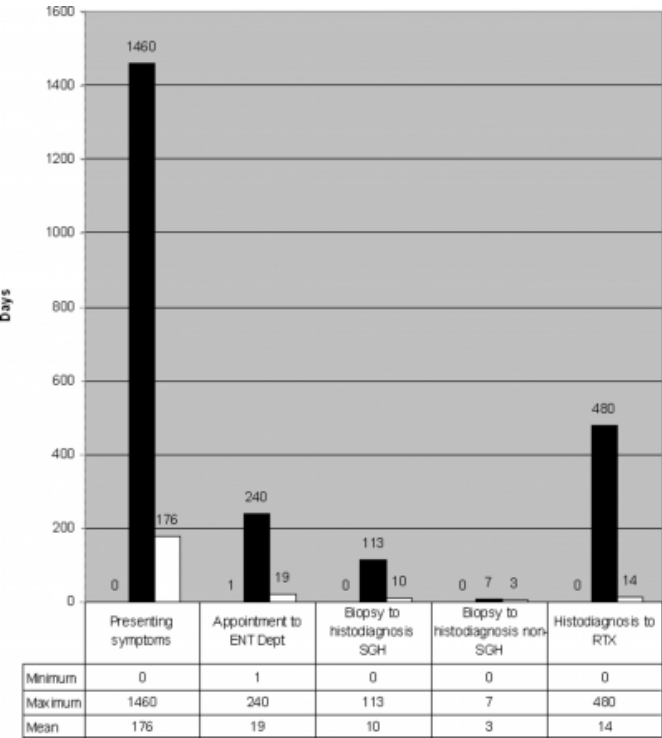
213 NPC patients were found qualified in this study. 116 of them resided in Kuching and 96 Serian. There were 145 males and 68 females. 15% (32/213) had early presentation and 85% (181/213) late presentation. 61% of them (130) having been diagnosed up to 4 years ago were alive at the time of interview.

The various findings in relation to many factors are shown on the figures presented below.

Figure 1 showed the duration of presenting symptoms at the time of presentation to local professionals (medical attendants or doctors), duration of appointment time to see ENT Specialists in Department of ENT SGH, duration from biopsy taken to histo-pathological diagnosis made in SGH and in non-SGH (private) laboratories, and duration of histo-pathological diagnosis made to commencement of radiotherapy (RTX).

Figure 1

Figure 1 shows in days the durations of presenting symptoms, appointment time referred to SGH ENT Department, time when histo-pathology diagnosis known after biopsy (by SGH and Non-SGH pathologists) and time to start radiotherapy when histo-pathology diagnosis known. Bx: biopsy, Dx: diagnosis, RTX: Radiotherapy.



Three major factors in late presentations in large percentage of patients were found in this series. They are:

- 153 patients being unaware of the seriousness of NPC (72%)
- 64 patients having no pain (30%)
- 51 patients seeking traditional treatment first and therefore the delay (24%)

Minor factors of late presentation in few percentages of the patients are:

1. Patient unable to travel as no one able to bring
2. Patient going overseas on business but told of seriousness on return
3. Patient no money to travel for referral
4. Patient knowing cancer but not knowing cancer could kill

5. Patient thought symptoms due to usual sickness
6. Patient not feeling sick
7. Miscommunication despite urgent on referral form
8. Patient thought symptom due to old age
9. Patient wished for traditional treatment despite advice otherwise
10. Patient defaulted despite early appointment
11. Patient refused referral due to fear of operations
12. Patient not believing in western medicine
13. Patient fear of going to hospital
14. Patient too busy of occupation despite advice otherwise
15. Local doctor referral not urgent
16. Local doctor not aware of seriousness
17. Medical attendants not aware of seriousness
18. Serian NPC Clinic too long waiting
19. SGH ENT Clinic too long waiting
20. Relatively longer time biopsy to histo-pathological report in SGH
21. Cytology/histology uncertainty report and therefore repeating and delaying
22. Patient no money for private biopsy
23. Local medical attendants and doctors being unaware of the seriousness of NPC
24. Local medical attendants and doctors making wrong diagnosis or referrals initially
25. Overloading or understaffing of Pathology Department SGH
26. Overloading or understaffing of Radiotherapy Department SGH
27. Breakdown of laboratory equipments and radiotherapy machine

DISCUSSION

Duration of presenting symptoms from onset ranged from 2 to 1460 days (mean 176 days). It is disappointing that patients had waited on the average of 6 months before seeing the medical professionals (Medical attendants and doctors). There are many factors of this late presentation and the 3 major ones are (1) patients being unaware of NPC and the seriousness of NPC (72%), (2) patients having no pain (30%), and (3) patients seeking traditional treatment first instead of going to medical professionals and therefore the delay (24%).

Duration of appointment time to see ENT Specialists in Department of ENT SGH ranges from 0 to 249 days (mean 19). The mean duration of less than 3 weeks is reasonable. The longer durations up to 8 months are of concern, and many of these were due to defaulters that repeated appointments had to be made due to patients inability to come for the reason mentioned in the minor factors described above.

Noted in the results is the duration from biopsy taken to histo-pathological diagnosis ranging from 1 to 113 days (mean 10) in SGH and from 0 to 7 days in non-SGH (private) laboratories. The relatively longer durations in SGH are mainly due to the minor factors mentioned of overloading or understaffing of Pathology Department SGH and breakdown of laboratory equipments.

Similarly noted is the duration of histo-pathological diagnosis made to commencement of radiotherapy (RTX). The reason for the long delay periods noted is also similar, mainly overloading or understaffing of Radiotherapy Department SGH and breakdown of laboratory equipments and radiotherapy machine.

There were a couple of primary care doctors trained overseas in countries with minimal exposure to NPC that being unaware of NPC prevalence in Sarawak referred the patients late to ENT Department SGH after prolonged treatment with no patient improvement. There happened a case referred to non-surgical specialist as the condition was further delayed in diagnostic referral. A few patients interviewed were not satisfied of their treatment by their medical professionals and sought opinions from the radiologists who made the diagnosis of NPC.

Studies in 126 NPC patients in Singapore by Leong et al₈ reported in 1999 the factors in late NPC diagnosis were more on the doctors than on the patients, saying that the doctors

not considering NPC as a diagnosis, they were misled by results of investigations though NPC was suspected, and patients refusing investigations or defaulting follow-ups. In Sarawak interestingly the factors are to large extent different.

In Sarawak, NPC being a very common malignancy especially in male need the have the above factors addressed so as to improve the early diagnosis and patient survival. These factors are to large extent preventable by public education to all the people including the traditional medicine men. They need to be fully aware of the prevalence and seriousness of NPC. Other factors though minor but they do have cumulative effects are also equally important to be addressed.

SUMMARY

Many factors for late presentation and diagnosis of NPC in Sarawak's 2 main districts had been retrospectively studied and presented. The main factors are related to patients themselves being unawareness of NPC and the seriousness of NPC, the relative painless nature of NPC, and the inclination of the patients seeking traditional medicine first thereby further delaying the presentation. To improve early diagnosis and patient survival, it is vital to provide public education to all the people including the traditional medicine men, of the awareness of prevalence and seriousness of NPC. Other factors are minor but do concern as there are so many with cumulative effects.

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