

Colorectal Carcinoma Detected by Barium Enema in Priest Hospital

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Objective: To determine the radiographic findings detected by barium enema in the priests of colorectal carcinoma

Material and Method: A retrospective review of all priest that had a barium enema performed for colorectal carcinoma between January 2002 to June 2007

Results: Thirty-two priest with colorectal CA were reviewed. No asymptomatic priests found. Nineteen priests (59.38%) had annular lesion, eleven (34.37%) had intraluminal mass, and two (6.25%) had other lesions. Nineteen priests (59.38%) had lesion in the sigmoid colon or below and thirteen patients (40.62%) had lesion more proximally in the colon. Two priests (6.25%) had Duke's stage A lesions, eight (25%) had stage B lesions, seven (21.87%) had stage C lesions, and fifteen (46.88%) had stage D lesions.

Conclusion: Almost sixty percents of all priests with colorectal CA had annular lesion (59.38%) at a late stage.

Keywords: Colorectal carcinoma, Barium enema, Priests

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Colorectal carcinoma is the third most common carcinoma in the world. Most of the cases are in Europe or America^(1,2) however, in Asia, the number of cases is increasing^(3,4). Colorectal carcinoma is also the third most common carcinoma in Thailand next to carcinoma of liver and lung⁽⁵⁾. Symptoms and clinical manifestations vary to size and location of the tumor. The common complaints are abdominal pain, changing in defecation habit either constipation or diarrhea, mucous bloody stool, pallor and weakness. The most important treatment concept is to be diagnosed before symptoms develop because the result of the treatment depends on the staging of the disease at the time of diagnosis. Early diagnosed cases can be cured. Most cases in Thailand are found in the late stage, which has poor treatment outcome⁽⁶⁾.

Material and Method

The present study was a retrospective, descriptive study of 32 colorectal carcinoma patients who had barium enema done in Department of

Radiology, Priest Hospital between January 2002 and June 2007 (66 months) by reviewing all of the medical records. The main complaints were abdominal pain, mucous bloody stool, constipation or diarrhea, anorexia and palpable abdominal mass. The radiologic findings of the barium enema were classified into three groups, annular lesion, intra-luminal mass and other lesions, e.g., intussusception. The location of the tumor was classified as rectum, recto-sigmoid colon, descending colon, transverse colon, ascending colon and cecum. Duke's classification was done by using the operative and pathological findings. Duke's A were the cases that the tumor confined to the mucosal layer only, Duke's B were the cases that the tumor were in the mucosal and serial layers, Duke's C were the cases with the tumor and lymph node metastasis, and Duke's D were the cases with distant metastasis. The data was collected from medical records, radiographic reports, endoscopic notes, operative notes, and histopathological reports. The results will be used for clinical and epidemiological studies.

Results

Thirty-two male priests were receiving barium

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enema at Department of Radiology, Priest Hospital between January 2002 and June 2007. Their ages ranged from 39 to 84 years, with a mean age of 64.43 years. Most of the cases were in the age range of 61 to 80 as shown in Table 1. The symptoms and signs at presentation included abdominal pain (31.25%), mucous bloody stool (28.13%), constipation or diarrhea (25.00%), anorexia (9.37%), and others (6.25%). None of them was asymptomatic (Table 2). Barium enema showed the abnormalities and locations as shown in Table 3 and 4. There were 19 cases of annular lesion, 11 cases of intra-luminal mass. The lesions located at rectum in 15 cases, two recto-sigmoid colon, two sigmoid colon, four descending colon, five transverse colon, and four in ascending colon and cecum. The

Table 1. Age range and number of patients

Age (years)	Number	Percent
31-40	1	3.12
41-50	5	15.62
51-60	6	18.76
61-70	10	31.25
71-80	9	28.13
81-90	1	3.12
Total	32	100.00

Table 2. Symptoms and signs of the patients

Sign and Symptoms	Number	Percent
Abdominal pain	10	31.25
Mucous bloody stool	9	28.13
Constipation or diarrhea	8	25.00
Anorexia	3	9.37
Other	2	6.25
Asymptomatic	-	-
Total	32	100.00

Table 3. Abnormalities from barium enema results

Morphology	Number	Percent
Annular	19	59.38
Intraluminal mass	11	34.37
Other	2	6.25
Total	32	100.00

pathological results were 31 cases of adenocarcinoma and one case of mucousadenocarcinoma. The adenocarcinoma was well differentiated in 23 cases, moderately differentiated in eight cases and, none of them had poorly differentiated adenocarcinoma (Table 5). According to Duke's staging, the patients were Duke's D in 15 cases (46.88%), Duke's B in eight cases (25.00%), Duke's C in seven cases (21.87%), and Duke's A in two cases (6.25%). The metastatic sites in Duke's D patients were liver in eight cases, lung in five cases and urinary bladder in two cases (Table 6).

