

=Abstract=

Clinical investigations of Crohn's disease in Korea

Min Kyu Ryu, M.D., Young-Ho Kim, M.D., Jae Geun Hyun, M.D., Won Moon, M.D.,
Kyung Su Lee, M.D., Sang-Soo Lee, M.D., Jun Haeng Lee, M.D.,
Hee Jung Son, M.D., Poong-Lyul Rhee, M.D., Jae J. Kim, M.D.,
Kwang Cheol Koh, M.D., Seung Woon Paik, M.D., Jong Chul Rhee, M.D.,
Kyoo Wan Choi, M.D., Woo-Young Lee, M.D. and Ho Kyung Chun, M.D.

*Department of Medicine and Surgery, Samsung Medical Center,
Sungkyunkwan University School of Medicine, Seoul, Korea*

Background : Crohn's disease (CD) is a chronic inflammatory disease that has difficulty in treatment due to various complications and frequent recurrence. There have been many studies on the clinical aspects of CD in western countries, however there have been few studies in Korea. We try to perform this study to elucidate the clinical features of CD in Korea.

Methods : We retrospectively reviewed the medical records of 62 patients diagnosed as CD in Samsung Medical Center from October 1994 to July 1999 and investigated their clinical features.

Results : Male to female ratio was 1.7:1 and the mean age at diagnosis was 29.6 years. The most common symptom was abdominal pain (58%), followed by diarrhea. Perianal lesions were observed in 27 cases (44%) of 62 patients. Fistula was the most common (60%) among the perianal lesions, followed by abscess, fissure, and stricture. Extraintestinal manifestations were observed in 23 cases (37%) of 62 patients. Arthritis was the most common (44%), followed by oral, skin, and ocular lesions. All patients were classified into three groups on the basis of disease extent by the radiologic and endoscopic findings; combined type (66%), colitis alone (23%), and small bowel disease alone (11%). Empirical anti-tuberculous medications were administered to 28 cases (45%) of 62 patients before CD was diagnosed. The presenting features were classified into inflammatory (71%), fistulizing (14.5%), and fibrostenotic (14.5%) type. Operation was performed in 31 cases (50%) of 62 patients during clinical course. The causes of operation were fistulizing complication (48%), fibrostenotic obstruction (32%), and indefinite diagnosis (20%).

Conclusion : We noticed little difference in the clinical features of CD in Korea compared to those of western countries. And, intestinal tuberculosis should be considered in differential diagnosis of CD in endemic areas of tuberculosis like Korea.(Korean J Med 60:46-50, 2001)

Key Words : Crohn's disease; Tuberculosis

• : 2000 3 9
• : 2000 7 3
• : , 50, (135-710)
E-mail : bowelkim@samsung.co.kr

2.

가 , (1.6%), (1.6%), (1.6%)
 가 (1.6%), (1.6%), (1.6%)
 가 (1.6%) (Table 1).

Table 1. Common clinical features in Crohn's disease

Symptoms	No. of patients
Abdominal pain	36(58%)
Diarrhea	18(29%)
Indigestion	2(3.4%)
Fever	1(1.6%)
Melena	1(1.6%)
RLQ mass	1(1.6%)
Turbid urine	1(1.6%)
Perianal pain	1(1.6%)
Bowel habit change	1(1.6%)
Total	62

RLQ; right lower quadrant

3.

가 62 27 (44%)
 가 2 가 3
 가 16 (26%) 가 ,
 (13%), (6%), (3%)

(Table 2).

Table 2. Perianal lesions in Crohn's disease

Perianal lesions	No. of patients
Fistula*	16(26%)
Abscess*	8(13%)
Fissure	4(6%)
Stricture	2(3%)
Total	27(44%)

*: Two perianal lesions were found in 3 cases.

4.

가 62 23 (37%)
 가 10 (16%)
 , (14%), (6%),

1994 10 1999 7
 62
 가
 가

1.

62 가 39 , 가 23
 1.7:1 가 29.6

(Figure 1).

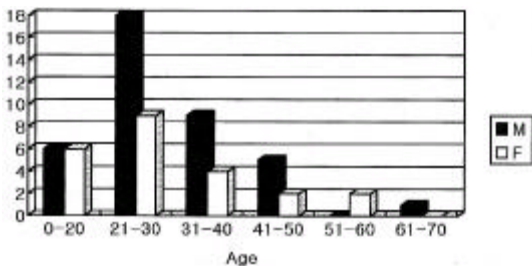


Figure 1. Age distribution and sex ratio in Crohn's disease. Male to female ratio was 1.7:1 and the average age at diagnosis was 29.6 years.

Table 3. Extraintestinal manifestations in Crohn's disease

Extraintestinal manifestations	No. of patients
Arthritis & arthralgia	10(16%)
Stomatitis*	9(14%)
Erythema nodosum*	4(6%)
Episcleritis	2(3%)
Total	23(37%)

*: Two extraintestinal manifestations were found in 2 cases.

(3%) , 2가
 2 (Table 3).
 5.
 62
 42 (66%) , 14 (23%),
 6 (11%) (Table 4).

