

EPIDEMIOLOGICAL STUDY OF NASOPHARYNGEAL CARCINOMA RISK IN THAILAND

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Background: Nasopharyngeal carcinoma (NPC) is one of the common cancers in Asian population but is rare in Western countries. In Thailand, the incidence of NPC was 2.8/100,000 among males and 1.4/100,000 among females.

Purpose: The objective of the study was to investigate the importance of environmental express, as well as genetic factors.

Methods: This case-control study was conducted at National Cancer Institute and regional cancer centers during October 2007- October 2009. Seven hundred and fifty patients with histopathologically confirmed NPC and 1294 controls were included in the study. Information was collected by interviewer about demographic variables, cigarette smoking, alcohol drinking, eating habits, past history of disease, family history of cancer and a lifetime history of every job that was held for one year or longer. The participants were also asked to donate a blood sample for virology and genetic study.

Results: The result indicated that smoking, fermented fish were associated with an increase risk of NPC, while salted fish consumption was not associated with NPC risk. Family histories of NPC, rhinitis, sinusitis were also associated with NPC risk. There was a non-significant increase risk among patient who exposed to wood dust. Our results suggest a strong effect of EBV infection on NPC risk. There was no association between GSTM1 and CYP2E1 polymorphism and NPC risk.

Conclusion: Our results suggest that many risk factions such as EBV infection, smoking, family history of NPC may play an important role in NPC pathogenesis Thai population. This findings will be benefit for further research project, and also can be use to build up new strategies for cancer prevention.