

Endoscopic findings of colorectum in patients presenting with bleeding per rectum

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ABSTRACT

Objectives: To determine the causes of bleeding per rectum in patients undergoing flexible colorectal endoscopy, taking in consideration the frequency of serious causes in our locality, and to compare the results with others.

Patients and methods: A retrospective descriptive study done at Al-Salam Teaching Hospital, endoscopy unit, Mosul, Iraq. One hundred and eighty five patients underwent flexible colorectal endoscopy between January 2008 and December 2011 complaining of bleeding per rectum, biopsies were taken from lesions and sent for histopathology then the findings were tabulated and recorded.

Results: One hundred and eighty five patients, with mean age of 44 years, and a male:female ratio of 2.36:1. One hundred and twenty patients (64.86%) had hemorrhoids, 10 patients (5.4%) had hemorrhoids and fissure in ano, 20 patients (10.8%) had carcinoma, 14 patients (7.5%) with inflammatory bowel disease, 9 patients (4.8%) with non-specific proctitis and colitis, 9 patients (4.8%) had polyps, 2 patients (1.1%) with solitary rectal ulcer, and 1 patient (0.5%) had benign tumor.

Conclusion: An appreciable number of serious lesions was found in patients with rectal bleeding especially in those above 40 years of age.

Keywords: Rectal bleeding, sigmoid-colonoscopy.

تحليل نتائج الفحص الناظوري للقولون والمستقيم للمرضى المصابين بنزف الجهاز الهضمي المعوي السفلي

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الخلاصة

الأهداف: لتحليل نتائج تنظير الجهاز الهضمي السفلي (المستقيم والقولون) للمرضى المحالين الى وحدة التنظير في مستشفى السلام التعليمي والذين يعانون من النزف الدموي عن طريق الشرج ولتقييم ومعرفة الأسباب الخطيرة منها وأهمها الأورام الخبيثة، في مستشفانا ونسبة إنتشارها بالمقارنة مع الحالات الحميدة منها، وكذلك مقارنة هذه النتائج بمثيلاتها لدراسات أجريت في العراق وبلدان أخرى من العالم.

التصميم والمرضى: تم إجراء دراسة لـ ١٨٥ مريضاً تم فحصهم سابقاً بواسطة ناظور القولون من قبل الباحث للفترة من كانون الثاني ٢٠٠٨ - كانون الأول ٢٠١١ وتمت دراسة وتحليل النتائج.

النتائج: كان المتوسط العمري ٤٤ سنة، ونسبة الذكور الى الإناث ٢,٣٦ : ١، ٢,٧٠% (١٣٠ مريض) مصاباً بمرض البواسير والفطر الشرجي، ٢٠ مريضاً مصاباً بأورام خبيثة أي بنسبة ١٠,٨% وكان متوسط أعمارهم ٥٠ سنة ونسبة الذكور منهم الى الإناث ١,٥ : ١، ١٤ مريضاً (٧,٥%) مصابة بتقرح القولون ومرض كرونس ومتوسط أعمارهم ٣٧ سنة نسبة الذكور الى الإناث ١,٣ : ١، المرحلات القولونية ٩ حالات بنسبة ٤,٨% متوسط أعمارهم ٤٢ سنة نسبة الذكور الى الإناث ٠,٨ : ١، التهاب المستقيم والقولون غير المخصص ٩ حالات ٤,٨% متوسط أعمارهم ٦٢ سنة نسبة الذكور الى الإناث ١,٢٥ : ١، التقرح الإنفرادي للمستقيم حالتان معدل العمر ٤١ سنة بنسبة ١,١% من الذكور فقط، حالة واحدة ورم حميد بنسبة ٠,٥% بعمر ٣٥ سنة من الذكور.

الاستنتاجات: وجد أن هناك أعداد لا يستهان بها من الأمراض الخطيرة والخبيثة للمرضى الذين يعانون من النزف عن طريق الشرج في مستشفى السلام التعليمي وخصوصاً للفئات العمرية أكثر من أربعين عاماً.

INTRODUCTION

Bleeding per rectum is a common problem, approximately one in seven persons between the ages of 20 and 64 years have an attack of bleeding that requires medical help.^{1,2} It remains a diagnostic challenge on the basis of bleeding alone to distinguish between benign anal lesions and serious colorectal diseases.³ Bleeding anal lesions especially hemorrhoids and fissures are frequent causes of rectal bleeding that could coexist with colorectal carcinoma and endoscopy is indicated in these cases.^{4,5}

Lower gastrointestinal bleeding refers to any bleeding distal to the ligament of Trietz. The color of stool and the volume of bleeding are good indicators of the site of bleeding. Black tarry stool, medically referred to as melena, can occur in upper GI tract, also can occur from small bowel and proximal colon. Bright red stool is a sign of fast moving active bleeding.^{6,7} Lower gastro intestinal bleeding commonly seen at emergency, is usually less in frequency than upper GI bleeding.⁸ Approximately 85% of lower gastrointestinal bleeding involves the colon and 10% involves the upper GI tract and 3%-5% are of small bowel origin. Mortality rate from lower GI tract bleeding is 2%-4%.⁹ Lower gastrointestinal endoscopy is used to investigate myriad of symptoms due to diseases of rectum and colon. Colorectal endoscopy is mandatory in average risk patients who are fecal occult blood positive.^{10,11} The procedure aids in the diagnosis of premalignant lesions and early carcinoma and significantly reduces the mortality of colorectal carcinoma.^{5,12}

