Findings of Colonoscopized Patients at a Primary Health Center in Riyadh, KSA, with Special Concern for Colitis

موجودات المنظار القولوني لمرضى مركز صحي في الرياض المملكة العربية السعودية وتركيز خاص على التهاب القولون

Mohamad Awadh Saeed Bagubair[1]
Ahmed Abdullah Abobaker Mahdami[2]
محمد عوض سعيد باجبير
احمد عبد الله ابوبكر مهدمي

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(1) **MD– medicine, Associate professor at faculty of Medicine, University of Sanaa, Yemen**
Email: Masjubair@gmail.com
(2) **Msc medicine, Saudi German Hospital, Ajman, Unite Arab Emirates**
Email: Mahdami9@hotmail.com

Abstract:

BACKGROUND: Colonoscopy is a diagnostic modality and therapeutic procedure widely used for screening and diagnosing and treating colorectal diseases. Colitis is the inflammation of the colon. There are a variety of causes of colitis including infections, ischemia and autoimmune reactions (inflammatory bowel disease, IBD). The study is aimed to determine the clinical, epidemiological, the prevalence of various colonic diseases and characteristics of colitis in patients undergoing colonoscopy in a primary health center in Saudi Arabia. This data may provide a comparison for researchers.

METHODS: Data from colonoscopized patients attending a gastroenterology clinic, primary health center in Riyadh, KSA between July 2014 and July 2015 were studied. This including the record of patient characteristics, age at diagnosis, course of the disease, manifestations, colonoscopy and Histopathology reports.

RESULTS: Among 100 patients, males comprised 90% and only 10% females. According to the Montréal classification of age, the majority of our patients belonged to the A2 category for age of diagnosis at 17-40 years 63% while 72% of the colitis patients and 50% of IBD patients. 36% belonged to the A3 category > 40 years. Normal colonoscopy was seen in most of our series cases and anorectal diseases (piles and fissures) were in 16%. Biopsies showing colitis in 11% of cases, 7% non-specific and 4% IBD (ulcerative 3% crohns 1%). Colonic mass and cancer in 5%. Diverticula in 4% and polyps in 3%. Mean of age for the colitis patients was 36.1 years and 29 years for IBD.

CONCLUSION: The majority of colonoscopised cases were young people and similar to the colitis and IBD cases, with a male preponderance. Colitis represented more than one tenth of cases with Ulcerative colitis more than crohns disease in 3:1 manner.

Keywords: **Colitis**, **IBD**, **Colonoscopized patients**, **Sex**, **Age**.

الملخص:

خلفية: منظار القولون هو جهاز تشخيصي وعلاجي لأمراض القولون والامعاء. هدفنا هو أكتشاف الأمراض وصفاتها في المرضى اللذين أجري لهم المنظار في مركز صحي أولي في الرياض.

طرق البحث:كل المرضى اللذين أجري لهم منظار القولون في الفترة مابين يوليو 2014 ألى يوليو2015

النتائج: خضع 100 مريض لمنظار القولون منهم 90% ذكور. أعتمادا على تصنيف مونتريال كان أغلب المرضى من فئة أ2من 17 الى 40 سنة 63%بينما 70 % لألتهاب القولون و 50% لألتهاب القلون المناعي. مثلت الامراض الشرجية 16% وورم القولون 5% والرتوج 4% واللحميات 3%. ألتهاب القولون مثل 11% منها 4% ألتهاب القولون المناعية. ثلاثة منها تقرحات القولون وواحد مرض كرون.

الاستنتاجات: أغلبية المرضى شباب. يمثل ألتهاب القولون أكثر من عشر المرضى بأغلبية للتقرحات القولون عن مرض كرون بنسبة 3:1

الكلمات المفتاحية: ألتهاب القولون, منظار القولون, العمر, الجنس

Introduction: 2

Colonoscopy is a diagnostic modality and therapeutic procedure widely used for screening and diagnosing and treating colorectal diseases (1, 2). Colitis is the inflammation of the colon. The most known forms of inflammatory bowel disease (IBD) are ulcerative colitis (UC) and Crohn's disease (CD). Changes in the incidence of IBD have been reported in different regions in the world. The incidence of IBD has either continued to increase or has stabilized at a high rate in most developed countries, whereas the incidence has continued to increase in regions where the IBD has been considered less common (6,7). There is little data on IBD in the Middle East. However, some data suggest that the disease is common (8, 9, and 10). There are a variety of causes of colitis including infections, ischemia and autoimmune reactions.

The aim of the study is to determine the clinical, epidemiological, the prevalence of various colonic diseases and characteristics of colitis in patients undergoing colonoscopy in a primary health centre in Saudi Arabia. This data may provide a comparison for researchers.

METHODS

Data from all colonoscopized patients attending a gastroenterology clinic, at a private primary health center in Riyadh (KSA), were studied. Indications were varied, some screening, others bleeding per rectum, and gastrointestinal upsets. This including the record of patient characteristics, age at diagnosis, course of the disease, manifestations, colonoscopy and Histopathology reports. All patients undergone colonoscopy were included, and exclusion was for patients who did not perform colonoscopy or patients who were interrupted before reaching diagnosis. All colonoscopy referrals were carried out by the author. Significant findings were described as neoplasia or IBD or other pathology. Neoplasia was defined as malignant lesions or neoplastic polyps on colonoscopy and confirmed by histological examination. Sufficient data was entered into a pre-designed Excel sheet.

