A study on the differences of age at diagnosis and multiple primary cancers between gastric cardia adenocarcinomas with or without a family history of the cancer

Liwei Zhang
4th Hospital of Hebei Medical University, China

The age-adjusted incidence rate of gastric cardia adenocarcinoma (GCA) in the Taihang mountain high-risk region in northern China ranged from 40.8 to 89.1 in male and 14.0 to 37.6 in female, but the etiology is not clear. As it is important to identify a genetic component in cancer research, this study focuses on genetic predisposition by noting the differences in age at onset and multiple primary cancers between GCAs with or without a family history of the cancer. Age at onset and multiple primary GCAs were compared between GCAs with (N=766) or without (N=2167) a family history of the cancer in a consecutive cure-intent surgery cohort at a field cancer center in which all local surgeries of UGIC are included. Overall, GCA cases with a positive family history of the cancer featured significantly both a younger age at onset and more multiple primary cancers than those without (54.68 vs 55.94 years-old, Pt-test = 0.000; 3.10% vs 1.30%, χ² = 11.05, P = 0.001). Both differences were evident in all subgrouped analyses, but did not correlate. While age at onset differed significantly with smoking and drinking cases, the difference of multiple primary cancers was significant with the nonsmoking, nondrinking or younger onset (< 55 years old) cases. Difference in age at onset and multiple primary cancers between familial and sporadic cases suggest a genetic component in GCA. Furthermore, it seems that earlier development occurs by genetic and environmental interaction, but multiple primary cancers reflect only genetic predisposition.

Biography

Li Zhang has completed her M.D and postoral studies at the age of 40 years from Hebei Medical University. She is a professor of oncology in the 4th hospital of Hebei Medical University, a premier cancer center in China. She has published more than 20 papers in reputed international and national journals and serving as an editorial board member of 2 key journals in China.