Iraq shares the epidemiological characteristics of colorectal cancer of developing countries in the Middle East, but a shift towards the western-style of living is leading to the increase of colon and rectal cancer incidence.¹³

PATIENTS AND METHODS

This is a retrospective study from January 2008 to December 2011 of one hundred and eighty five patients who were referred to the endoscopy unit, at Al Salam Teaching Hospital, Mosul, Iraq, who underwent colonoscopy by the author using Olympus Japan SN-2510583/CF-P10 Storz video colonoscopy SN1349. All patients included in the study were complaining of bleeding per rectum, whether fresh blood or mixed with mucus. Patients

who had upper GIT bleeding, acute bloody diarrhea and bleeding diathesis were excluded from the study. All patients were informed about the way of preparation. In most of the patients, the rectum and the left side of the colon were visualized, biopsies were taken from the lesions and sent to the pathology laboratory of our hospital and to private laboratories. All the findings and results were documented and tabulated according to their occurrence and seriousness in the endoscopy unit and some of the lesions were photographed.

RESULTS

One hundred and eighty five patients (185) were examined by flexible colorectal endoscopy from January 2008 to December 2011, their mean age was 44 years, and male:female ratio of 2.36:1. One hundred and thirty patients (70.2%) with mean age of 44.5 years and a male to female ratio of 3.3:1 (120 patients had hemorrhoids only, and 10 patients had both hemorrhoids and fissure in ano). Twenty patients (10.8%) with mean age of 50 year, and male:female ratio of 1.5:1 had malignant tumors of mucin secreting adenocarcinoma of moderate and poor differentiation, all of them were found in the rectum, sigmoid and descending colon. Fourteen patients (7.5%) with mean age of 37 years, and male:female ratio of 1.33:1 had inflammatory bowel disease, 12 patients had ulcerative colitis, and 2 patients had Crohn's disease. Nine patients (4.8%) with mean age of 42 years, and male: female ratio of 0.8:1 had polyps; 4 of them had single polyp, and the remaining five had multiple adenomatous polyps, 3 of the latter had severe dysplastic changes. Nine patients (4.8%) with mean age of 62 years, and male:female ratio of 1.2:1 had proctocolitis, 7 of them with non-specific type, the remaining two had pseudomembranous colitis. Two male patients (1.1%) aged 38 & 47 years had solitary rectal ulcer. One 35 years old male patient (0.5%), had metaplastic polyp, (**Table 1**).

Table 1. Summary of the results.

Type of lesions	No. of patients & %	Mean age years	Male:female
Haemorrhoids & fissure in ano	130, 70.2% 120 had hemorrhoids 10 with fissure in ano	44.5	3.33:1
Colorectal carcinoma	20 10.8%	50	1.5 :1
Benign tumor	1 0.5%	35	1:0
Polyps	9 4.8%	42	0.8:1
Inflammatory bowel diseases Ulcerative, Crhon's	14 7.5%	37	1.33:1
Non-specific proctatitis, colitis	9 4.8%	62	1.25:1
Solitary rectal ulcer	2 1.1%	41	2:0
Total	185	44	2.36:1

DISCUSSION

The use of flexible colorectal endoscopy in screening people with rectal bleeding resulted in a significant reduction in both the incidence and the mortality from colorectal carcinoma in many communities.¹⁴⁻¹⁷ Our retrospective study in Mosul was designed to identify the pattern of colorectal diseases in patients presented with bleeding per rectum. Twenty patients out of one hundred and eighty five were discovered to have malignant tumors which constituted (10.8%) from the total and this result is consistent with similar study done in Iraq by Talib A- Majid *et al*,¹⁸ but is much more higher than a similar study done in Hong Kong in Queen Marry Hospital in which the result was 1.2%.¹⁹ It is a bit higher than the percentage seen in Egypt,²⁰ and also higher than those reported at Korle -Bu Teaching Hospital, by Da Kubo *et al* in Ghana (6.7%).²¹ Grossly, malignant tumors were of different patterns. Histologically, they were varied from moderately differentiated to poorly differentiate adenocarcinoma. The mean age was 50 year, and a male:female ratio of 1.6:1 which is not consistent with the Egyptian and other international reports.²²⁻²⁴ The high percentage of malignant tumors in our study may be partly attributed to the change of life style to that of the western countries, and partly to the exposure of our population to depleted uranium.²⁵ Inflammatory

bowel disease was found in 14 patients (7.5%) which is much lower than a study in Egypt (37.5%),²⁵ and also much less than the Iraqi study done by Shubbar *et al* (71%).²⁶ The figure is higher than that of the Ghana study.²¹ The age of the patients with inflammatory bowel disease was similar to the Iraqi study mentioned above. There were 9 patients (4.8%) with polyps, 5 of them had multiple polyposis with histopathological dysplasia and their mean age was 42 year, the figure is higher than those of Ghana study (2.9%)²¹ but less than a study done by Winawer SJ *et al*.²⁷

Nine cases with non-specific proctitis and colitis (4.8%), were seen, the number is lower than the of the Iraqi study done by Shubbar *et al*.²⁶ Solitary rectal ulcer syndrome was diagnosed in 2 patients representing 1.1% compared to 3.5% of Amira *et al*²⁶ similar to that of Sharara.²⁸ One patient presented with bleeding per rectum had metaplastic polyp at rectosigmoid area.

CONCLUSION

The study revealed that there was appreciable number of serious lesions especially cancer of the large bowel in advanced stages presented with bleeding per rectum.

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