

EXTRAIESTINAL MANIFESTATIONS OF CROHN'S DISEASE IN BANGLADESH

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Abstract

Crohn's disease has been considered to be uncommon in Asia Pacific region. The study was undertaken to know the extraintestinal manifestations of Crohn's disease in Bangladesh and to compare the result with that of other Asian and Western countries. This was an observational study consisting of patients seen in the department of gastroenterology, Bangabandhu Sheikh Mujib Medical University for 20 years (between 1991 and 2010). Individual case records were carefully reviewed with regard to gender, sex and extraintestinal manifestations. A total of 41 patients with Crohn's disease were identified. 70.7% were male and 29.3% were female with male to female ratio was 2.4:1. Mean age was 34±11.8 years and peak age group was 21-30 years. The chief extraintestinal manifestations were arthritis, aphthous ulcer in the oral cavity, erythema nodosum and episcleritis. Arthritis was the most frequent among the extraintestinal manifestations. So, Crohn's disease should be considered as an important differential diagnosis when a patient presents with bowel symptoms associated with extraintestinal manifestation and thus early recognition and treatment could be possible.

Key words: Crohn's disease, extraintestinal manifestation

Introduction

Crohn's disease is an inflammatory bowel disease that primarily affects small intestine and colon. Extraintestinal manifestations of inflammatory bowel disease are common, occurring in up to 25% of patients with inflammatory bowel disease. These manifestations can occur during periods of active inflammatory bowel disease and at any time unrelated to the activity of bowel disease.¹ Crohn's disease has traditionally been considered a disease of developed countries and Asia-Pacific region had previously been thought as an area with a low incidence of Crohn's disease. More recent reports from India, Japan and China have shown it is an emerging disease in the part of the world where tuberculosis and infective colitis had previously been thought to predominate.²

The aim of the study was to find out the extraintestinal manifestations of Crohn's disease amongst Bangladeshi population and to identify any difference between the result in our population and that of other Asian as well as Western population.

Materials and methods

All patients attending the Gastroenterology department of Bangabandhu Sheikh Mujib Medical

University, Dhaka, Bangladesh with a diagnosis of Crohn's disease between 1991 and 2010 were enrolled in the study. Total forty one patients with Crohn's disease were included in the study. The medical records of these patients were thoroughly reviewed from the time of diagnosis up to the date of each patient's last follow up. Data were collected about gender, age at presentation and extraintestinal manifestations.

Data were entered systematically into computer with Microsoft Excel. The test statistics used to analyze the data were descriptive statistics.

Results and observations

A total of 41 patients diagnosed as Crohn's disease from 1991 to 2010 were reviewed. Twenty-nine patients (70.7%) were males and twelve (29.3%) were females. Male to female ratio was 2.4:1 (Figure 1). Age ranged from 18 to 70 years with a mean age of 34±11.8 years (Mean ± SD). Of the total patients, 3 patients (7.3%) were in 11-20 years age group, 20 patients (48.7%) were in 21-30 years age group, 5 patients (12.2%) were in 31-40 years age group, 2 patients (4.9%) were in 51-60 years age group and rest 1 patient (2.4%) was in 61-70 years age group (Figure 2). So the peak age group was 21-30 years.

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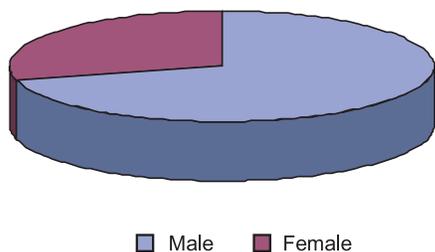


Fig.-2: Sex distribution of Crohn's disease

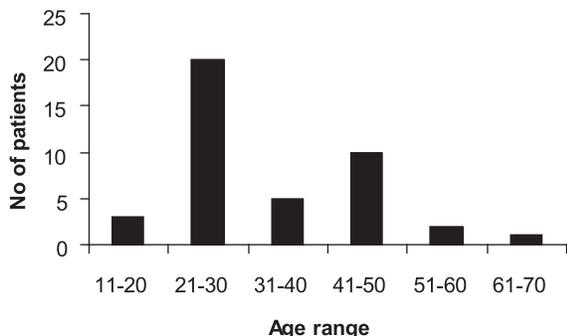


Fig.-3: Age distribution of Crohn's disease

The extraintestinal manifestations reported by the patients were arthritis, oral ulceration, ocular problem mostly episcleritis and erythema nodosum during the course of disease at the time of diagnosis or at different follow up. Most of the extraintestinal manifestations appeared during flare of intestinal manifestations and disappeared when intestinal manifestations achieved remission.

Out the total patients, 10 patients (24.4%) patients had arthritis, 4 patients (9.7%) patients had aphthous ulceration in the oral cavity, 2 (4.9%) patients had erythema nodosum and 1 (2.4%) had episcleritis (Table 1)

Table-I

Extraintestinal manifestations of Crohn's disease (n=41)

Features	Number of patients	Percentage
Arthritis	10	24.4
Aphthous ulcers	4	9.7
Erythema nodosum	2	4.9
Episcleritis	1	2.4

Arthritis found in Crohn's disease were mostly peripheral asymmetrical oligoarticular involving the large joints of both upper and lower limbs. Pyoderma gangrenosum and primary sclerosing colangitis were not reported in our study.

Discussion

The present study was an observational study done in a referral, teaching hospital where we noticed the

extraintestinal manifestations of Crohn's disease over the last two decades.

Extraintestinal manifestations in Crohn's disease are common in developed countries but uncommon in Asian countries like China (6.1%) and Singapore.³ In Jewish patients with Crohn's disease, Sephardic patients had significantly more frequent extraintestinal manifestations than Ashkenazi patients (35% vs. 17%).⁴ Extraintestinal manifestations were reported to be uncommon in patients with Crohn's disease from Pakistan.⁵ Arthritis was found in 24.4% of our patients, in 9.1% of Chinese patients,⁶ in 10 to 20% patients of developed countries. Erythema nodosum was found in 4.9% of our patients, in 3.1% of Chinese patients³ and in 6–15% of patients with Crohn's disease in developed countries.⁷ Oral ulceration occurred in 9.7% of our patients and in 4.9% of Chinese patients⁶ whereas it was 70% in one report from a developed country.⁸ Finally, episcleritis was found in one of our patient (2.4%), while in 2.3% Chinese patients³ and Orchard *et al*⁷ reported 5% in 483 Crohn's disease patients with more serious eye complications.

In conclusion arthritis in our patients was more frequent than other Asian countries but similar to Western countries. Extraintestinal manifestations other than arthritis are uncommon in our population

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