

Clinical Characteristics of Young Patients with Colonic Adenomas

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INTRODUCTION

Incidence of colorectal cancer (CRC) is rising among young individuals.

Studies addressing the risk factors, patient characteristics and appropriate surveillance intervals in young patients with pre-malignant adenomatous polyps are limited.

AIM

Describe the clinical characteristics of young patients (< 50 years of age) with adenomatous colonic polyps and characterize those polyps.

METHODS

Retrospective chart review of young patients (< 50 yrs) with polyps on colonoscopy between 2008 and 2021 at a tertiary care center.

Patient demographics, clinical characteristics, colonoscopy indication, and number, size, location and pathology of polyps were documented.

Timing and findings on follow-up colonoscopies were also collected.

Study population was divided into two cohorts: patients with and patients without adenomatous polyps.

877 patients were included in our study; 610 (70%) had adenomas.

- Patients with adenomas had a mean age of 42.9 ± 6 years, 61% were males, and 51% were smokers. Mean BMI was 27.5 ± 5 and mean Vitamin D level was 22.1 ± 10 ng/dl. Around half (49%) of those were 44 years old or younger.
- 156 (26%) patients with adenomas had a follow-up colonoscopy after a mean time of 2.9 ± 2 years. 74 (47%) of those had recurrent adenomas. 38 (24%) patients had a second follow up colonoscopy after 2.1 ± 1 years. 15 (39%) patients of those had recurrent adenomas.

RESULTS

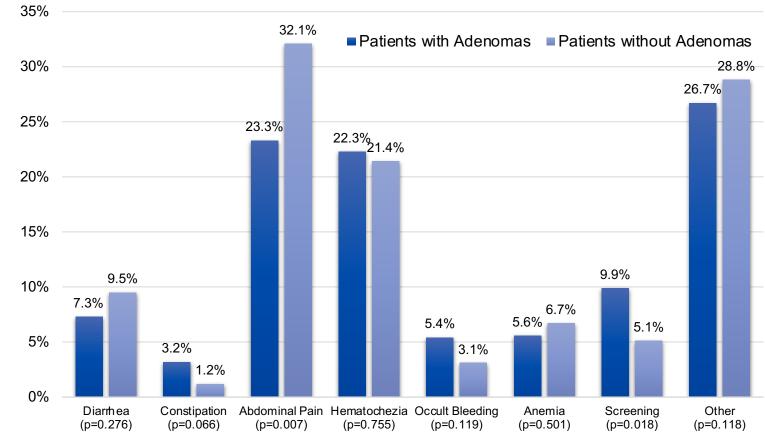


Chart 1. Colonoscopy indications in patients younger than 50 years old found to have adenomatous polyps vs. those found to have non-adenomatous polyps only.

Polyp Pathology	Baseline Colonoscopy (N = 610)	1 st Follow-up Colonoscopy (N = 156)	2 nd Follow-up Colonoscopy (N = 38)	
Tubular – N (%)	569 (93)	71 (45)	13 (34)	
Tubulovillous – N (%)	29 (5)	0 (0)	1 (2)	
Villous - N (%)	1 (0.2)	1 (0.6)	1 (2)	
Sessile Serrated – N (%)	19 (3)	2 (1)	0 (0)	
Hyperplastic – N (%)	104 (17)	42 (27)	14 (37)	

Table 1. Number of individuals found to have each pathology finding on baseline and follow-up colonoscopies for patients < 50 years old with adenomas.

	60%						
as		52.9%		■Pa	tients with Adenon	nas ■Patients w	ithout Adenomas
3%-	50%						
	40%		41.3%			33.6%	
	30%		31.5%	24.4%	26.6%		
	20%	21.5%			13.2%	14.7%	12.1%
ŀ	10%			10.1%			7.8%
3)	0% -	Rectum (p<0.001)	Sigmoid (p=0.002)	Descending (p<0.001)	Transverse (p<0.001)	Ascending (p<0.001)	Cecum (p=0.061)

Chart 2. Distribution of polyp locations between patients with adenomas and patients without adenomas (hyperplastic polyps only).

Patients Patients Aged 18 - 44 Aged 45 - 50 p - value (N = 299)(N = 311)Males 58.6% 63.0% 0.256 Smokers 50.1% 0.705 51.6% Mean BMI 26.77 28.20 0.886 Mean Size of Polyps (cm) 1.01 <0.001 1.21 Follow-up Rate 0.713 24.7% Adenomas on 1st Follow-up 70.3% 74.1% 0.597 High Risk Patients* 24.7% 30.2% 0.130

Table 2. Comparison of clinical and polyp characteristics between patients < 45 years of age and patients 45 to 50 years of age with adenomatous polyps at baseline colonoscopy. *Patients with 3 or more polyps and/or a polyp \geq 1 cm and/or villous histology.

CONCLUSIONS

- Patients < 50 years of age with colonic adenomas were mostly males and overweight; hence colonoscopy should be considered in young individuals with high-risk baseline characteristics.</p>
- High rates of recurrent adenomas and larger mean polyp size in patients < 45 years of age may warrant more frequent surveillance than is done for patients > 45 years.

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