Pneumatosis Cystoides Intestinalis Presenting as Acute Obstructing Intussusception: A Case Report of a Rare Entity

Sanjay D. Deshmukh, Priya Kendre, Sadhana H. Khaparde*, R. Khandelwal, B.B. Shinde and Priyanka Ingole

Department of Pathology, Dr Vitthalrao Vikhe Patil Foundation’s Medical College, and Hospitals Ahmednagar, India

Abstract: Pneumatosis cystoides intestinalis (PCI) is an uncommon disease that may lacks symptoms and is rarely associated with intussusception. We report a case of PCI clinically presenting as obstructing intussusception who underwent emergency colectomy with excellent outcome.

Keywords: Pneumatosis Cystoides Intestinalis, Intestinal Obstruction, Intussusception.

INTRODUCTION

Pneumatosis cystoides intestinalis (PCI) is an unusual condition characterized by the presence of air/gas in the form of cysts or linear elevations in the submucosa and/or subserosa of the intestinal wall [1, 2]. PCI may be encountered in variety of clinical pathologies, which includes: chronic obstructive lung diseases, collagen diseases, necrotizing intestinal infections, ischemic bowel disorders and coeliac disease [3, 4]. PCI may present as a benign condition that may not warrant immediate surgery. However emergency surgery is indicated when it is associated with complications like: volvulus, perforation, intestinal obstruction and intussusception [2, 5]. Herein, we report a rare case PCI presenting as intussusception, which was treated surgically with excellent results.

CASE REPORT

A 30yr old female presented at our hospital with c/o pain in abdomen since 2 days and vomiting since 1 day. Physical examination revealed distended abdomen with reduced bowel sounds, tenderness in lower abdomen, with no signs of peritoneal irritation. Emergency serological test results were within normal range. CBC was non-contributory. Computed Tomography (CT) – showed intussusception of ascending colon and multiple gas-filled cysts, and linear collections of air in the bowel wall (Figure 1).

Emergency laparotomy was done with diagnosis of acute intestinal obstruction. Intra-operatively intussusception was relieved and right hemi cystic lesions colectomy was performed. Right hemi colectomy specimen was received in the surgical pathology. On gross examination the specimen showed, multiple in

Figure 1: CECT abdomen (Axial View) showing intussusception of the colon and multiple gas-filled cysts, and linear collections of air in the bowel wall.

the submucosa with normal appearing overlying mucosal surface (Figure 2) There was no evidence of ulcer related lesions or polypoidal lesions on the mucosa. The cut section showed submucosalair filled empty cavities (Figure 3).
Figure 2: Gross specimen showing submucosal gas containing cysts within the wall of colon.

Histopathological examination - section from colonic wall showed large cysts in the submucosa with overlying normal appearing colonic mucosa (Figure 4).

On follow up with periodic visits, the patient made uneventful recovery and was symptom free after one year.

DISCUSSION

Pneumatosis cystoides intestinalis (PCI) is a rare condition characterised by presence of multiple gas filled cysts in the intestinal wall affecting the submucosa and/or subserosa of the intestine. Based on aetiology, PCI is subdivided into two distinct groups: (1) Primary PCI -15% (2) Secondary PCI-approximately 85% [6]. Secondary PCI refers to PCI when underlying pathological condition is elucidated, while in primary there is no underlying pathological condition. Our case belongs to the group of primary PCI presenting as intussusception. It may be noted that there is paucity of reported cases of primary PCI associated with intussusception [2, 7].

The surgical resection of the affected segment has proved to be rewarding procedure in most of these cases [7, 8].

CONCLUSION

Although primary PCI represents a benign condition, an emergency laparotomy with large bowel
Pneumatosis Cystoids Intestinalis Presenting as Acute Obstructing Intussusception

Global Journal of Pathology and Microbiology, 2018 Vol. 6

Resection is indicated, when it clinically presents as an acute intestinal obstruction with intussusception as encountered in this case.

REFERENCES


Received on 1-11-2018 Accepted on 28-11-2018 Published on 10-12-2018

DOI: http://dx.doi.org/10.20941/2310-8703.2018.06.2

© 2018 Deshmukh et al.; Licensee Scientific Array. This is an open access article licensed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/3.0/), which permits unrestricted, non-commercial use, distribution and reproduction in any medium, provided the work is properly cited.