CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

http://doi.org/10.5281/zenodo.2577270

Available online at: http://www.iajps.com ***Research Article***

THE FREQUENCY OF INCIDENTAL RECTAL CANCER IN ELDERLY PATIENTS PRESENTING WITH HAEMORRHOIDS – IS ROUTINE COLONOSCOPY JUSTIFIED

[1]Dr Rabia Saleem,[2]Dr Fizzah Shabbir,[3]Dr Abubakar Shahid

[1]MBBS, Alnafees Medical College Islamabad., [2]Demonstrartor, Islamabad Medical and Dental College,Islamabad., [3]MBBS,Nawaz Sharif Medical College,Gujrat.

Abstract:

The basic aim of this study is to assess the role of colonoscopy in incidental rectal cancer in elderly patients presenting with hemorrhoids. Consecutive elderly outpatients prospectively underwent colonoscopy with minimal BRBPR was defined as small amounts of red blood after wiping or in the toilet bowl. Elderly patients with the following alarm signs were excluded: if there is a positive personal history of colorectal neoplasms or IBD, inflammatory bowel disease, if there is any positive first-degree family history of colorectal neoplasms or any history of altered bowel habits, recent significant weight loss, and presence of iron deficiency anemia. IBD, colorectal carcinoma and neoplastic polyps were defined as important lesions.

A total of 402 patients (183 female and 219 male), the range of age was 51-83 years, were studied. Anal Fissures 14.2%, Hemorrhoids (54.2%) and ulcerative colitis (14.2%) were the most common lesions and colonoscopy was normal in 8.0%. Noteworthy injuries were found in 30.1% (121) patients, comprising 6.5% (26) patients with adenocarcinoma and 7.5% (30) with adenomatous polyps. Almost all patients with important injuries had at least one lesion in the distal colon; adenomatous and adenocarcinoma polyp in the proximal colon were found in two patients with hemorrhoids.

Adaptable sigmoidoscopy represents to be adequate for the analysis of average-risk patients with insignificant BRBPR. Severe sigmoidoscopy may be used as an alternative in patients less than 60 years of age in settings where the former is not available. The choice of colonoscopy over flexible sigmoidoscopy in patients aged over 60 years should be individualized.

Keywords: *Colonoscopy, Gastrointestinal hemorrhage, Colorectal Neoplasms, Incidental Rectal Cancer.*

Corresponding author:

Dr. Rabia Saleem,

MBBS, Alnafees Medical College Islamabad.

QR code

Please cite this article in press Rabia Saleem et al., ***The Frequency Of Incidental Rectal Cancer In Elderly Patients Presenting With Haemorrhoids – Is Routine Colonoscopy Justified.,*** *Indo Am. J. P. Sci, 2019; 06(02).*

INTRODUCTION:

BRBPR (Minimal bright red bleeding per rectum) is a clinical problem frequently found in adults of all ages. Incidental Rectal Cancer is the problem which may be even more common in adults because of under-reporting to physicians. The prevalence of any rectal bleeding was significantly higher in elder people. Only 14 percent of those with any rectal bleeding had seen a physician for bowel problems in the prior year (Ampil and Baluna, 2016).

The bleeding etiology is inclusively variable and depends upon the nature of the population studied. The etiology of Incidental Rectal Cancer and minimal BRBPR is often difficult to determine because individual patients may have multiple potentially culpable lesions found at endoscopy. Furthermore, the colorectal neoplasms (typically adenomas) have been observed in 16 percent of patients who were simultaneously identified with an anorectal source of bleeding. Benign anorectal pathologies appear to account for 90 percent or more of all episodes of minimal BRBPR. The true proportion of benign etiologies may be even higher since many young people with minimal BRBPR never present for care. The appropriate evaluation of a patient presenting with minimal BRBPR must be guided by the risk of underlying serious pathology (Carden, 2016).

