Life Style-Related Disease and Colorectal Cancer

Hirokazu Takahashi and Masahiko Inamori

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Chronic conditions including obesity, diabetes, hyperlipidemia and hypertension have been shown to be associated with a Western diet, alcohol intake, and smoking. Indeed, obesity has been reported to be associated with an elevated risk of cardiovascular disease, diabetes and mortality. Recently, these life styles have also been shown to be correlated with an increase in colorectal cancer (CRC) risk. CRC is a disease with a high mortality and morbidity rate, and recently its prevalence has been increasing worldwide. In their recent report in the journal (1), Omata et al suggested that a body mass index (BMI) of 22-25, associated with both colorectal neoplasms including CRC and hyperplastic polyps (HP), and current or heavy smoking, is in part correlated with colorectal neoplasms (CRN) and HP.

Obesity, hyperinsulinemia and insulin resistance have been repeatedly shown to be associated with CRC and colorectal precancerous lesions (2, 3). Overweight, obesity, or high BMI has been consistently associated with an increased risk for CRC incidence and mortality, at least in men and premenopausal women (4). The WHO definition of life style-related disease allows the use of a BMI of at least 30 kg/m² in place of waist circumference or waist-to-hip ratio (5).

Diabetes mellitus (DM) and hyperlipidemia were also associated with an increased risk for CRC in cohort studies (6-10). A recent study reported that diabetic individuals, especially those who are obese, have an increased risk of prevalent colon adenoma and particularly for advanced adenoma (11). Recently, great progress has been made in understanding the role of life style-related diseases and CRC. CRC is potentially one of the most preventable malignancies (12). Further research may lead to new opportunities for prevention of CRC.

References