

שם: רעות צור

שם העבודה:

Dietary and lifestyle patterns and the development of colonic polyps among population with average and high risk for colorectal cancer

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Abstract

Background:

It is well known that the majority of sporadic CRC tumors originate from premalignant precursor known as polyps. Both genetic and lifestyle factors contribute to the development of colorectal polyps, however, the association between lifestyle behaviors and development of various types of polyps among the average risk population was only marginally tested prospectively. "The average risk population" applies to asymptomatic adults 50 years and older who do not have a family history of known genetic disorders that predispose them to a higher lifetime risk of CRC. On the other hand, a population with a high risk of CRC includes inherited cancer syndromes such as familial adenomatous polyposis (FAP). The associations between lifestyle behaviors and development of various types of polyps among this high risk population were not tested.

Aim:

To evaluate the association of lifestyle behaviors and dietary patterns with the prevalence, incidence or recurrence of colorectal polyps among average risk population and FAP patient and to compare between these two populations in order to shed more light on the role of nutrition and lifestyle on the development of colorectal polyps.

Methods:

This study encompass two study designs: a cross-sectional and cohort study. Cohort study- This population will include patients who previously participated in a study which examined the association between non-alcoholic fatty liver disease (NAFLD) and colorectal polyps, who underwent screening/diagnostic colonoscopy from 2010 to 2015 and will agree to participate in the follow-up study. Participants that will included in the study are those who have repeated the colonoscopy or who agree (and need) to undergo another colonoscopy.

Cross-sectional study- This population will include patients of all ages with high risk of developing colorectal polyps and CRC due to clinical and/or genetic diagnosis of Familial Adenomatotic Polyposis (FAP) who are being monitored at the gastroenterology department at Tel-Aviv medical center. These patients undergo a colonoscopy at least once a year and we will take the result of the

colonoscopy performed near their entry for the study day. During the study-day, these patients will undergo the same tests and questionnaires as the cohort. All participants will be sampled by convenient sampling from the population attending the department of Gastroenterology and Hepatology of the Tel-Aviv Medical Center, with a calculated sample size of 72 participants of the high-risk group and of 172 participants for the average risk group. Colorectal polyps will be diagnosed by colonoscopy, and lifestyle behaviors and metabolic parameters, will be measured by detailed questionnaires, blood tests, body composition and muscle strength (hand-grip strength). 7

Study importance:

This study is among the few that examines the relationship between diet and lifestyle versus the: phenotype, including polyp development / recurrence in FAP patients, a group with a high genetic risk of developing colorectal cancer. In addition, for the first time, this group will be compared to a group with an average risk of developing colorectal cancer, thus gaining a better understanding of the importance of lifestyle-related behaviors and dietary patterns among these patients. The findings of this study can help in the construction of lifestyle recommendations for the prevention of one of the most common cancers.