Discussion

All of the patients underwent barium enema examination in Priest Hospital and had positive finding because all of them were admitted with signs and symptoms of the carcinoma. The most common findings were annular lesion with advanced stage^(7,8), and the most common location was the rectum. There were only few patients who were classified as Duke's A while a large number of patients were in Duke's D. Staging of the cancer is very important to the result of the treatment and prognosis of the disease. The 5-year survival rate of Duke's A is equal to normal person who do not have cancer. Five year survival rate of Duke's B is 80-85%, Duke's C is 70 % and patients with Duke's D have

Table 4. Locations of the tumors from barium enema

Location	Number	Percent
Rectum	15	46.88
Rectosigmoid	2	6.25
Sigmoid colon	2	6.25
Descending colon	4	12.50
Transverse colon	5	15.62
Ascending colon & cecum	4	12.50
Total	32	100.00

Table 5. Pathological results

Histologic findings	Number	Percent
Adenocarcinoma	31	
∑ Well differentiated	23	71.88
∑ Moderate differentiated	8	25.00
∑ Poorly differentiated	-	-
Mucous adenocarcinoma	1	3.12
Total	32	100.00

Table 6. Staging of the tumors

Duke's stage	Number	Percent
A	2	6.25
B	8	25.00
C	7	21.87
D with metastasis to	15	
∑ Liver	8	25.00
∑ Lung	5	15.62
∑ Bladder	2	6.25
Total	32	100.00

5-year survival rate of only 6-4%^(9,10). The American Cancer Society and The American College of Physicians and the Thai Institute of Cancer suggested that fecal occult blood test should be done every year in population aging over 50 and flexible sigmoidoscopy should be done every 3-5 years. Incidence of colorectal carcinoma among population in the big cities of Thailand had increased because of eating behavior, chemical substances used in preparing large amount of food, or other environmental factors. The population in the present study was all priests who had to take food from the villagers and might ignore annual health check up including fecal occult blood test, flexible sigmoidoscopy, or barium enema, which could be done in all general hospital. Good screening campaign may help all Thai priests to have early diagnosis, good prognosis, and good quality of life.

Conclusions

The present study showed results of barium enema in 32 priests of colorectal carcinoma. Annular lesions were the most common type (59.38%), the rectum was the most common location (46.88%), and almost all the patients were diagnosed at the late stage that the tumor had spread to distant metastatic sites.

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การตรวจมะเร็งลำไส้ใหญ่ด้วย Barium Enema ในโรงพยาบาลสงฆ์

ชมพูนุท จิตรานนท์

วัตถุประสงค์: ศึกษาผลตรวจทางเอกซเรย์ Barium Enema ในพระสงฆ์ที่ได้รับการวินิจฉัยเป็นมะเร็งลำไส้ใหญ่

วัสดุและวิธีการ: ศึกษาพรรณนาแบบย้อนหลังในผู้ป่วยที่ได้รับการวินิจฉัยเป็นมะเร็งลำไส้ใหญ่ที่ได้รับการตรวจ Barium Enema ระหว่างเดือนมกราคม พ.ศ. 2545 ถึง มิถุนายน พ.ศ. 2550

ผลการศึกษา: มีพระสงฆ์ทั้งสิ้น 32 ราย (34.37%) ไม่พบพระสงฆ์ที่ไม่มีอาการ มีพระสงฆ์ 9 ราย (59.38%) ที่มีรอยโรคแบบ annular lesion มี 11 ราย (34.37%) ที่มีรอยโรคแบบ intraluminal mass และ 2 ราย (6.25%) ที่มีรอยโรคอื่นๆ รอยโรคที่พบอยู่ที่ระดับ sigmoid colon และต่ำกว่า 19 ราย (59.38%) ที่เหลือ 13 ราย (40.62%) มีรอยโรคเหนือต่อ sigmoid colon ระยะของโรคตาม Duke's stage พบระยะ A 2 ราย (6.25%) ระยะ B 8 ราย (25.0%) ระยะ C 7 ราย (21.87%) และระยะ D 15 ราย (46.88%)

สรุป: พระสงฆ์ส่วนใหญ่มีโรคแบบ annular lesion (59.38%) และอยู่ในระยะสุดท้ายของ Duke's Stage
