Scholars Journal of Medical Case Reports **ISSN 2347-6559 (Online)**
Sch J Med Case Rep 2014; 2(4):252-254 **ISSN 2347-9507 (Print)**

(An International Publisher for Academic and Scientific Resources) DOI: 10.36347/sjmcr.2014.v02i04.0010

Intussusception in an Adult: a Rare Presentation of Non Hodgkin's Lymphoma

Varun Rajan[1], Jaisankar Puthusseri[1], Geetha Narayanan[2*]
[1]Lecturer, Department of Medical Oncology, Regional Cancer Centre, Trivandrum 695011, India
[2]Professor & Head, Department of Medical Oncology, Regional Cancer Centre, Trivandrum 695011, India

***Corresponding Author:**
Name: Dr. Geetha Narayanan
Email: geenarayanan@yahoo.com

Abstract: Intussusception is uncommon among adults. Primary Non Hodgkin's lymphoma of the intestine presenting as Intussusception in an adult patient is very rare. We report the case of a 46 year old man who presented as Intussusception and was found to have NonHodgkin's lymphoma. He underwent resection followed by chemotherapy with, cyclophosphamide, vincristine, doxorubicin, prednisolone and rituximab and is remission at 2 years.
Keywords: Non Hodgkin's Lymphoma, Intussusception, ileocaecal

INTRODUCTION

Intussusception is a rare cause of bowel obstruction in adults and is usually associated with an underlying pathology, benign, or malignant. It accounts for 1% of all bowel obstructions, and 5% of all intussusceptions [1]. Lymphoma is a very rare cause of adult intussusception, with only 36 cases reported in the literature between 2000 and 2011[2]. Intussusception is a different entity in adults than it is in children. We present the case of intussusceptions in an adult which turned out to be Non Hodgkin.s lymphoma (NHL)

CASE REPORT

A 46 year old man presented with colicky abdominal pain since 4 months. Examination showed a tender mass in the right iliac fossa. A computed tomographic (CT) scan of the abdomen showed a hyperdense mass lesion 6.1 x 5.7 cm with double lumen suggestive of ileocolic Intussusception in the right iliac fossa (Figure 1a, b). He underwent right hemicolectomy. There was a proliferative growth 5x4cm in the caecum with ileocolic Intussusception.

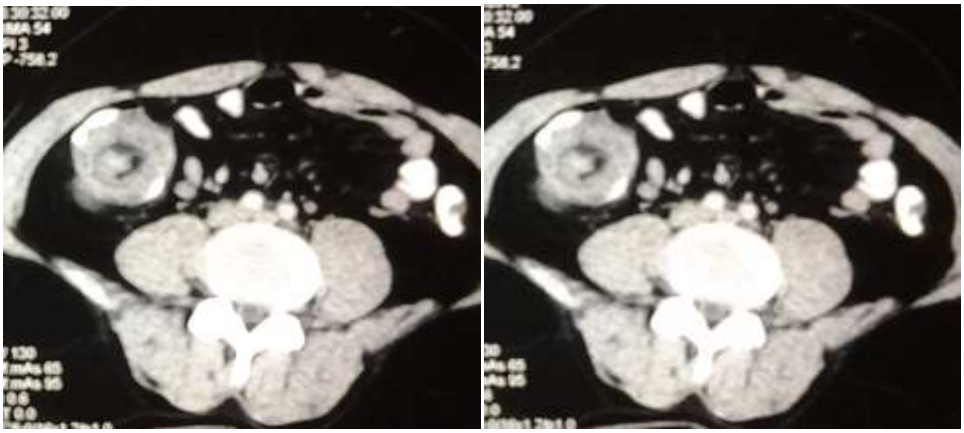

Fig. 1 (a) & (b): CT scan of the abdomen showing hyperdense mass lesion with double lumen suggestive of ileocolic Intussusception

Histopathological examination showed a neoplasm composed of sheets of large lymphoid cells which on immunohistochemistry were positive for LCA, CD20, bcl6 and negative for CD5, cytokeratin, CD117 and desmin with a MIB labeling index of 80% diagnostic of diffuse large B cell lymphoma. A staging work up by CT scan and bone marrow biopsy did not reveal disease elsewhere. He received combination chemotherapy with CHOP and Rituximab for 6 cycles and continues to be in remission at 24 months.

DISCUSSION

Intussusception of the bowel is defined as the telescoping of a proximal segment of the

gastrointestinal tract within the lumen of the adjacent segment. This condition is frequent in children, however, bowel intussusception in adults is considered a rare condition. The condition is distinct from intussusception in children, where it is usually primary and benign, and pneumatic or hydrostatic reduction is sufficient in 80% of the cases. On the other hand, 90% of adult intussusception are secondary to a pathologic condition such as carcinomas, polyps, Meckel's diverticulum, colonic diverticulum, strictures or benign neoplasms and most of adult cases requires surgerical excision [3-5]. It presents with a variety of vague symptoms, thus making its preoperative diagnosis difficult. In 30 years at the Massachusetts General Hospital, there were 58 cases of surgically proven adult intussusception. Forty-eight percent of the enteric lesions and forty-three percent of the colonic lesions were malignant [1].

The clinical presentation of adult intussusception are nonspecific such as nausea, vomiting, gastrointestinal bleeding, change in bowel habits, constipation or abdominal distension and have been reported as chronic, consistent with partial obstruction [1, 3]. The classic pediatric presentation of acute intussusception (a triad of cramping abdominal pain, bloody diarrhea and a palpable tender mass) is rare in adults. The mechanism of bowel intussusception is unknown in primary or idiopathic cases. In contrast, secondary intussusception initiates from a pathologic lesion of the bowel wall or irritant within the lumen that alters normal peristaltic activity and serves as a lead point.

Primary lymphoma of the gastrointestinal tract accounts for 30–40% of all extra nodal lymphomas and constitute 10–15% of all non-Hodgkin lymphomas [6]. More than 90% of cases of adult intussusception are due to colonic adenocarcinoma and malignant lymphoma[7]. Although rare, intussusception is a recognized presenting feature of lymphoma and the most common recognised site is the ileocolic region [2].

Akbulut reviewed 36 published cases of intussusception caused by lymphoma. Their mean age was 48.2 years, 29 male and 7 female, 24 had ileocolic intussusception, 10 had enteric and 2 had colic intussusception, 34 had NHL and 2 had HD [2]. A 78 year old man with jejuno jejunal intussusception due to primary intestinal B cell NHL was described [8]. Mudhol *et al*. described a 48 year old lady with Ileocaecal intussusception due to NHL, she underwent Rt hemicolectomy and received chemotherapy [9]. A 74 year old man with jejunojejunal intussusception as the initial presentation of DLBCL is also reported [10]. Our patient also had ileocolic intussusceptions which later proved to be due to diffuse large B cell lymphoma.

Intussusception is only rarely considered in the differential diagnosis of adult patients with vague abdominal complaints. Variability in clinical presentation and imaging often make the preoperative diagnosis of intussusception challenging. Plain abdominal films show features of intestinal obstruction and Ultrasonography may show the classical imaging features such as the "target" or "doughnut" signs. Abdominal CT is considered the most sensitive imaging modality with a reported diagnostic accuracy of 58%-100% and can distinguish between intussusceptions with and without a lead point [1].

The characteristic features of CT scan include an unhomogeneous "target" or "sausage"- shaped soft-tissue mass with a layering effect , mesenteric vessels within the bowel lumen are also typical [5]. A CT scan may define the location of the mass, its nature, its relationship to surrounding tissues and, also help staging the patient with suspected malignancy causing the intussusceptions. Confirmation of diagnosis and treatment of adult intussusception is surgical, with surgical resection of the intussusception without reduction being the preferred treatment in adults, as almost half of the intussusceptions are associated with malignancy. Our patient received chemotherapy following surgery since it was an aggressive lymphoma.

In conclusion, intussusceptions of bowel in adults are rare but challenging and is usually associated with an underlying cause, including lymphoma.

REFERENCES

1. Azar T, Berger DL; Adult intussusception. Ann Surg., 1997; 226:134–138.
2. Akbulut S; Unusual cause of adult intussusception: diffuse large B-cell non-Hodgkin's lymphoma: a case report and review. European Review for Medical and Pharmacological Sciences, 2012; 16: 1938–1946.
3. Weilbaecher D, Bolin JA, Hearn D, Ogden W; Intussu-sception in adults. Review of 160 cases. Am J Surg., 1971; 121: 531–535.
4. Akcay MN, Polat M, Cadirci M, Gencer B; Tumor-induced ileo-ileal invagination in adults. Am Surg., 1994; 60: 980–981.
5. Begos DG, Sandor A, Modlin IM; The diagnosis and management of adult intussusception. Am J Surg., 1997; 173: 88–94.
6. Bautista-Quach MA, Ake CD, Chen M, Wang J; Gastrointestinal lymphomas: morphology, immunophenotype and molecular features. Journal of Gastrointestinal Oncology, 2012; 3: 209–225.
7. Chi-S H, Chao FC, Hua TC; Adult intussusception caused by malignant

lymphoma. J Soc colon Rectal Surgeon, 2009; 45: 100-102.

8. Salemis NS, Tsiambas E, Liatsos C, Karameris A, Tsohataridis E; Small bowel intussusception due to a primary non-Hodgkin's lymphoma. An unusual presentation and clinical course. J Gastrointest Cancer, 2010; 41: 233-237.
9. Marinis A, Yiallourou A, Samanides L, Dafnios N, Anastasopoulos G, Vassiliou I *et al*.; Intussusception of the bowel in adults: A review. World J Gastroenterol., 2009; 15(4): 407–411.
10. Stohlner V, Chatzizacharias NA, Parthasarathy M, Groot-Wassink T; Jejunojejunal Intussusception as the Initial Presentation of Non-Hodgkin's B-Cell Lymphoma in an Adult Patient: A Case Report and Review of the Literature. Case Rep Surg., 2013; 2013: 619031.