

Colonoscopy In The Geriatric Population: Indications And Specificities - Experience From A Moroccan Center

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Abstract:

Colonic pathologies are common in elderly patients, and colonoscopy remains the gold standard for their evaluation. This study aims to report the indications for colonoscopy and the endoscopic abnormalities observed in patients aged 60 and above. We conducted a retrospective descriptive study over a four-year period (January 2020 to January 2024), including colonoscopies performed on patients aged 60 years and older. In our study, a total of 241 colonoscopies were performed in this age group, with a mean age of 65 years and a male predominance. A history of comorbidities was present in 58% of patients. The main indications for colonoscopy were rectal bleeding (40%), followed by abdominal pain (14%), colonic obstruction (12%), and constipation (10%). Colorectal cancer screening accounted for only 5% of indications. Bowel preparation was rated as moderate in 45% of cases and good in 30%. Colonoscopy findings were abnormal in 66% of cases. The most frequent endoscopic abnormalities were recto-colonic tumors (40%), followed by polyps (25%), inflammatory colitis (13%), and angiodysplastic lesions (10%). The low rate of colonoscopy for cancer screening highlights the need for greater awareness and promotion of colorectal cancer screening in this age group

Keywords: Colonoscopy, elderly patients, colorectal cancer, screening, awareness

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I. Introduction:

Colonic pathologies are common in elderly patients, and colonoscopy remains the gold standard for colon exploration. It allows not only for an endoscopic description of detected lesions but also for performing biopsies for histopathological analysis. The objective of our study is to report the indications for colonoscopy and the endoscopic lesions observed in patients aged 60 and above.

II. Materials And Methods:

This is a retrospective descriptive study conducted over a period of four years (January 2020 to January 2024). Data were collected from colonoscopy records of patients over 60 years old. All procedures were performed under sedation.

III. Results:

During the study period, 241 colonoscopies were performed on patients aged 60 years and older. The mean age of the patients was 65 years, ranging from 60 to 90 years, with a male predominance and a sex ratio of 1.3. A history of comorbidities was reported in 58% of patients, primarily colorectal cancer (30%), ischemic heart disease (18%), and extra-digestive cancer (15%), Hypertension (5%), diabetes (5%). Additionally, 9% of patients had a family history of digestive neoplasia.

The main indications for colonoscopy were dominated by rectal bleeding (40%), followed by abdominal pain (14%), colonic obstruction (11%), constipation (10%), anemia (9%), melena (6%), and chronic diarrhea (4%). Colorectal cancer screening accounted for only 5% of indications. The quality of colonoscopy depended on bowel preparation, which was rated as moderate in 45% of cases and good in 30%. Complete colonoscopy was achieved in 80% of cases.

A normal result was observed in 34% of cases, while colonoscopy revealed pathological findings in 66% of cases (Figure 1). The most frequently identified endoscopic abnormalities (Figure 2) were recto-colonic tumors (40%), polyps (25%), inflammatory colitis (13%), and angiodysplastic lesions (10%), Diverticula (5%) and ischemic colitis (2%) (Figures 3, 4).

IV. Discussion:

Colonoscopy remains an essential tool for diagnosing, screening, and treating digestive diseases in elderly patients. With increasing life expectancy, there is a growing demand for comprehensive gastrointestinal

evaluations in this population. Among the primary indications, the screening and diagnosis of colorectal cancer play a predominant role, as this pathology is one of the leading causes of mortality in older adults. Colonoscopy enables the early identification of precancerous lesions (adenomas) and their removal before progression to invasive cancer. According to a study published in the *New England Journal of Medicine*, colonoscopy reduces the risk of colorectal cancer-related mortality by 68% when polyps are detected and resected [1]. However, colorectal cancer screening beyond the age of 75 remains a topic of debate. Currently, the French national colorectal cancer screening program stops at age 74, despite the fact that over 40% of cases occur beyond this age. These late-diagnosed cases are often discovered in emergency settings, leading to increased mortality rates [2]. To date, no large-scale randomized study has directly assessed the impact of screening beyond 75 years. However, North American and French modeling studies suggest that continued screening remains cost-effective, particularly in healthy patients with extended life expectancy [3]. The American College of Physicians (ACP) recommends stopping routine colorectal cancer screening at 75 years for asymptomatic adults at average risk and with a life expectancy of less than ten years. This recommendation is based on the fact that the risks associated with colonoscopy, such as bleeding and intestinal perforation, increase with age, while the benefits diminish due to reduced life expectancy [4]. In France, the French Society of Digestive Endoscopy (SFED) advises discontinuing colonoscopy surveillance when a patient's life expectancy is limited due to age and/or comorbidities. Routine colorectal cancer screening is recommended between 50 and 75 years, and beyond this age, the decision should be individualized based on life expectancy and comorbidities [5]. A 2024 study published in *JAMA Network Open* by Smith et al. found that 40% of adults over 50 consider it unacceptable to stop colorectal cancer screening at 75, suggesting a continued demand for screening procedures beyond this age [6]. Beyond screening, colonoscopy plays a crucial role in post-polypectomy surveillance, allowing for the detection of potential recurrences or new lesions. The SFED recommends post-polypectomy follow-up tailored to recurrence risk, with monitoring intervals based on the size and number of resected polyps [5].

