

Colonoscopy in the etiological diagnosis of rectal bleeding. What contribution?

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Abstract

Rectorragies are a frequent reason for consultation after constipation, chronic diarrhea, abdominal pain. They represent 20% of digestive hemorrhages, it is the most frequent mode of revelation of low digestive hemorrhages. Colonoscopy allows the etiological diagnosis to be made in more than 80% of cases. Our work aims to study the contribution of colonoscopy in the etiological assessment of rectal bleeding.

Materials and methods

This is a descriptive retrospective study spanning 3 years from April 2017 to April 2020 on patients who underwent a total colonoscopy for rectal bleeding in the Clinical Gastroenterology department of HMIM V in Rabat.

Results

During the study period, 158 total colonoscopies were performed for the assessment of rectal bleeding. The average age of our patients is 53.6 years (14-88 years), the sex ratio is 3H / 1F. The exam was normal in 17%. Hemorrhoids accounted for 26% of the aetiologies of recto-colic tumors 24%, inflammatory colitis 15%, angiodysplasia 6.5%, diverticular disease 6%, recto-colic polyps 3%, ectopic rectal varices 1% and radiation proctitis 0.5% of the aetiologies of rectal bleeding.

Conclusion

Colonoscopy found a colonic lesion in 83.5% as part of the assessment of rectal bleeding. The aetiologies are dominated by hemorrhoids, tumor pathology and inflammatory colitis.

Keywords: Colonoscopy, Rectorragies, Colorectal cancer, Hemorrhoids, colitis

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I. Introduction

Rectal bleeding is the emission of red blood through the anus. Its abundance is variable and its causes are multiple and vary considerably depending on the geographic area and the age of the patient. They are the expression of benign ano-recto-colic pathologies but they can also reveal serious neoplastic, inflammatory or infectious pathologies justifying a precise etiological diagnosis. [1,2]

The diagnostic process for rectal bleeding includes questioning the patient for the discovery of red blood emitted by the anus, an examination of the anal margin supplemented by a digital rectal examination, sometimes finding blood on the finger cot. Additional tests are done to confirm the origin of the bleeding such as anoscopy, proctoscopy and colonoscopy to identify damage to the colon. Colonoscopy is therefore of crucial importance. [3]

It allows the etiological diagnosis in more than 80% of cases.

The objective of our work was to individualize ano-recto-colic lesions by colonoscopy in the case of the etiological assessment of rectal bleeding.

II. Materials and methods

This is a descriptive retrospective study covering the period from April 2017 to April 2020 (03 years old) concerning patients who underwent a total colonoscopy for rectal bleeding in the clinical gastroenterology department of the Mohammed V Military Hospital of Instructions in Rabat.

III. Results

During the study period, 158 colonoscopies were performed for the assessment of rectal bleeding. The mean age of the patients was 53.6 years with ranges ranging from 14-88 years. The sex ratio was 3H / 1F. The

exam was normal 17% of the time. Hemorrhoids accounted for 26% of the aetiologies of recto-colic diseases 24%, inflammatory colitis 15%, angiodysplasia 6.5%, diverticular disease 6%, recto-colic polyps 3%, ectopic rectal varices 1 %, and radiation proctitis 0.5% of the aetiologies of rectal bleeding.