METHODS:

The study was performed prospectively on consecutive out-patients undergoing colonoscopy during a period (October 2015 - August 2017) at the "open access" Unit of Gastrointestinal Endoscopy. Incidental Rectal Cancer with minimal BRBPR, was defined as small amounts of red blood after wiping or a few drops of blood in the toilet bowl after defecation. Small amounts of blood on the surface of the stool were also considered minimal BRBPR, but red blood intermixed with stool was not. Exclusion criteria were age below 53 years, positive personal history of colorectal neoplasms or inflammatory bowel disease (IBD), positive first degree family history of colorectal neoplasms, history of altered bowel habits, recent significant weight loss, presence of iron deficiency anemia, those who had already had a colonoscopy within the previous year, and those who did not consent or refused colonoscopy. Patients less than 60 years of age who refused to participate in the study underwent flexible sigmoidoscopy according to the current recommendations. These patients are excluded from the main data analysis, but their results are presented as a separate group.

All patients were interviewed and examined by a gastroenterologist. Accordingly, patients' informed through written consent was obtained from each patient before placing interview according to the strategies of the local institutes. After clinical assessment, all patients suffered anal examination and digital rectal review. Notwithstanding of any anal pathologies detected, all patients underwent total colonoscopy (Carden, 2016).

Endoscopy was performed by an expert endoscopist in patients after the ingestion of 4 to 6 liters of polyethylene glycol solution. Any abnormal lesion was biopsied and sent for histology. IBD was diagnosed based on colonoscopy features and histopathological findings. All those patients who are suffered with poor bowel preparation were scheduled for repeat colonoscopy and the results of a suitable analysis are reported. Colonoscopy was supplemented with double-contrast barium enema if the colon was examined to at least the hepatic flexure, but the cecum could not be reached (Saad and Rex, 2017).

There are relatively few studies that have addressed issues relevant to the appropriate evaluation of patients and most studies have not been performed in patients with strictly minimal BRBPR. It is a source of controversy as to whether minimal BRBPR necessitates total colonoscopy as a first-line procedure or a 60 cm flexible sigmoidoscopy. Some authors have recommended colonoscopy in all patients with rectal bleeding, while others prefer colonoscopy for patients over 55 years of age and recommend sigmoidoscopy only if a potential source of bleeding is not identified on physical examination or anoscopy/proctoscopy.

Medical resources are limited in developing countries and a total colonoscopy may not be easily accessible for all patients. Our aim was to determine the type and prevalence of colonoscopic role incidental rectal cancer findings in patients with minimal BRBPR in order to establish which patients need a total colonoscopy. The part of the colon, situated between the rectum and the splenic flexure, was defined as the distal colon. Neoplastic polyps, colorectal carcinoma, and IBD were defined as "significant lesions" (Saad and Rex, 2017).

The study was approved by the institutional review board of the research unit according to the declaration of Helsinki. Informed written consent was obtained from each patient before interview and procedures according to the guidelines of the institute. Quantitative variables are presented with mean ± SD. In this study the qualitative variables are

stated with number and percentage. The two groups of values were compared using the chi-square test and the Fisher's exact test, a value of $P < 0.05$ was considered statistically significant (Saad and Rex, 2017).

RESULTS:

Patients

During the study period, 402 patients with minimal BRBPR were enrolled. This study group was composed of 219 males (54.5%) and 183 females (45.5%). Their ages ranged from 51 to 83 years. Of these, 177 (44.0%) were in the one age group. There were another 94 patients (41 male, 53 female), who met the eligibility criteria, but did not agree to participate and undergo colonoscopy.

Endoscopic lesions

Endoscopy was performed up to the cecum in 389 patients (96.8%). There were no complications attributed to the procedure. The 13 (3.2%) incomplete examinations showed distal lesions in 11 patients and 2 normal results. All barium enemas were normal. Endoscopic findings are presented in below-mentioned Table 1. Hemorrhoids, anal fissures, and IBD were the most common diagnoses.

