Patients With Advanced Colorectal Polyps have Poor Knowledge of Colorectal Cancer Risk and Screening Recommendations for their First-Degree Relatives



Abigail Braun MD¹, Michelle Springer MS,CGC¹, Timothy Yen MD¹, Jeannine Espinoza BA¹, Elizabeth Magnan BA¹, Jordan J. Karlitz MD², Swati G. Patel MD, MS¹ 1. University of Colorado Anschutz Medical Campus, 2. Denver Health Medical Center

INTRODUCTION

- First-degree relatives (FDRs) of patients with advanced colorectal polyps (ACPs) are at increased risk for colorectal cancer (CRC)
- Guidelines recommend FDRs undergo screening 10 years before FDR age of diagnosis or at age 40
- Screening is dependent on patient knowledge of their own history and communication of risk with FDRs

AIM

- Evaluate proband knowledge of increased risk of CRC in FDRs
- Determine factors associated with correct knowledge

METHODS

- Ongoing multi-center clinic trial for patients with ACPs diagnosed before the age of 60
- ACP defined as any adenoma or serrated polyp \geq 10 mm, or any polyp with villous features or high-grade dysplasia
- Patients underwent surveys assessing demographic information and knowledge
- Chi Square Test utilized to compare patient knowledge by baseline demographic characteristics

Table: Characteristics of participants who are aware that their ACP confers increased risk of CRC to their FDR and that FDRs should undergo earlier screening

Total Cohort (N=133)	Risk higher N=62 (%)	P value	Should get colonoscopy earlier N=63 (%)	P value
Age				
20-29 (N=10)	3 (30.0)	0.057	5 (50.0)	0.702
30-39 (N=29)	18 (62.1)		18 (62.1)	
40-49 (N=49)	17 (34.7)		24 (49.0)	
50-59 (N=43)	23 (53.5)		16 (37.2)	
No response (N=2)	1 (50.0)		0 (0.0)	
Race				
White/Caucasian (N=118)	57 (48.3)	0.050	53 (44.9)	0.322
Black/African American (N=9)	3 (33.3)		6 (66.7)	
Other/No response (N=10)	1 (10.0)		6 (60.0)	
Household Income				
>70,000 (N=82)	45 (54.9)	0.064	45 (54.9)	0.056
45-69,999 (N=26)	12 (46.2)		14 (53.8)	
30-44,999 (N=13)	2 (15.4)		2 (15.4)	
15-29,999 (N=5)	2 (40.0)		1 (20.0)	
<14,999 (N=3)	1 (33.3)		1 (33.3)	
U.S. Birthplace Region				
Northeast (N=15)	6 (40.0)	0.433	8 (53.3)	0.050
Midwest (N=32)	18 (56.3)		21 (65.6)	
South (N=21)	10 (47.6)		7 (33.3)	
West (N=52)	20 (38.5)		20 (38.5)	
Synchronous Advanced Polyps				
Yes (N=33)	19 (57.6)	0.244	19 (57.6)	0.173
No (N=87)	36 (41.4)		38 (43.7)	
Unknown (N=13)	7 (53.8)		6 (46.2)	
Metachronous Advanced Polyps				
Yes (N=21)	8 (38.1)	0.139	6 (28.6)	0.103
No (N=87)	38 (43.7)		42 (48.3)	
Unknown (N=25)	16 (64.0)		15 (60.0)	

- 133 participants, median age at time of colonoscopy 46, 53% male, 89% white, 13% Latino/Hispanic
- Most with income > \$45,000 (81%), and college or post college education (68%)
- Polyps primarily < 20 mm (67%), adenomatous histology (97%), without high grade dysplasia (HGD) (79%)
- Only 46% of participants aware that FDRs are at increased risk of CRC
- 47% aware that FDRs are eligible for earlier colonoscopy screening

RESULTS

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Correct response rates involving familial risk and need for colonoscopy screening by patient characteristic



Q1: % answered correctly risk to FDRs is higher; Q2: % answered correctly FDRs need earlier colonoscopy screening

- Women and non-Hispanic individuals had significantly better knowledge of familial risk and screening recommendations
- Presence of high-grade dysplasia was associated with less accurate knowledge of familial risk

CONCLUSIONS

- Less than half of participants with ACPs are aware that their family members are at increased risk of CRC and should get earlier colonoscopy screening
- There is a critical need for colonoscopists to communicate familial risk and recommendations to those with advanced polyps
- Future studies to understand why males and those of Hispanic or Latino ethnicity have sub-optimal knowledge can inform targeted educational campaigns

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