Additionally, colonoscopy remains a key diagnostic tool in elderly patients presenting with digestive disorders such as rectal bleeding, chronic diarrhea, unexplained abdominal pain, or iron-deficiency anemia of unknown origin. It is essential for identifying underlying organic pathologies, including diverticular disease, which is common in elderly individuals. This endoscopic examination assesses the extent of diverticula and detects potential complications such as bleeding or perforation. Colonoscopy is also valuable in diagnosing ischemic colitis and late-onset inflammatory bowel diseases (IBD), although the latter are less frequent in older populations. However, certain IBD cases may present later in life and require regular endoscopic follow-up.

In our study, the primary indications for colonoscopy were rectal bleeding (40%), followed by abdominal pain (14%) and colonic obstruction (12%). These findings are consistent with several other studies. A recent study conducted in Cameroon on 203 colonoscopies reported that the most common indications were rectal bleeding (45.3%) and abdominal pain (42.4%) [7]. Similarly, a Tunisian study by Houissa et al., involving 901 patients, found that among patients aged 75 and older, the primary indications were chronic diarrhea (42.9%) and constipation (27%) [8]. In Togo, a study on 70 colonoscopies in patients aged 65 and above reported that rectal bleeding (60%), abdominal pain (11.4%), and constipation (7.1%) were the leading reasons for colonoscopy [9]. Additionally, a literature review conducted by Ajol et al. confirmed that rectal bleeding and abdominal pain remain the most frequent indications for colonoscopy in elderly patients [10].

Regarding the most frequently detected abnormalities in our study, recto-colonic tumors were the most common, found in 40% of cases, followed by polyps (25%), inflammatory colitis (13%), and angiodysplastic lesions (10%). The Tunisian study reported that the most frequent abnormalities in elderly patients were polyps (25.6%), colorectal cancer (12.8%), and diverticular disease (17.7%) [8]. In the Togolese study, pathological findings were observed in 67.2% of cases, with diverticulosis (34.3%), colon cancer (18.6%), and rectal cancer (7.1%) being the most commonly identified lesions [9]. Another study reported similar detection rates for colorectal cancer (11%) and polyps (27%) in elderly patients [10]. Our study stands out due to a higher detection rate of recto-colonic tumors (40%). This discrepancy could be explained by a higher prevalence of colorectal cancer in our sample.

Performing colonoscopies in elderly patients presents certain non-negligible risks, including those associated with sedation, particularly cardiac and respiratory complications. Additionally, the procedure itself carries a higher risk of bleeding and perforation due to the fragility of the intestinal mucosa. Bowel preparation tolerance is often lower in older adults, potentially leading to dehydration or electrolyte imbalances. A meta-analysis revealed that colonoscopy tolerance in elderly patients is comparable to that of younger adults. However, the rate of incomplete colonoscopies is higher in older individuals due to technical challenges, such as reduced colonic elasticity and inadequate bowel preparation [11]. Furthermore, the presence of multiple comorbidities complicates decision-making and increases the risks associated with the procedure. Therefore, its indication should be carefully considered, favoring an individualized approach that balances benefits and risks. A review published by Johnson et al. examined the clinical use of colonoscopy in various intestinal diseases, including in elderly patients. This study emphasized that, while colonoscopy remains an essential tool for diagnosis and

treatment, the associated risks increase with age, necessitating a rigorous evaluation of indications in the geriatric population [12].

However, our study has certain limitations. The limited access to healthcare for the Moroccan population, particularly in rural areas, along with financial constraints, can delay the performance of a colonoscopy. Additionally, the low uptake of colorectal cancer screening contributes to late diagnosis, which may explain the high prevalence of colorectal tumors observed in our study. This delay in diagnosis restricts therapeutic options, negatively impacts prognosis, and increases morbidity and mortality associated with this condition. Another limiting factor is poor adherence to bowel preparation, frequently observed in elderly patients or those in precarious socio-economic situations. Inadequate bowel preparation affects the quality of the examination, making it more challenging to detect polyps and precancerous lesions at an early stage. This limitation can lead to delayed management of treatable lesions, increasing the risk of progression to invasive cancer. These challenges highlight the importance of strengthening awareness campaigns for colorectal cancer screening, improving healthcare accessibility, and optimizing bowel preparation protocols to enhance the effectiveness of colonoscopy in the early detection of high-risk lesions.

V. Conclusion:

Colonoscopy remains an essential tool for the diagnostic evaluation of various digestive disorders, particularly in the geriatric population, where its risks and feasibility must be carefully assessed. In our study, rectal bleeding was the most common indication for colonoscopy in elderly patients, with 66% of procedures revealing pathological findings, primarily recto-colonic tumors (40%). This high prevalence may be influenced by geographical differences and demographic factors. Screening indications were rare, largely due to limited healthcare access and financial constraints affecting the Moroccan population. This underscores the urgent need to raise awareness about the importance of colorectal cancer screening, particularly for high-risk groups, to improve early detection and outcomes.

