Reviewer's report

**Title:** Traditional Cantonese Diet and Nasopharyngeal Carcinoma Risk: a Large-scale Case-control Study in Guangdong, China

**Version:** 1  **Date:** 6 April 2010

**Reviewer:** Ahmed Abdulamir

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Major compulsory concerns

1) The current study was written in a good English and was fair concise. Although well-prepared study, the impact of the results is not that strong. The results are mostly known previously by other studies done on NPC risk factor at the same region of China. However, we can conclude that the only valuable results of this study can be the effect of the Cantonese herbal tea and the slow-cook soup on preventing or lowering NPC incidence. Unfortunately, there might be a serious limiting effect on the effect size of herbal tea on lowering NPC development, the control group was wrongly selected; it was rather an apparently healthy group. Taken the high rate of NPC in this region of the world, the proper control group should be that composed of subjects are clinically proven free of NPC which can be done by a nasopharyngeal examination and diagnosis. I think the exclusion of definite NPC from control group might change the results of the current study especially if we have known that the region of the study is of highest rates of incidence of NPC in the world as well as the fact that premalignant cases have been found more commonly in NPC than other types of head and neck cancers. I understand, if NPC shall medically excluded from control subjects, the number of control would not be as high as in the current study, but I think the precise control group is more important than the size of controls. Moreover, the healthy subjects were recruited from physical enhancement centers where we can expect they care of their health much more than the rest of the population.

Otherwise, data were sound, the methods used were appropriate, the discussion and the conclusions were balanced, the limitations were stated clearly.

Minor essential revisions

Introduction

Authors did not mention many references of recent to relatively recent studies done on the same problem at the same area (southern china). There are many previous studies done that had already focused on the same problem with close results (except for herbal tea). Authors need to present strongly what the new study offers different from the lump of previous studies done on the same problem.
One of the justifications of doing this study is that the economic progress in China might change the risk factors of NPC; however, more than maybe 60-70% of epidemiological studies on NPC were conducted in the last 10 years which in turn abolish the authors' stated objective.

2) This study did not correlate the incurred results with factors other than diet like the genetic factor (familial incidence of NPC).

Materials and methods

Authors stated that “The controls were recruited from among people who requested health examinations in the centers of physical examination of the largest general hospitals in Guangdong province”. As shown in this sentence, the control group in this study were apparently healthy subjects rather than control subjects taken that the definition of control subjects is those who are confirmed to be devoid of NPC! In this instance control group was not considered correctly.

-The sentence "informed consent was obtained before patient interviews” was repeated for the second time in line 1 page 8.

-The data collection encompassed the frequency of taking certain kinds of food as "never, sometimes, monthly, weekly and daily". However, this alone is not enough; it would be more prudent to ask as well on how many times taken per day.

-As cancer are shown to be of multifactorial nature, one of the shortcomings of the conducted data collection was the absence of any data collection on the familial or genetic factor for the development of the disease among patients or controls in order to relate between familial liability and food habits. It was possible to calculate the OR between NPC patients with positive versus negative family history of the disease.

Statistical analysis was well designed and was implemented correctly.

Results

"Results from the present study indicate that consumption of salted fish, salted vegetables and preserved/cured meat is a risk factor for NPC, while consumption of fresh fruit is inversely associated with NPC risk" has been inferred previously by many reports and this is not new at all.

Discussion

It is recommended to include more previous studies and compare between them and this study (apply to discussion too).

Finally, the paper acts as a merely epidemiological case-control study with some limitations.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests