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Colorectal Polyps - Experience at Shaikh Zayed Hospital, Lahore

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SUMMARY

During the period 1987-1994, 107 patients underwent colonoscopy and polypectomy in the department of Gastroenterology at Shaikh Zayed Hospital, Lahore. 93 (86.4%) were non-neoplastic juvenile polyps (JP), 8 (7.5%) adenomatous polyps and 6 (5.6%) non-neoplastic miscellaneous group. Mean age for JP was 7.28 SD + 5.41 (range 2-32) years, for neoplastic polyps 54.13 SD + 9.88 (range 42-70) years and for miscellaneous group 49.83 SD + 15.59 (range 35-80) years. Size of the polyps ranged from 0.4 cm to 2.5 cm. 82 patients (76.7%) had a single polyp, 20 patients (18.7%) had two polyps, 1 patient (0.9%) had 3 polyps while 4 patients (3.7%) had multiple polyps. Left colon was involved in 105 (98.2%) patients, transverse colon in 1(0.9%) and diffuse involvement of colon was seen in 1 (0.9%) patient. We conclude that in Pakistan, juvenile polyps are the commonest variety of polyps especially in children and young adults.

INTRODUCTION

A colorectal polyp is a discrete mass of tissue that protrudes into the lumen of the bowel. Increased interest in polyps is the result of recent progress in our ability to detect these with a high degree of sensitivity and to remove them endoscopically. Polypoid lesions of colon and rectum occur commonly in the general population and the greatest concern with polyps is their potential to become malignant. Their clinical significance varies according to their location, size, gross appearance and histology. They may be sessile or pedunculated. They are histologically classified as:

I Adenomatous
- a) Tubular
- b) Villous
- c) Tubulovillous

II Hamartomatous
- a) Juvenile
- b) Peutz-Jeghers

III Inflammatory
- a) Benign lymphoid polyp
- b) Pseudo polyp

IV Hyperplastic (Metaplastic)

V Miscellaneous (Lipomas, Neurofibromas etc)

In addition, there are many familial polyposis syndromes with characteristic intestinal and extra intestinal features.

Patients with non-neoplastic polyps usually seek medical attention because of symptoms like rectal bleeding, diarrhoea and lower abdominal pain. On the other hand bulk of patients with neoplastic polyps are asymptomatic and diagnosed during screening programme for detection of colorectal cancer in the populations where prevalence of this cancer is high.

Colonoscopy and double contrast barium enema are the usual diagnostic methods for colorectal polyps but if available colonoscopy is preferred because of its diagnostic superiority as well as therapeutic capability. This enhanced diagnostic accuracy has been demonstrated in studies of patients with known polyps[1,2] as well as in symptomatic patients who have had negative findings on proctosigmoidosocpic and barium enema examinations[3,4,5].

Endoscopic removal of all colorectal polyps

greater than 0.5 cm in size is advocated as they may cause symptoms and carry the risk of malignant potential. Colonoscopic polypectomy is a safe procedure with a complication rate of less than 2.5% when performed by an experienced endoscopist[6,7].

PATIENTS AND METHODS

This study is based on the retrospective data analysis of 107 patients who underwent colonoscopy and polypectomy in the Gastroenterology Department of Shaikh Zayed Hospital during the eight year period from January 1987 to December 1994. All the patients presented in our outpatient clinic with history of rectal bleeding and/or intermittent lower abdominal pain with or without diarrhoea. All underwent a detailed history, thorough physical examination and routine laboratory tests. Colonoscopy was done with OLYMPUS CF 1 T 10 L colonoscope and polypectomy was done with OLYMPUS polypectomy snare SD 11 using OLYMPUS PSD 10 electrosurgical equipment. Patients with familial polyposis, inflammatory bowel disease and colorectal cancer were excluded from the study. Histopathological study of the polyps was done by an experienced consultant histopathologist using H & E stains.