		Total		Age < 60		Age ≥ 60		P
		Number	Percent	Number	Percent	Number	Percent	
Significant lesions	Carcinomas	26	6.5	4	2.3	22	9.8	0.002
	Polyps	30	7.5	8	4.5	22	9.8	0.046
	UC	57	14.2	37	20.9	20	8.9	0.001
	CD	10	2.5	5	2.8	5	2.2	0.700
Insignificant lesions	Hemorrhoids	218	54.2	62	35.0	156	69.3	7.2 e-012
	Anal fissures	57	14.2	38	21.5	19	8.4	0.000
	Diverticulosis	1	0.2	0	0.0	1	0.4	0.560
	SRUS	33	8.2	23	13.0	10	4.4	0.020
	AD	1	0.2	0	0.0	1	0.4	0.560
	Normal	32	8.0	23	13.0	9	4.0	0.001

UC: Ulcerative colitis; CD: Crohn's disease; SRUS: Solitary rectal ulcer syndrome; AD: Angiodysplasia.

[1]patients with more than one lesion were presented in more than one diagnostic category.

Source: (Saad and Rex, 2017)

Location of lesions in patients with abnormal findings

At least one distal lesion was found in all patients with abnormal findings (370 patients), but a concomitant proximal significant lesion was found in 15 patients (4.1%). The concomitant proximal lesion was in the same diagnostic category (e.g. distal and proximal polyps) in 13 patients; a 53-year-old woman with hemorrhoids was found to have adenocarcinoma in the transverse colon and one adenomatous polyp was found in the transverse colon of a 62-year-old woman with hemorrhoids. At least one anorectal lesion was found in 359 patients (97.0%). In patients with an anorectal source of bleeding, a different distal lesion was found in 31 (8.6%). A statistically significant difference in the frequency of concomitant lesions could not be found in patients.

Significant lesions

Significant lesions were found in one group of 54 patients (30.5%) and 67 patients (29.8%) in the other group ($P > 0.5$). The potential diagnostic yields of different approaches (based on the location of the lesions) for the diagnosis of significant lesions are compared in Table 2 mentioned below:

Distance from anal verge	Carcinomas	Polyps	UC	CD
Age < 60 Years				
10 cm	3/4	2/8	36/37	3/5
30 cm	4/4	8/8	37/37	5/5
60 cm	4/4	8/8	37/37	5/5
Entire colon	4/4	8/8	37/37	5/5
Age ≥ 60 Years				
10 cm	12/22	10/22	20/20	0/5
30 cm	17/22	13/22	20/20	4/5
60 cm	21/22	21/22	20/20	5/5
Entire colon	22/22	22/22	20/20	5/5

UC: Ulcerative colitis; CD: Crohn's disease.

[1]The length of evaluation was considered 10 cm for anoscopy/rectoscopy, 30 cm for rigid sigmoidoscopy and 60 cm for flexible sigmoidoscopy;

[2]In patients with multiple lesions of the same type, the nearest lesion to the anal verge has been considered.

Source: (Saad and Rex, 2017)

Findings in young patients who underwent flexible sigmoidoscopy

There were 94 patients (41 male, 53 female) in one group, who met the eligibility criteria but did not agree to undergo colonoscopy. Evaluation of these patients revealed hemorrhoids in 46 (48.9%), anal fissures in 20 (21.3%), IBD in 7 (7.4%), solitary rectal ulcer syndrome in 6 (6.4%), and diverticulosis in 1 (1.1%). There were no cases of carcinoma, polyps or angiodysplasia. Normal results were found in 21 patients (22.3%).

DISCUSSION:

Our study showed that significant lesions in the proximal colon are infrequent in patients with minimal BRBPR. Colonoscopy is recommended for the evaluation of rectal bleeding in patients who are at increased risk for colorectal neoplasms, but there are no specific recommendations for the appropriate evaluation of the majority of patients who lack these risk factors. The decision about the extent of the evaluation of these patients should be based on the prevalence of clinically significant lesions, potential need for a repeat procedure, costs, and availability of the facility (Paddon, 2017).

