

Controversy regarding gastric cancer and diabetes

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We have read, with great interest as diabetes specialists, the paper entitled “Gastric atrophy and xanthelasma are markers for predicting the development of early gastric cancer” [1]. The authors have found that patients who have gastric xanthelasma accompanied with diabetes have a higher risk of developing gastric cancer.

Diabetes has been shown to be associated with an increased risk of a number of cancers, but the risk of gastric cancer is controversial, with both positive [2] and inverse [3] association being reported. Recently, Tsugane et al. reported that higher insulin and C-peptide levels have an associated elevated risk of gastric cancer whereas no association was observed for fasting plasma glucose (FPG) levels or body mass index (BMI) [4]. Although the authors have reported that both FPG and HbA1c were significantly higher in patients with gastric xanthelasma than in those without, the raw data suggested that subjects with gastric xanthelasma were in a good glycemic control group. Taken together, it seems to be difficult to show a relationship between a high glucose level, by itself, and with gastric xanthelasma. Furthermore, in general, women have a lower risk of gastric cancer compared to men, while women with diabetes have relatively a higher risk in comparison with those without diabetes.

Therefore, we are interested in knowing if there exist differences in the sexes, BMI, HbA1c, FPG, plasma insulin, and C-peptide levels between patients, with gastric

xanthelasma, who have and have not developed gastric carcinoma.

Finally, this study suggests that diabetic patients with gastric xanthelasma should undergo a careful endoscopic survey regardless of glycemic control, the presence of obesity, or gender. According to the “Report of the Japan Diabetes Society/ Japanese Cancer Association joint committee on diabetes and cancer” [5], patients with diabetes over 40-years-old are encouraged to undergo a stomach X-ray screening, though gastric xanthelasma is only detected by endoscopy. So the role of endoscopy in patients with diabetes for gastric cancer needs to be reevaluated.

Compliance with ethical standards

Conflict of interest Hisamitsu Ishihara has received lecture fees from Asteras, Astrazeneca, Boehringer Ingelheim, Daiichi Sankyo Inc., Eli Lilly and Company, Kowa Pharmaceutical Co., MSD, Novartis Pharmaceuticals, Novo Nordisk Pharma, Ono Pharmaceutical Co., Mitsubishi Tanabe Pharma, and Sanofi, and research funds from Asteras, Boehringer Ingelheim, Daiichi Sankyo Inc., Eli Lilly, Kowa Pharmaceutical Co., MSD, Mitsubishi Tanabe Pharma, Novartis Pharmaceuticals, Novo Nordisk Pharma, Sanofi, and Takeda Pharmaceutical Co.

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