

Nested case-control study on the risk factors of colorectal cancer.

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AIM: To investigate the risk factors of colon cancer and rectal cancer. **METHODS:** A nested case-control study was conducted in a cohort of 64 693 subjects who participated in a colorectal cancer screening program from 1989 to 1998 in Jiashan county, Zhejiang, China. 196 cases of colorectal cancer were detected from 1990 to 1998 as the case group and 980 non-colorectal cancer subjects, matched with factors of age, gender, resident location, were randomly selected from the 64 693 cohort as controls. By using univariate analysis and multivariate conditional logistic regression analysis, the odds ratio (OR) and its 95 % confidence interval (95 %CI) were calculated between colorectal cancer and personal habits, dietary factors, as well as intestinal related symptoms. **RESULTS:** The multivariate analysis results showed that after matched with age, sex and resident location, mucous blood stool history and mixed sources of drinking water were closely associated with colon cancer and rectal cancer, OR values for the mucous blood stool history were 3.508 (95 %CI: 1.370-8.985) and 2.139 (95 %CI: 1.040-4.402) respectively; for the mixed drinking water sources, 2.387 (95 %CI: 1.243-4.587) and 1.951 (95 %CI: 1.086-3.506) respectively. All reached the significant level with a P-value less than 0.05. **CONCLUSION:** The study suggested that mucous blood stool history and mixed sources of drinking water were the risk factors of colon cancer and rectal cancer. There was no any significant association between dietary habits and the incidence of colorectal cancer.

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