RESULTS

Total no. of patients	107	
Male	80	
Female	27	
Symptoms at presentation: (Fig. 1 Bar graph)		
Rectal Bleeding	100 %	
Abdominal Pain	25 %	
Diarrhea	12 %	
Histopathology: (Fig. 2 Pie graph)		
Juvenile polyps	93	(86.4%)
Adenomatous polyps	8	(7.5%)
Miscellaneous polyps	6	(5.6%)
Age distribution		
Juvenile polyps	7.28	SD±5.41 (range 2-32) years
Adenomatous polyps	54.13	SD±9.88 (range 42-70) years
Miscellaneous polyps	49.83	SD±15.59 (range 35-80) years
Size of polyps	0.4 - 2.5 cm	
Number of polyps		
Single polyp	82	(76.7%)
Two polyps	20	(18.7%)
Three polyps	1	(0.9%)
Multiple polyps	4	(3.7%)
Site of polyps		
Left colon/rectum	105	(98.2%)
Transverse colon	1	(0.9%)
Diffuse involvement of colon	1	(0.9%)
Complications of polypectomy		
Immediate bleeding	2	
Delayed bleeding	0	
Perforation	0	
Serosal burn syndrome	0	

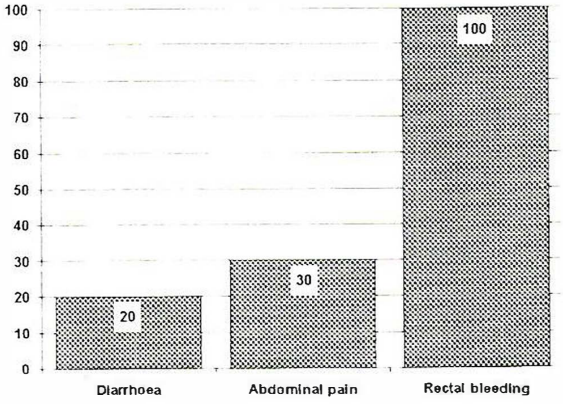

Fig. 1: Symptoms of colorectal polyps.

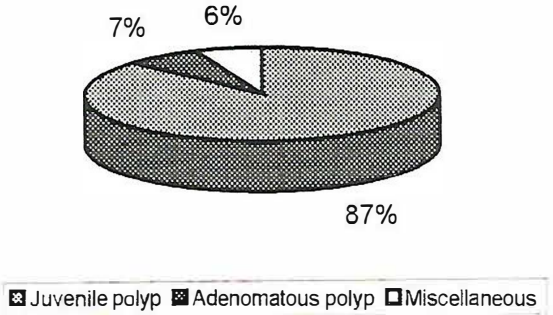

Fig. 2: Histopathology of colorectal polyps.

DISCUSSION

The histologic nature of a polyp is its most important characteristic and that is why polypectomy is recommended for all polyps detected even incidentally on colonoscopic examination[8]. Depending on the histologic nature of the polyp, further treatment and follow-up is organized. In our study all patients presented with symptoms leading onto colonoscopy and polypectomy. Screening to detect polyps or early cancer in middle age is recommended now for high risk populations[9,10,11] like that of U.S.A.

Pakistan is considered to be a low risk area for lower G.I. malignancy and no such screening programme is recommended for the population in general. This low risk is attributed to the high, fibre unrefined diet consumed here but with the urbanization of population and change to western life style and dietary habits may alter this trend in future.

In our study only 8/107 patients were found to have neoplastic polyps lending support to the belief that Pakistan is a low risk area for lower G.I. malignancy but larger population based studies are needed to confirm this view.

Patients with juvenile polyps predominated our study especially in children and young adults. Other studies of colonoscopic polypectomy present the same observation[12].

The predominant sex in our study was male with hematochezia the main presenting symptom in all the patients but some in addition had lower abdominal pain and diarrhoea.

We carried out all the colonoscopies and polypectomies under sedation using intravenous midazolam or diazepam and intravenous pethidine. None of our patients required general anesthesia. In two of our patients the procedure was complicated by immediate post-polypectomy bleeding. This was due to completion of polypectomy before complete coagulation of the stalk. This complication was treated by regrasping the stalk and holding it for 5-10 minutes. None of our patients had delayed post-polypectomy bleeding, perforation or serosal burn syndrome. So our complication rate of 1.86% compares favourably with the 1-2% complication rate observed by other workers[13].

In conclusion, colonoscopic polypectomy is a safe and effective method for treating colorectal polyps. Moreover, in our population non-neoplastic polyps ae more common than the neoplastic polyps especially in children and young adults.

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