THE DENTAL MANAGEMENT OF PATIENTS IRRADIATED FOR NASOPHARYNGEAL CARCINOMA

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NASOPHARYNGEAL CARCINOMA

Nasopharyngeal carcinoma (NPC) is the cancer of the nasopharyngeal region. The highest rates are recorded among Chinese living in the South-East of China, where age-standardised rates reach 21/100,000 in males. Moderately high rates occur in the countries in South-Eastern Asia, in northern Africa and among natives of the Arctic Region.

Nasopharyngeal carcinoma (NPC) is one of the commonest head and neck cancers in Malaysia, especially in the Chinese. In Singapore, it is ranked as one of the five most frequent cancers, especially in males. The risk of developing NPC is 30 times greater in Chinese people than other ethnic group. The risk is highest among people of southeast Asian ancestry, particularly residents of Kwantung province in South China, with men at double the risk for women. Because of this, it has been reported mainly in Malaysian and Singaporean of Chinese extract, many of whom have ancestors from South China. In a study in Malaysia in 1979, it was reported that the age-adjusted incidence rates among Chinese males and females were 16.5 and 7.2 per 100,000, among Malay males and females 2.3 and 0.7 respectively and among Indian males, 1.0. There were no significant changes in incidence rates over the 10-year period for sex and ethnic groups, or for Chinese sub-ethnic groups. In Chinese sub-ethnic groups, rates were highest among Cantonese, moderate among Khek and lowest among Hokkien and Teochiu. Recently, there has been a report of a high incidence of NPC in native people of Sarawak, Malaysia especially among the Bidayuh.

The mean age of the 365 new cases of NPC registered in Malaysia in 1988 was 46.8 years (SD+/−12.2 years). The ages of patients ranged from 10 to 80 years. The incidence in both sexes rose after the age of 20-29 years and reached a plateau between 40 and 49 years. No further rise was exhibited after age 60 years. More recent literatures suggested that there is an increasing incidence of NPC from the second decade of life and the peak incidence occurs in the fifth and sixth decade of life. The Chinese had the highest age-adjusted incidence rates, particularly for the age group 40-49 years, where the incidence rate was 40.1 per 100,000 for males and 14.9 for females. The average age-adjusted male/female ratio was 2.8:1.

Predisposing factors to NPC include genetic predisposition, increased size of nasopharynx in the south Chinese, smoking, working in poor ventilation, use of nasal balms or oils, herbal drugs, ingestion of salted fish, and high Epstein-Barr virus (EBV) antibody titre (especially anti-IGA). Tumours of the nasopharynx are strongly associated with EB. The predominant strain of EBV was type 1 in NPC in Asia and Mediterranean Africa and in Caucasian Americans EBV type 2 was more prevalent in Eskimos.

Head and neck pain was an important identifying symptom of NPC. Symptoms prior to diagnosis included headaches, neck masses, ear complaints (hearing changes, dizziness, plugged sensation, pain), nose bleeds and stuffiness, reduced or altered smell, jaw pain, limited mouth opening, facial pain or numbness, and neck masses. These symptoms can be non-specific and present with overlapping symptoms of temporomandibular disorders. Unfortunately, NPC is often not diagnosed until advanced.