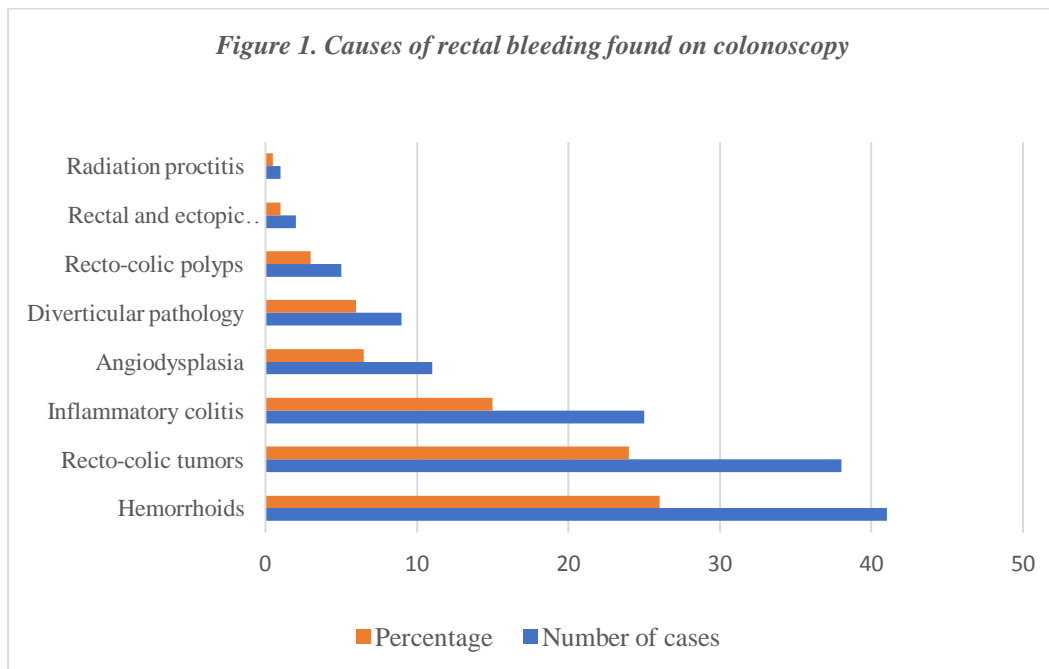
Table I. Prevalence of lesions on colonoscopy for rectal bleeding

| Colonoscopy results | Number of cases | Percentage |
|---------------------|-----------------|------------|
| Normal | 26 | 16,45 |
| Lesions | 132 | 83,54 |

Table II. The etiologies of rectal bleeding found at colonoscopy

| Etiologies | Number of cases | Percentage |
|----------------------------|-----------------|------------|
| Hemorrhoids | 41 | 26 |
| Recto-colic tumors | 38 | 24 |
| Inflammatory colitis | 25 | 15 |
| Angiodysplasia | 11 | 6,5 |
| Diverticular pathology | 9 | 6 |
| Recto-colic polyps | 5 | 3 |
| Rectal and ectopic varices | 2 | 1 |
| Radiation proctitis | 1 | 0,5 |

Figure 1. Causes of rectal bleeding found on colonoscopy



IV. Discussion

Rectal bleeding is a frequent reason for consultation after constipation, chronic diarrhea, abdominal pain and is one of the biggest reasons for having a colonoscopy. This exam is ideal for exploring for rectal bleeding. In our study, colonoscopy made it possible to find the etiological diagnosis in 83.54% of cases; these results are similar to several other studies. [4,5,6]

The average age of our patients was 53.6 years with extremes ranging from 14-88 years, this age is close to that found in various African studies in Senegal (51.3 years) [7], in Ghana (50 , 9 years old) [8]; in Ivory Coast [3] this age is 44.5 years.

Hemorrhoids were the leading cause of rectal bleeding in our study with 26% of cases, followed by recto-colic tumors, which is similar to the results found in Ghana [8] and Zambia. [6] The third cause of rectal bleeding in our study is represented by inflammatory colitis with 15% of cases; this cause was objectified in 3rd position of the aetiologies of rectal bleeding in Ivory Coast. [3] This shows that these lesions responsible for rectal bleeding are predominant in Africa, which can be explained by infectious and parasitic causes but also by the emergence of cryptogenetic intestinal inflammatory diseases.

Our results are also similar to Western studies where in about 90% of cases the rectal or anal (proctological) origin of rectal or anal infections, especially hemorrhoids.

