

Original Article

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Incidence and Nature of Isolated Ileal Ulcers – A Study of 69 cases

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Abstract:

Introduction: This study was designed to see the incidence and nature isolated ileal ulcers.

Material and Method: Consecutive patients undergoing colonoscopic examinations having isolated ileal ulcer or ulcers were included irrespective of age and sex. Clinical history and histopathological examination of tissue from ulcer or ulcers were evaluated.

Result: Out of 2193 colonoscopic examinations total 69 eligible patients (3.15%) had isolated ileal ulcers. Age of patients varied from 18 to 77 years with mean 37.29 years with 46 (66.7) males and 23 (33.3) females. Common indications were pain abdomen 23 (33.3%), chronic diarrhoea 20(29.0%) and bleeding per rectum 12(17.4%). Specific diagnosis was found in nine patients (tuberculosis 6; 8.7% and Crohn's disease 3; 4.3%). Rest 60; 87.0% were nonspecific. Tuberculosis was more common among patients within 26 to 45 years group (4; 16.66%).

Conclusion: Most of the isolated ileal ulcers are nonspecific. Among specific ulcers tuberculosis is common.

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Introduction:

Since 1960s¹ colonoscopy is one of most important and reliable method for diagnosis and treatment of colonic diseases. Ileal intubation at colonoscopy increases its usefulness and diagnostic yields^{2,3}. In addition to diagnosis and therapeutic intervention, colonoscopy is recommended increasingly for screening of colorectal cancers (CRC)⁴.

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So frequency of colonoscopy as well as ileal intubation has been increased in diagnostic and nondiagnostic colonoscopy. And detection of ileal ulcers, single or multiple has been increased⁵. In one prospective study among asymptomatic individuals, ileal ulcers were found in about 6% cases⁶. Although most of ileal ulcers heals spontaneously, a small group may yield specific diseases⁷. Isolated ileal ulcer is superficial or deep ileal ulcers without involvement of ileocaecal valve or colon⁸. In addition to diagnostic purpose, in developed countries CRC screening is usually done. But CRC screening among South Asian immigrants in USA⁹ and UK¹⁰ was low. CRC screening rate is also low in low and middle income countries¹¹. In our country no previous report regarding CRC screening is available. Most of the colonoscopy procedures are done in our country for diagnostic purpose and detection of ileal ulcers are not uncommon. But in our country no prior published report regarding incidence and aetiology of isolated ileal ulcers is available. With this background, this prospective study was designed to see the nature of isolated terminal ileal ulcers.

Material and methods

Consecutive patients undergoing colonoscopic examinations for various indications having isolated terminal ileal ulcers were included in study. Patients, age 18 years and above of both sexes agreed to take part were enrolled in this cross sectional study. Patients' epidemiological information, indications, and colonoscopic findings were recorded in a predesigned data sheet. Biopsies were taken from terminal ileal ulcers and histopathological examinations were done.

Study place and duration:

This study was done at Popular Medical Service and Hospital, Sylhet, Bangladesh from March 01, 2022 to February 29, 2024. Prior ethical permission was taken from The Ethical Review Board of the centre.

Statistical Analysis:

All the data were analysed using SPSS version 20. Mean and standard deviation were calculated for continuous data and percentage were calculated for categorical data.

Results

Consecutive 69 (3.15%) case of isolated ileal ulcer out of 2193 diagnostic colonoscopic examinations were enrolled in this study. Age of them varied from 18 years to 77 years (mean 37.2899 and $\pm$ SD 14.4945). Of them 46 (66.7%) and 23 (33.3%) were male and female respectively. Common indications for colonoscopy were abdominal pain 23 (33.3%), chronic diarrhoea 20(29.0%) and bleeding per rectum 12(17.4%) (table 1). Histopathological examination of tissue from ileal ulcers were mostly nonspecific 60 (87.0%) while six (8.7%) and 3(4.3%) were histopathologically consistent with tuberculosis and Crohn's disease (CD) respectively. Nonspecific ileal ulcers and tuberculosis were more in 26 to 45 years age group (Table 2). Common presenting symptoms of patients with nonspecific ileal ulcers of this series were pain abdomen 19, (27.53%), bleeding per rectum 17(24.63%) and altered bowel habit 10(14.49%). Half (3; 50%) patients with tuberculosis presented with pain abdomen. Most of the patients with tubercular ulcers were single 4(66.66%). While 42(60.87%) patients

with nonspecific ileal ulcers had multiple ulcers. All patients with Crohn's disease had multiple ileal ulcers.

Discussion:

Common diseases of small bowel ie, intestinal tuberculosis, CD, lymphoma, adenocarcinoma, drug induced enteropathy, Behcet's disease etc. usually occur at terminal ileum¹². Incidence of isolated terminal ileal ulcers was 3.15% in this series which was lower than that of Nepal¹³ and India^{14, 15}, but higher than one report from china^{16,17}. Meta analysis showed incidence of ITIU in patients with gastrointestinal symptoms varied from 2% to 7%¹⁵ and in asymptomatic patients 0.27%⁷. In this series specific aetiology were found in 9 (13.04%) patients ie, tuberculosis and CD. But no lymphoma malignancy were found in this study. Incidence of specific diagnosis in our series was lower than that of Nepal¹³ and India¹⁵. These differences may be due to differences in sample size, population, local disease profile and study design. In our series tuberculosis was common specific disease which is similar to report from Nepal¹³. But Indian report showed higher incidence of CD at ITU¹⁵. In Korea incidence of tuberculosis at ITIU were lower than that of our report¹⁸. In our series incidence of nonspecific ileal ulcers at ITIU is higher than previous reports^{8,13,15}; but similar to one report from China¹⁸. This may be due to difference in sample size, population, local disease profile and study design. Common presenting symptoms irrespective of diagnosis in our series were abdominal pain and chronic diarrhea which was consistent with reports from Nepal¹³ and India⁸. In our series one third of ileal tuberculosis and all cases of CD had multiple ulcers which was consistent with reports from Nepal¹³ and India¹⁵.

Limitations:

Small sample size, no follow up was done to see outcome. All sample are from single private centre

Conclusion:

Incidence of isolated ileal ulcers as well as specific diagnosis is low. And majority of them are nonspecific in nature. And tuberculosis is common specific disease. Further multicentre

study with large sample size may be recommended for better inference.

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