

Intussusception in Adults: A Case Report

Nabeel UR Rahman¹, Rigenjyoti Kalita², Kishalay Datta³

Author's Affiliation:

¹MEM Resident, ²Attending Consultant, ³Associate Director & HOD, Department of Emergency Medicine, Max Hospital, Shalimar Bagh, New Delhi 110088, India.

Corresponding Author:

Rigenjyoti Kalita, Attending Consultant, Department of Emergency Medicine, Max Hospital, Shalimar Bagh, New Delhi 110088, India.

E-mail: drkishalay.datta@maxhealthcare.com

Received on 11.02.2019,
Accepted on 26.03.2019

Abstract

Abdominal pain is one of most frequent presenting complain in ED among adult population. Intussusceptions although rare, can be consider as a cause of bowel obstruction in adults. Its occurrence in adult is not as common as in children; also difficulty to diagnose as patient usually present with non-specific abdominal pain or features of obstruction. Most sensitive diagnosis is computed tomography and adult intussusceptions rarely resolved without surgical interventions. Delay in diagnosis and treatment may leads to dangerous consequences. Here we have reported a case of 20 year old female with long standing pain abdomen found to have intussusceptions.

Keywords: Intussusceptions; Current jelly; Telescoping.

Introduction

Intussusception occurs when a portion of the alimentary tract telescopes into another segment, commonly ileum invaginates into the upper colon, bringing the mesentery with it (ileocolic) [1]. This leads to constriction of mesentery and bowel ischaemia. Children mostly present with classical triad of intussusception; abdominal pain, current-jelly stool and palpable tender abdominal mass where as in adults predominance of nausea, vomiting, abdominal distension/pain or any other non-specific symptoms distorted the clinical diagnosis [2,3].

Adult intussusceptions represent about 5% of all cases of intussusceptions and account a minor percentage (1%-5%) of intestinal obstruction [4]. As per their locations it is classified into four categories: enteric, ileocolic, ileocaecal and colonic [5]. Etiology of intussusceptions in children usually primary and benign where as in adults Mackel's diverticulum, carcinoma, polyps and malignancy bears a major risks.

Case Report

20 year old female was presented to emergency

with complain of severe epigastric pain, progressive in nature 10-12 days associated with bilious vomitus 2-3 episodes since 1 day. She had no history of any commorbidity previously and not on any regular medication. She passed flatus normally. She denied for any history of chest pain, fever, weight loss, burning micturation, any vaginal discharge and trauma.

On Examination

Airway Assessment : Patent

Breathing Assessment

Respiration (RR/min) : 18/Min

Laboured : No

SpO₂ : 98% on Room Air

Circulation

Pulse : 90/Min

BP : 100/70 MM HG

Peripheral Pulses : Yes

Temperature : 98 F

Cardiac Monitor : Sinus rhythm

GRBS : 104 mg/dl

LMP : Regular



Systemetic Examination

HEENT : No Pallor/Icterus/Cyanosis/Dehydration.
 CHEST : B/L Air entry equal
 CVS : S1S2 Heard
 ABD : Soft, Mild epigastric tenderness with distension, no organomegaly, BS +
 EXT : Warm, No Pedal Edema
 Neuro : Conscious, oriented, no focal neurological deficit
 Reflexes were normal
 Plantars : B/L downgoing

Ample History:

Allergies : No Known Drug Allergy
 Medications : No past medical/Surgical history

Provisional Diagnosis was made as SAIO with Dyselectrolytemia, Cholelithiasis, Pancreatitis.

She was evaluated in emergency and investigated for her symptoms. Her Ultrasonography of abdomen s/o small bowel obstruction (? Intussusceptions). She was planned for CT whole abdomen, features s/o Jejunum-jejunal Intussusception with mucosal thickening of multiple small bowel loops with enlarged mesenteris lymph node? infective enteritis. General Surgery and gastroenterology consultation was done, Intravenous fluid, IV Antibiotics, Ryles' tube started and admitted for further intervention. As per Surgery consultation, pt was taken to operating room for Laproscopy and reduction of intussusceptions. Intra-operative findings revels small bowel intussusceptions at two places with jejunal congestion and hyperaemic but apperantly healthy tissue. Post operative period was uneventful and patient's condition improved in subsequent hospital stay.

*Lab Reports**Blood gas report :*

PH : 7.3, PO₂ : 100, PCO₂ : 33, HCO₃ :19
 Na⁺ : 133, K⁺ : 3.3, CL : 110, GLU : 148, LAC :0.8

Complete blood counts

WBC - 6.6, RBC - 4.2, Hb - 12.5, Plt-1.76 L
 Differential counts : N-75 M-5 L-18 E-2

Electrolytes

Na⁺ - 132, K⁺ - 3.7

Renal Function Test, Liver function tests, Coagulation profile are within normal limits.

CXR-WNL

Abdomen ERC/Supine - Apparently normal.

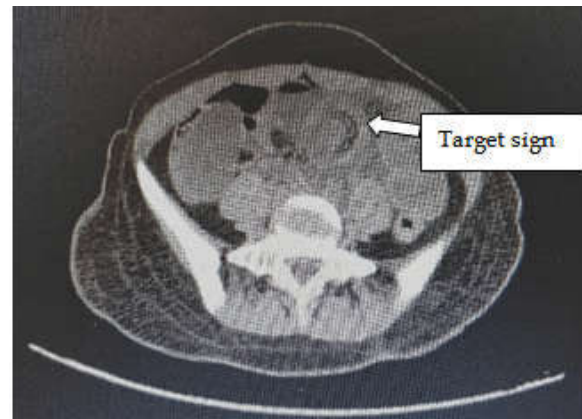


Fig. 1: CT Abdomen s/o Target Sign

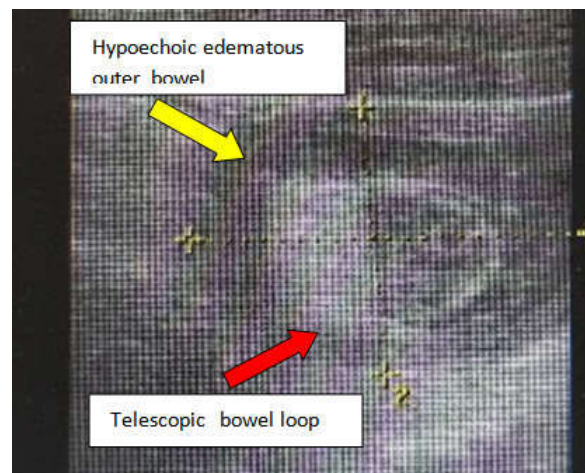


Fig. 2: USG Whole Abdomen

Discussion

Intussusception as an infrequent cause of intestinal obstruction was first reported in 1674 by Barbette of Amsterdam [6]. Clinical features of adult intussusceptions varies as mostly present with features of obstruction eg, nausea, vomiting, abdominal pain and are often long standing. we have reported a young female having long standing abdominal pain presented with features of obstruction.

Abdominal plain radiograph were considered as

initial diagnostic tool to evaluate any features of obstruction. Abdominal x-ray with multiple air – fluid level (usually more than 3) rise suspicion of an obstruction. Ultrasonography gives more clue about it as it may shows classical signs (“target sign” or “doughtnut sign” in transverse view Figure 2) or pseudo-kidney sign in longitudinal view.

Contrast enhanced abdominal CT considered as a gold standard with accuracy 58%-100%. Typically it suggest a soft tissue mas “target” or “sausage-shaped” mass consisting an outer intussusciens and inner intussusceptum. Abdominal CT scan came out as a best modality to comment on the location, length and diameter of intussusceptum, possibility of strangulation and relationship with surrounding tissue that guides the operative surgeons. It is also used to see if there any proximal bowel obstruction or not (lead point) and staging in case of malignant mass [7,8]. Adenocarcinoma is the most common malignant lead point in the colon, whereas metastasis is the most common malignant lead point in the small intestine [9,10].

Symptomatic intussusceptions in adult requires operative intervention mainly because of underlying structural abnormality. It involves exploratory laparotomy followed by resection of ischaemic bowel segment. Reduction of intussusceptions preoperatively by barium or air generally not recommended due to increased risks of perforation of bowel leads to spread of infection. Manual reduction can be considered with consultation of surgeons if diagnosis of benign lesion has been established [11,12].

Intussusception was previously believed as a disease of pediatric population, but due to radiological advances and use of abdominal CT scans asymptomatic or idiopathic intussusception is being seen more commonly. Early diagnosis and timely treatment is helpful to overcome adverse outcomes.

References

1. Tintinalli's Emergency medicine, A Comprehensive Study Guide, 7th Edition, Judith E Tintinalli (pp.840-842).
2. Begos DG, Sandor A, Modlin IM. The diagnosis and management of adult intussusception. *Am J Surg.* 1997 Feb;173(2):88–94.
3. Azar T, Berger DL. Adult intussusception. *Ann Surg.* 1997 Aug;226(2):134–8.
4. Marinis A, Yiallourou A, Samanides L, et al. Intussusception of the bowel in adults: a review. *World J Gastroenterol.* 2009 Jan 28;15(4):407–11.
5. Teng Lu, MD, Yi-mei Chng, MD Adult Intussusception. *Perm J.* 2015 Winter;19(1):79–81.
6. Barbette P. *Ouevres Chirurgiques at Anatomiques.* Geneva: Francois Miege, 1674.
7. Gore RM, Silvers RI, Thakrar KH, Wenzke DR, Mehta UK, Newmark GM, Berlin JW. Bowel Obstruction. *Radiol Clin North Am.* 2015;53:1225–40.
8. Gayer G, Apter S, Hofmann C, Nass S, Amitai M, Zissin R, Hertz M. Intussusception in adults: CT diagnosis. *Clin Radiol.* 1998;53:53–57.
9. Barussaud M, Regenet N, Briennon X, et al. Clinical spectrum and surgical approach of adult intussusceptions: a multicentric study. *Int J Colorectal Dis.* 2006 Dec;21(8):834–9.
10. Nagorney DM, Sarr MG, McIlrath DC. Surgical management of intussusception in the adult. *Ann Surg.* 1981 Feb;193(2):230–6.
11. Eisen LK, Cunningham JD, Aufses AH. Intussusception in adults: institutional review. *J Am Coll Surg.* 1999 Apr;188(4):390–5.
12. Olasky J, Moazzez A, Barrera K, et al. In the era of routine use of CT scans for acute abdominal pain, should all adults with small bowel intussusception undergo surgery? *Am Surg.* 2009 Oct;75(10):958–61.