Figures :

Fig 1

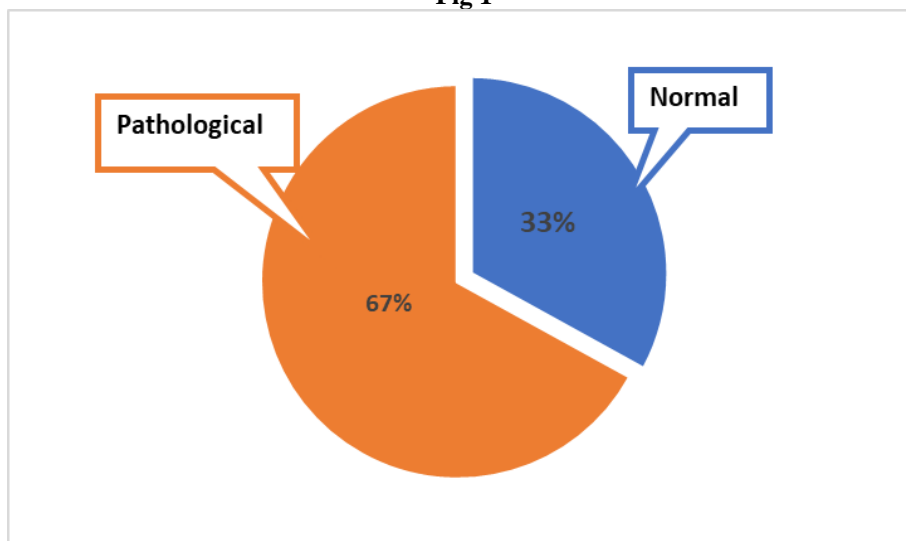


Fig 2

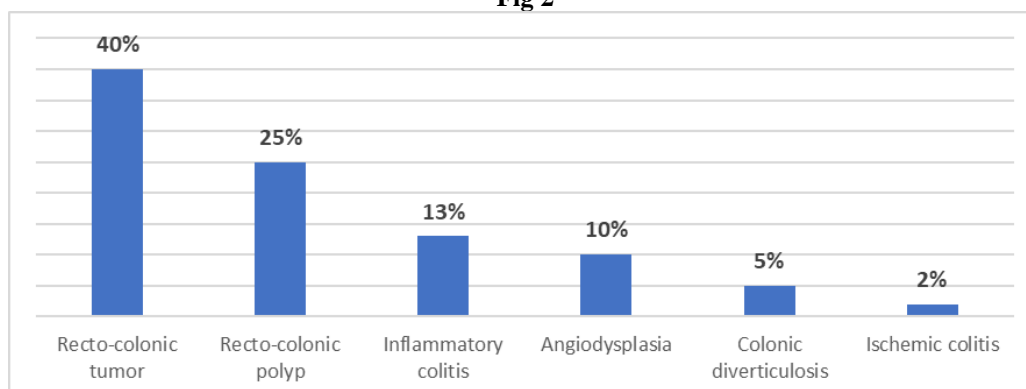


Fig 3

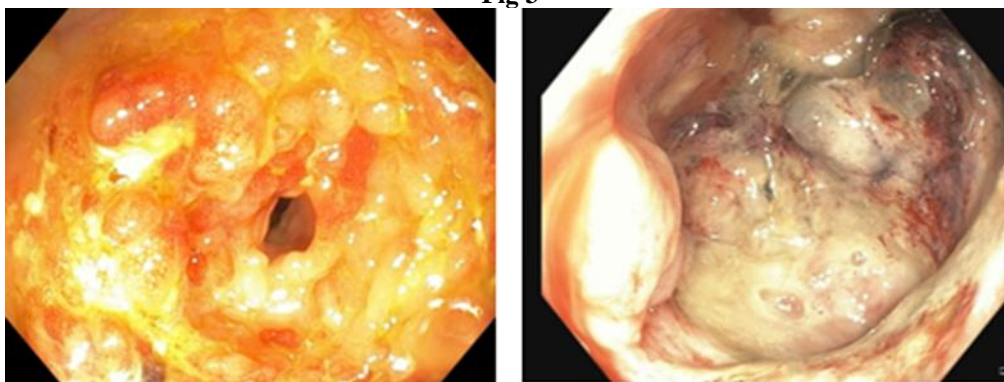
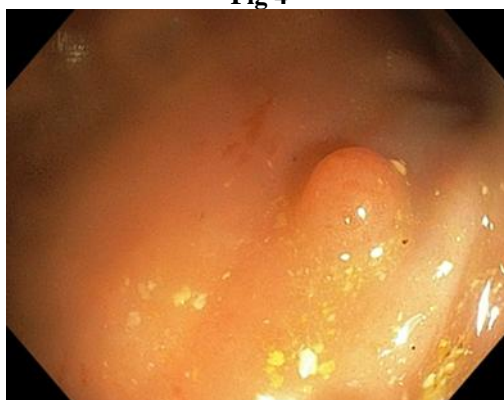


Fig 4



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