

## Guidelines on Cancer Prevention, Early Detection & Screening Nasopharyngeal carcinoma (NPC)

Nasopharyngeal carcinoma (NPC) is the 7th commonest cancer in Hong Kong: 944 new cases were detected in 2005. As people at the prime of their life are mostly affected (peak age-specific incidence being 30-60 years), the impact is especially devastating.

Despite improvements in radiotherapy techniques and better treatment outcomes with combination of chemotherapy and radiotherapy, the key to higher disease-free survival rates lies in early diagnosis.

Good correlation has been shown between the stage of the disease and 5-year survival rates. In fact, the overall survival decreases from 90% for stage I to below 60% for advanced stage IV disease. Unfortunately, only less than 10 % of NPC patients presented with stage I disease without screening.

It is well known that NPC shows familial aggregation and is probably one of the highest amongst malignancies. In epidemiologic studies, the excess risk was generally 4 to 8 fold among individuals with a first-degree relative with NPC, compared with those without a family history. Screening may help in achieving earliest possible detection in this high risk group.

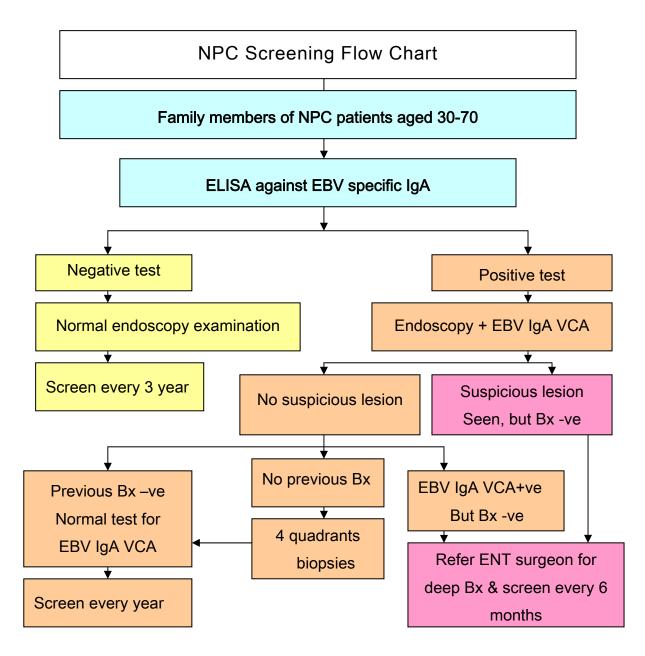
As NPC is strongly associated with Epstein-Barr virus (EBV), common practice is to perform regular EBV serology test and nasopharyngoscopy. These screening methods are sensitive and recent research showed that regular screening with these methods results in early detection of cancer, with more than 40% cases presenting at stage I disease. The 5 year survival rate is also much higher and exceeds 90% for those cancers detected in the screening program. Hence the current recommendation is to offer screening to all high risk family members aged over 30 years.

However, there is currently insufficient evidence to recommend a population-based NPC

screening programme in Hong Kong using IgA against specific EBV viral antigens. Given the current annual incidence rate (crude rate) of NPC in Hong Kong (13.9 per 100,000) the yield is expected to be very low.

Concerning EBV DNA test, it is useful as a prognostic indicator and can serve as a predictor for tumour recurrence for NPC patients. However it has never been studied under screening circumstance and is thus not recommended for routine screening.

In summary, current study results strongly suggest that screening asymptomatic family members of NPC patients can lead to early detection of NPC and clinically valuable survival advantage. However, a larger sample size will be needed for more precise estimates of this potential survival benefit.



## Dr. NG Wai Tong

Associate Consultant, Dept of Clinical Oncology, Pamela Youde Nethersole Hospital Member of "Cancer Education" Subcommittee, The Hong Kong Anti-Cancer Society

## Dr. Anthony C.H. YING

Chairman, "Cancer Detection & Prevention" Subcommittee, The Hong Kong Anti-Cancer Society

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