Some experts recommend that some patients do not require further evaluation if the presentation and history do not suggest an increased risk of cancer and a potential source of bleeding (such as hemorrhoids or an anal fissure) is identified in the clinical evaluation. Several studies have concluded that flexible sigmoidoscopy is initially appropriate, while others have recommended colonoscopy in this age group. Contrasting opinions are also expressed in the guidelines prepared by the American Society for Gastrointestinal Endoscopy (ASGE) and the European Panel for Appropriateness of Gastrointestinal Endoscopy (EPAGE): While the former specifies that older individuals must always undergo a total colonoscopy, even in the presence of an anal lesion that could justify the hematochezia, accordingly it consider total colonoscopy inappropriate when the source of bleeding has been ascertained by ano- or sigmoidoscopy (Shuja and Deutch, 2018).

IBD was found in 16.4% of our patients. Other studies have reported lower rates of IBD in their patients. Detection of ulcerative colitis is not a problem, because the rectum is almost always involved. Our 10 patients with Crohn's disease also had distal colonic involvement (less than 30 cm from the anal verge). Thus, our results show that IBD can be readily diagnosed in patients with minimal

BRBPR with any of the available procedures (Shuja and Deutch, 2018).

Colorectal cancer has been reported as low as 0%-4% and adenomatous polyps in 9.9%-30% in patients with minimal BRBPR. Some of the differences in these results may be explained by the differences in their study populations. In a recent study, there found no cancer and 4 adenomatous polyps (3%) in 134 average-risk patients with minimal bright red bleeding from midline anal fissures. We found colorectal carcinoma in 6.5% of our patients and adenomatous polyps in 7.5%. Our findings may be overestimated because we excluded 94 patients from analysis who underwent only flexible sigmoidoscopy and there were no neoplastic lesions in this group. Nevertheless, minimal BRBPR should be regarded as an 'alarm symptom' for neoplastic colorectal lesions (Saad and Rex, 2017).

Patients with incidental rectal cancer and minimal BRBPR from colorectal cancer are probably to have left-sided lesions. Generally, all of the neoplastic lesions in our patients were located in the distal colon. There was one patient with hemorrhoids and an adenocarcinoma in the transverse colon, but we believe that the bleeding may have been caused by the hemorrhoids and the tumor was incidentally found during a colonoscopy. The distribution of polyps was similar to colorectal cancer in our patients. Thus, we conclude that average-risk patients with minimal BRBPR of any age may not be at an increased risk for proximal neoplastic colonic lesions (Shuja and Deutch, 2018).

The choice of the appropriate diagnostic evaluation depends mainly on the age of the patient. According to our results in Table 2, one group of patients should at least be evaluated up to the distal 30 cm of the colon. Physical examination (including digital rectal examination), anoscopy and rectoscopy are simple and low-cost maneuvers that do not require bowel preparation. Accordingly, the higher sensitivity of anoscopy, for the detection of hemorrhoids is comparable with flexible video endoscopy. However, these methods would fail to diagnose most neoplastic lesions in our patients, even if a potential anorectal source of bleeding was identified. Rigid sigmoidoscopy is a widely used modality as a preliminary investigation to exclude colorectal pathology and is usually done in outpatient clinics on unprepared bowel (Saad and Rex, 2017).

All significant lesions of our young patients were in the reach of rigid sigmoidoscopy; however, flexible sigmoidoscopy has been shown to be superior in terms of diagnostic value and patient discomfort. Thus, we suggest flexible sigmoidoscopy for young patients with minimal BRBPR regardless of identified anorectal pathologies and rigid sigmoidoscopy may be an appropriate alternative in settings, where flexible sigmoidoscopy is not accessible (Shuja and Deutch, 2018).