RESULTS

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Colonoscopy was successful in 95% of patients and failed in 5%. Poor bowel preparation was the primary reason for the failed cases. No complications were developed in our patients. Among 100 patients, males comprised 90% and only 10% females. According to the Montréal classification of age, the majority of our 100 patients belonged to the A2 category for age of diagnosis at 17-40 years 63% while 72% of the seven non-specific colitis patients and 50% of four IBD patients, while 36% belonged to the A3 category > 40 years.

Normal colonoscopy was seen in most of our series cases, and anorectal diseases (piles and fissures) were in 16% as in table (1). Characters of colitis patients shown in table (2) while comparison between main features of nonspecific colitis (NSC) and IBD were summarized in table (3). Biopsies confirmed colitis in 11% of the cases, 7% non-specific, and 4% IBD (ulcerative 3% crohns 1%). Colonic mass and cancer in 5%. Diverticula in 4% and polyps in 3%. Mean of age for all colitis patients was 36.1, 40 years for NSC and 29 years for IBD.

DISCUSSION

Our study was at a single primary health center, surveying analytically 100 colonoscopized cases in a south region of Riyadh, Saudi Arabia, with many Yemeni people. Total Colitis represented more than one tenth of cases. Most cases were of NSC (7 of 11 patients). We showed that there was a predominance of UC over CD, which was similar from previously reported data from Saudi Arabia [11, 4] and with reports on North American populations [12, 13] but different from Alqasim in Saudi Arabia (14).

According to Mosli meta-analysis, the incidence of IBD in the Arab world was estimated to be approximately 2.33 and 1.46 per 100,000 persons per year for UC and CD, respectively [15]. The median age at presentation of colitis was 36.1 years (40 y for NSC and 29y for IBD); our patients were comparable with patients from the West (30 years) (16, 17).

The peak incidence of colitis occurs in the second and third decades of life, but some studies have reported a second peak between 60 and 70 years (18). In

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our study, we did not observe any patient above 60 years; and this was similar with Fadda (4). The presenting symptoms of our CD patients were dominated by abdominal pain, bleeding per rectum and bloody diarrhea.

The incidence of IBD is higher in women worldwide (19). In the present study, a male predominance was found. This may be due to male predominance of the study sample (males 90, 90%). However, male predominance has previously been reported in many Asian countries (including Saudi Arabia) (17, 20, and 21). The factors which influence the gender distribution of IBD are complex and multifactorial. There are biological and non-biological factors (22).

CONCLUSION

The majority of colonoscopised cases were young people and similar to the colitis and IBD cases, with a male preponderance. Total Colitis represented more than one tenth of the cases with Ulcerative colitis more than crohns disease in 3:1 manner.

LIMITATIONS: **small number of data**. **Patients sent for followed up at hospitals**.

CONFLICT OF INTEREST: **None**.

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Table (1): Colonoscopic findings and diagnosis

Finding/diagnosis	**Number of patients (100)**	**notes**
Normal	**61**	61%
Anorectal disease -piles -anal fissures	16 12 4	16%
polyps	3	3%
Colonic cancer	5	5%
diverticulum	4	4%
Colitis ·IBD ·NONSPECIFC	**11** 4 7	11%

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Table (2): Characteristics of colitis patients, IBD and non-specific (NSC) colitis patients

characters Patients	Age of onset	nationality		Clinical features	Clolo-noscopic feataures		Pathological diagnosis
E				S			
1	35	Y	Rec. bloody diarrhea	Hge, ulcers	E3	S2	UC
2	43	S	RAP	erythema	E1	S1	NSC
3	30	S	RAP	Erythema, erosions	E1	S0	NSC
4	40	S	Anti-biotic as-sociated, bloody diarrhea	Hge, ulcers	E3	S1	NSC
5	47	Y	RBPR, CON-STIPA-TION	erythema	E1	S0	NSC
6	37	Y	RBPR	Multiple erosions, desquama-tion	E1	S0	NSC
7	20	Y/ Fe-male	Rec. bloody diarrhea	Multiple erosions	E1	S1	UC
8	32	Y	Anal pain, fissure	Patches of erosions at 20, 30 and 50cm	E3	S0	CD

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9	29	Y	Rec. bloody diarrhea	Multiple bleeding ulcers	E2	S1	UC
10	52	S	RBPR	Erythema	E1	S0	NSC
11	31	Y	Rec. bloody diarrhea	Erythema	E1	S0	NSC
Total	**Mean age 36.1**	**SAU–DI = 4** **YE–MENI = 7** **Fe–male = 1** **Males = 10**	Rec. bloody-diar–rhea5 **RAB 2** **RBPR 3**	**Erythema 5 Hge 3** **Erosions 5** **Ulcers 2**	**E1=7** **E2=1** **E3=3**	**S0=6** **S1=4** **S2=1**	**UC=3** **CD=1** **NSC=7**

Table (3): Comparison of IBD and nonspecific (nsc) colitis patients

Type of colitis	Clinical presentation	%		Colonoscopic findings	E		S	
		Of IBD	OF COLITIS					
IBD	-Rec. bloody diarrhea -anal pain	75 25	27	Hemorrhage 2 Ulcers 2 Erosions 3	E1 E2 E3	1 1 2	S0 S1 S2	1 2 1
NON-Specific colitis (nsc)	RAP	43	27	ERYTHEMA 5 EROSIONS 3 HEMORRHAG 1	E1 E2 E3	6 -- 1	S0 S1	5 2
	RBleeding PR	43	27					
	Bloody diarrhea	29	18					
	Diarrhea, IBS	43%	27					

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