Table 4. Disease extent of Crohn's disease

Site of involvement	No. of patients
Combined type	42(66%)
Small bowel disease alone	6(11%)
Colitis alone	14(23%)
Total	62

6.
 62 28 (45%)
 7.
 62 44 (71%)가
 9 (14.5%)
 8.
 31 (50%)
 가 15
 (24%), 가 10 (16%),
 가 6 (10%)

1).
 15 30 가 2)
 가 3). 29.6

가
 가 4).
 가 87%

44% 5) 20-60%
 6) 44%
 가
 Sangwan 5) 86%,
 가 71%, 32%, 8%
 , Pescatori 7) 가 72.8%, 35.5%,
 23.5%

가 60% 가
 , 30%, 15%, 가 7%
 , 가 11%

2-5% 8),

0.5-3%

9). 가 가 ,

가

가 36% 10). Greenstein 1) 가 71% 가 14.5%

23% 가

62 23

(37%)

가

10 (16%)

, 2가

17),

2

18).

가

(30-40%),

(40-55%),

(15-25%)

가 35%,

가

3가

11).

(8-9%),

34%,

가 12%

(<1%),

(0.5-5%)

11, 19).

62 31 (50%)

(3-36%)

12-14).

66% 가

(23%)

(11%)

가 15 (24%) 가

54%

가 10 (16%)

가 6 (10%)

가가

:

가

가

가

가

62 28

(45%)

: 1994 10 1999 7

62

: 1.7:1 가 ,

3가

15).

29.6

가

(58%)

가

27

(44%)

(26%)가 가

16).

23 (37%)

(16%) 가
 ,
 ,
 42 (66%) 14
 (23%), 6 (11%)
 28 (45%)
 가 44 (71%)
 가 9 (14.5%)
 31 (50%)
 가 15 (24%),
 가 10 (16%), 가 6
 (10%)
 :

REFERENCES

- 1) Greenstein AJ, Janowitz HD, Sachar DB. *The extraintestinal manifestations of Crohn's disease and ulcerative colitis: A study of 700 patients. Medicine 55:401-412, 1976*
- 2) Shivananda S, Lennard-Jones J, Logan R, Logan R, Fear N, Pr Carpenter L, van Blankenstein M. *Incidence of inflammatory bowel disease across Europe: Difference between north and south? Results of the European Collaborative Study on inflammatory Bowel Disease(EC-IBD). Gut 39:690-697, 1996*
- 3) Grimm IS, Friedman LS. *Inflammatory bowel disease in the elderly. Gastroenterol Clin North Am 19:361-389, 1990*
- 4) Mekhjian HS, Switz DM, Melnyk CS. *Clinical features and natural history of Crohn's disease. Gastroenterology 77:889-906, 1979*
- 5) Sangwan YP, Schoetz DJ, Murray JJ, Roberts PL, Coller JA. *Perianal Crohn's disease. Dis Colon Rectum 39:529-535, 1996*
- 6) Chang DK, Kim JS, Kim TH, Jung HC, Song IS, Kim JY. *Perianal Lesions in Crohn's Disease. Korea J Gastroenterol 32:591-599, 1998*
- 7) Pescatori M, Interisano A, Basso L, Arcan`a F, Buffatti P, Doldi A, Forcheri V, Gaetini R, Pera A. *Management of perianal Crohn's disease. Results of a multicenter study in Italy. Dis Colon Rectum 38:121-124, 1995*
- 8) Petrelli EA, McKinley M, Troncale FJ. *Ocular manifestations of inflammatory bowel disease. Ann Ophthalmol 14:356-360, 1982*
- 9) Lyons JL, Rosenbaum JT. *Uveitis associated with inflammatory bowel disease compared with uveitis associated with spondyloarthritis. Arch Ophthalmol 115:61-64, 1997*
- 10) Van den Broek MF, Van de Putte LB, Van de Berg WB. *Crohn's disease associated with arthritis: A possible role for cross-reactivity between gut bacteria and cartilage in the pathogenesis of arthritis. Arthritis Rheum 31:1077-1079, 1988*
- 11) Farmer RG, Hawk WA, Turnbull RB Jr. *Clinical patterns in Crohn's disease: A statistical study of 615 cases. Gastroenterology 68:627-635, 1975*
- 12) Niv Y. *Esophageal involvement in Crohn's disease. Am J Gastroenterol 83:205-206, 1988*
- 13) Nugent FW, Roy MA. *Duodenal Crohn's disease: An analysis of 89 cases. Am J Gastroenterol 84:249-254, 1989*
- 14) Gschwantler M, Kogelbauer G, Klose W, Bibus B, Tscholakoff D, Weiss W. *The pancreas as a site of granulomatous inflammation in Crohn's disease. Gastroenterology 108:1246-1249, 1995*
- 15) Sacher DB, Andrews HA, Farmer RG. *Working team reports. Proposed classification of patient subgroups in Crohn's disease. Gastroenterol Int 5:141-154, 1992*
- 16) Griffiths AM, Wessen DE, Shandling V, Corey M, Sherman PM. *Factors influencing postoperative recurrence of Crohn's disease in childhood. Gut 32:491-495, 1991*
- 17) Irving M. *Assessment and management of external fistula in Crohn's disease. Br J Surg 70:233-236, 1983*
- 18) Broe PJ, Bayless TM, Cameron JL. *Crohn's disease: Are enteroenteral fistulas and indication for surgery? Surgery 91:249-253, 1982*
- 19) Summers RW, Switz DM, Sessions JT. *National Cooperative Crohn's Disease Study: Results of drug treatment. Gastroenterology 77:847-869, 1979*