Colorectal cancer screening recommendations should be considered when deciding about the evaluation of middle-aged or older individuals with minimal BRBPR. Both flexible sigmoidoscopy and colonoscopy have been recommended for this purpose and the decision about which option to select should be made between the patient and physician. Although, clinically significant lesions of 97% of our patients were in the reach of flexible sigmoidoscopy; a colonoscopy is also an appropriate option for patients over 53 years willing to undergo screening for colorectal cancer simultaneously. Therefore, patients should be informed that minimal BRBPR does not place them at an increased risk for proximal neoplastic colonic lesions and the costs and availability of the facility should also be considered. Another important factor is the need for a repeat procedure. About 30% of patients who undergo initial flexible sigmoidoscopy will eventually require colonoscopy (Shuja and Deutch, 2018).

CONCLUSION AND LIMITATIONS:

Our findings should be interpreted in the context of the limitations of our study. First, not all patients with minimal BRBPR are referred to gastroenterologists for evaluation, and this is particularly true for younger patients. Second, any recommendation about the appropriate extent of evaluation of patients with minimal BRBPR should be made from randomized clinical trials with follow-up data.

We suggest flexible sigmoidoscopy for the evaluation of average risk patients for colorectal cancer with minimal BRBPR. Rigid sigmoidoscopy may be used as an alternative in patients less than 60 years of age in settings where the former is not available. The choice of colonoscopy over flexible sigmoidoscopy in patients aged over 60 years should be individualized.

REFERENCES:

1. Ampil, F. and Baluna, R. (2016). Is "Routine" Cranial Irradiation in Hemiplegic Lung Cancer Patients with Brain Metastases Justified?. *Journal of Palliative Medicine*, 13(7), pp.794-795.

2. Carden, A. (2016). Management of Haemorrhoids and Associated Ano-rectal Conditions. *Drugs*, 4(12), pp.75-80.
3. Hala, F., Johnson, C. and Rex, D. (2016). Patients' description of rectal effluent and quality of bowel preparation at colonoscopy. *Gastrointestinal Endoscopy*, 71(7), pp.1244-1252.e2.
4. Jones, P. (2016). 472 Poster Pronostic factors of rectal cancer in elderly patients receiving pre-operative radiotherapy. *Radiotherapy and Oncology*, 64, pp.S152-S153.
5. Paddon, A. (2017). Incidental pulmonary embolism detected by routine CT in patients with cancer. *Cancer Imaging*, 5(1), pp.25-26.
6. Saad, A. and Rex, D. (2017). Routine rectal retroflexion during colonoscopy has a low yield for neoplasia. *World Journal of Gastroenterology*, 14(42), p.6503.
7. Sangwan, M., Sangwan, V., Garg, M., Singla, D., Malik, P. and Duhan, A. (2015). Incidental carcinoma of the gallbladder in north India: is routine histopathology of all cholecystectomy specimens justified?. *International Surgery Journal*, 2(3), pp.465-470.
8. Shuja, A. and Deutch, A. (2018). An incidental finding of a baclofen pump catheter-related colon perforation diagnosed a during routine screening colonoscopy. *Digestive and Liver Disease*, 50(8), p.856.
9. Spinelli, A. and Montroni, I. (2017). Personalized treatments for elderly patients affected by rectal cancer. *Colorectal Disease*, 19(10), pp.879-880.
10. Stornes, T., Wibe, A. and Endreseth, B. (2015). Complications and risk prediction in treatment of elderly patients with rectal cancer. *International Journal of Colorectal Disease*, 31(1), pp.87-93.
11. Thiels, C., Bergquist, J., Meyers, A., Johnson, C., Behm, K., Hayman, A., Habermann, E., Larson, D. and Mathis, K. (2017). Outcomes with multimodal therapy for elderly patients with rectal cancer. *British Journal of Surgery*, 103(2), pp.e106-e114.
12. Young, S. (2016). The use of routine CT imaging to assess sarcopenia in patients undergoing chemo-radiotherapy for rectal cancer. *Manchester Medical Journal*, 1(1).