Original Paper

Nutritional characteristics in patients with colorectal cancer in Golestan Province of Iran, A case-control study

Abbas Ali Keshtkar (PhD)\(^1\), Shahryar Semnani (MD)\(^2\), Gholamreza Roshandel (MD)*\(^3\), Maryam Aboomardani (PhD)\(^4\), Nafiseh Abdolahi (MD)\(^5\), Sima Besharat (MD)\(^3\), Abdolvahab Moradi (PhD)\(^6\), Khodaberdi Kalavi (MSc)\(^7\), Saba Besharat (BSc)\(^8\), Honeyeh Sadat Mirkarimi\(^9\)

\(^1\)Assistant Professor, Department of Social Medicine, Gorgan University of Medical Sciences, Gorgan, Iran. \(^2\)Associate Professor, Department of Gastroenterology & Hepatology, Golestan Research Center of Gastroenterology & Hepatology, Gorgan University of Medical Sciences, Gorgan, Iran. \(^3\)General Physician, Golestan Research Center of Gastroenterology & Hepatology, Gorgan University of Medical Sciences, Gorgan, Iran. \(^4\)Nutritionist, Gorgan University of Medical Sciences, Gorgan, Iran. \(^5\)Assistant of Internal Medicine, Iran University of Medical Sciences, Tehran, Iran. \(^6\)Associate Professor, Department of Virology, Golestan Research Center of Gastroenterology & Hepatology, Gorgan University of Medical Sciences, Gorgan, Iran. \(^7\)Academic Instructor, Department of Hematology, Golestan Research Center of Gastroenterology & Hepatology, Gorgan University of Medical Sciences, Gorgan, Iran. \(^8\)Midwife, Tehran University of Medical Sciences, Tehran, Iran. \(^9\)Laboratory science technician, Golestan Research Center of Gastroenterology & Hepatology, Gorgan, Iran.

Abstract

Background and Objective: Colorectal cancer is the third common malignancy in the world. Personal habits including life style and nutrition have been proposed as risk factors of colorectal cancer. We conducted this study to assess the nutritional characteristics in colorectal cancer patients in Golestan province of Iran.

Materials and Methods: This case-control study was done on 47 colorectal cancer cases, diagnosed during 2004-05 and 47 healthy controls. A questionnaire containing socio-demographic and nutritional characteristics (FFQ) was filled for each of the participants. Chi square test was used to assess the relationship between variables.

Results: In each of the two groups, 40.4% were females and 59.6% were males. The mean±SD age of age in cases and controls were 52.4±13.4 and 52.1±13.1 years, respectively. Total energy expenditure of higher than 1837.5 Kcal/ day was significantly related to colorectal cancer (OR=3.8; 95% CI: 1.2-11.3). Colorectal cancer risk was higher in individual with frying cooking method (OR=3; 95% CI: 0. 8-11.1). The risk of colorectal cancer was 6.5 times higher in individuals with fat consumption of higher than 118.5 grams/day (95% CI: 1.5-28.8). No significant relationship was seen between vegetables consumption and the risk of colorectal cancer.

Conclusion: This study showed that high total energy expenditure, high fat consumption and using frying method for cooking are risk factors of colorectal cancer in Golestan province in Nothern of Iran.

Keywords: Colorectal cancer, Total energy expenditure, Nutritional characteristics, Golestan province, Iran

* Corresponding Author: Gholamreza Roshandel (MD), E-mail: roshandel_md@yahoo.com

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