

Characteristics of Patients with Colorectal Cancer on Screening Colonoscopy: A Case-Control Study in a Predominantly Hispanic Community

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Introduction

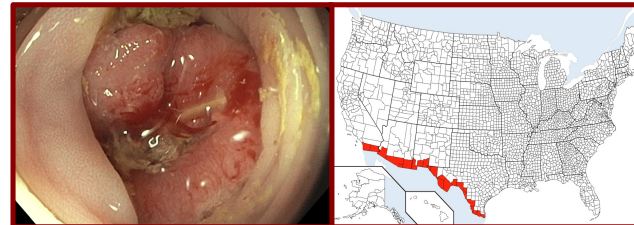
- Colorectal cancer (CRC) is the second most common cause of cancer-related death in men and women.
- The incidence of CRC has declined, primarily due to screening programs and lifestyle modifications.
- A disparity in colon cancer screening rates has been recognized between Hispanics and non-Hispanic whites.
- The aim of this study was to identify factors associated with the incidence of CRC found during screening colonoscopy in asymptomatic individuals in a predominantly Hispanic community on the US-Mexico border.

Methods

- We conducted a case-control study in which subjects diagnosed with CRC during their first screening colonoscopy were identified as cases, and randomly selected subjects with normal colonoscopies were matched as a control group (1:1 match).
- Demographic, clinical, pathological, and endoscopic data of the case and control groups, collected from medical records at our tertiary county hospital from January 2010 to March 2021, were compared between the two groups.
- Continuous data was described using mean and standard deviation (SD); categorical data as frequency and proportion (%). Chi-square and t-tests were used for statistical comparison as appropriate.

Table 1

	NORMAL	CANCER	
Screening Colonoscopies	n = 116	n = 116	
Mean age at the time of procedure (SD)	58.2 (5.3)	60.17 (8.2)	<i>p</i> = 0.03
Gender (%)			
Male	59 (51)	59 (51)	
Female	57 (49)	57 (49)	
Ethnicity (%)			<i>p</i> = 0.25
Hispanic	108 (93)	103 (89)	
Non-Hispanic	8 (7)	13 (11)	
Mean BMI (SD)	30.6 (6.7)	29.9 (5.5)	<i>p</i> = 0.39
Diabetes Mellitus(%)	42 (36)	35 (30)	<i>p</i> = 0.28
Hyperlipidemia (%)	68 (59)	47 (41)	<i>p</i> = 0.01
Hypertension (%)	58 (50)	61 (53)	<i>p</i> = 0.28
Tobacco use (%)	27 (23)	36 (31)	<i>p</i> = 0.52
Alcohol use (%)	41 (35)	44 (38)	



Results

- A total of 116 subjects (51% male, 89% Hispanic) diagnosed with CRC on their first screening colonoscopy were identified as cases.
- The majority of the cancers were left-sided (66%) and were either stage 1 or 2 disease (65%).
- The mean age was found to be higher in subjects with CRC (case group) compared to the control group (60.2 vs 58.2, *p*=0.03). Hyperlipidemia was found to be less frequent in subjects with CRC compared with those with normal colonoscopy (41% vs 59%, *p*=0.01).
- Otherwise, there were no statistically significant differences in the variables examined between the CRC and control group (Table 1).

Discussion

- In our predominantly Hispanic population, higher age was associated with CRC on screening colonoscopy compared with a control group of patients.
- Hyperlipidemia was less prevalent in subjects with CRC than those with normal colonoscopies.
- Whether lifestyle habits or the use of medications, such as statins, contribute to this finding needs further investigation.