In France, the indications for total colonoscopy are represented by screening colonoscopy, monitoring after polypectomy, rectal bleeding, monitoring of colon cancer; the main diagnoses being recto colic polyps,

diverticula and colorectal cancers. The place of colonoscopy remains central in the diagnostic management of rectal bleeding with a yield varying from 72 to 97%. Common aetiologies are represented by diverticula (26-38%), angiodysplasias (6-9%), cancer / polyps (8-12 / 4-14%), ischemic colitis (6-8%), hemorrhoids (10-19%), post-polypectomy (0.3-3.5%), small intestine (1-7%) and anorectal conditions (10-15%). [9, 10]

In America, the aetiologies of rectal bleeding are represented by colonic polyps, diverticular diseases, hemorrhoids, inflammatory bowel disease, colon cancer. [11]

In Iraq, in a study of adult patients presenting with rectal bleeding, colonoscopy found lesions in 74.13% of cases with the etiologies: hemorrhoids followed by inflammatory diseases then colorectal cancer. [12]

In Pakistan, colonoscopy performed for rectal bleeding has found as etiologies: inflammatory bowel disease (Crohn's disease and ulcerative colitis) followed by recto-colic tumors followed by hemorrhoids, polyps and diverticulosis. [13]

We find that colorectal cancers, polyps and diverticulosis occupy an increasingly important place in recto-colonic pathology in Africa, the results in different studies are close to those of Europe, America and the United States. Asia. This increasing frequency can be explained in part by the westernization of the lifestyle and also the increase in life expectancy. [8]

V. Conclusion

Colonoscopy found a colonic lesion in 83.5% of cases; it is therefore the ideal exploration to be carried out within the framework of an assessment of rectal bleeding. The aetiologies are dominated by hemorrhoids, tumor pathology and inflammatory colitis.

Bibliographical references

- [1]. Anne-Christine Della Valle. Blood in the anus: What are the causes of rectal bleeding? *The Journal of Women*. February 2019
- [2]. Heintze C, Matysiak-Klose D, Krohn T, Wolf U, Brand A, Meisner C et al. Diagnostic work-up of rectal bleeding in general practice. *Br J Gen Pract* 2005. Jan, 55 (510): 14-9
- [3]. Assi C, Lahoues-Krouacou MJ, Toth'o A, Traoré F, Allah-Kouadio E, Camara BM. Some epidemiological aspects of rectal bleeding in black African adults. *Med Afr. Black* 2006; 53: 315-9
- [4]. Burling D, East JE, Taylor SA. Investigating rectal bleeding. *BMJ* 2007; 335: 1260-2
- [5]. Jehangni et al. Causes of lower gastrointestinal bleeding during colonoscopy. *J Ayoub Med Coll Abbottabad* 2017 PMID 29076685
- [6]. Violet Kayamba et al. A seven-year retrospective review of colonoscopy records from a single center in Zambia. 2018. *Malawi Medical Journal*.
- [7]. Mbengue M, Dia D, Diopuf ML, Bassène ML, Diallo S, Ndongo S, Ponye a. Contribution of colonoscopy in the diagnosis of rectal bleeding in Dakar (Senegal) 286. *Med Trop* 2009; 69:3
- [8]. Dakubo JCB, Kumoji R, Naaeder SR, Clegg-Lamtey JN. Endoscopic evaluation of the colorectum in patients presenting with haematemesis at Korle-Brighton Hospital Accra. *Ghana Med J*. 2008; 42: 33-7
- [9]. P. Ah-Soune, M. Barthelet. Lower Gastrointestinal Bleeding: a treatment algorithm. *Acta Endosc* 2015, 45: 321-324
- [10]. JM Canard et al. Colonoscopy in France in 2008. Results of a national prospective survey by SFED
- [11]. Parswa Ansari MD, Hofstra Northwell. Lenox Hill Hospital, New-York 2018, MSD Manual
- [12]. Ibrahim Jamal Mohammed, Sultan Awni Ismail, Al-Atra kchi Hishou. The value of bleeding per rectum in adult. *Indian Journal of Forensic Medicine and Toxicology* 2019, 13 (4): 330-335
- [13]. Amjad Salamat, Ammara Ayub, Sobia Zaheer, Arooj Ehsan. Colonoscopy: Analysis of indications and diagnoses at a specialist unit. *Ann. Pak. Inst. Med Sci* 6 (1), 15-19; 2010

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