

## Ileo Ileo COLIC INTUSSUSCEPTION IN 1 YRS OLD CHILD: A RARE CASE REPORT

Dr Siddharth Kumar Sinha<sup>1</sup>, Dr Dhaval Desai<sup>2</sup>, Dr. Sanjay Singhal<sup>3</sup>

<sup>1</sup>Dept of Gen Surgery Resident 3 year, Mahatma Gandhi Medical College and Hospital, Jaipur

<sup>2</sup>Dept of Gen Surgery, 2 year Resident, Mahatma Gandhi Medical College and Hospital, Jaipur

<sup>3</sup>Professor, Dept. of General Surgery, Mahatma Gandhi Medical College and Hospital, Jaipur

**Article Info:** Received 10 September 2020; Accepted 17 October 2020

**DOI:** <https://doi.org/10.32553/ijmbs.v4i10.1469>

**Corresponding author:** Dr. Sanjay Singhal

**Conflict of interest:** No conflict of interest.

### Abstract

Intussusception is a common cause of intestinal obstruction and colicky abdominal pain in the children, particularly infants, the commonest being the ileocolic variety with colocolic variety being a very rare entity. We present a case of colocolic intussusception in a 1-year-old girl. A 1-year-old girl presented with history of colicky abdominal pain since 6 hours and non-passage of stools and flatus since 8 hours. The parents also gave history of 4 episodes of vomiting, vomitus contained food particles. Vomitus was not blood stained, foul smelling or bilious. Intraoperative findings included a polypoidal growth in the descending colon as the leading point with the formation of a colo-colic intussusception. The child was taken up for emergency laparotomy. Intraoperatively ilio-ileal intussusception was noted at 2 levels with multiple enlarged mesenteric lymph nodes. The intussusceptions were reduced manually. On further exploration of the distal end of bowel, appendix was found to be elongated and inflamed. Appendectomy was done, and the sample sent for histopathological examination.

### Introduction

Intussusception is a serious problem in the intestine. It occurs when one part of the intestine slides inside another part. The intestine then folds into itself like a telescope. This creates a blockage or obstruction. It stops food that is being digested from passing through the intestine. Intussusception is the most common cause of intestinal blockage in children between ages 3 months and 3 years. It is rare in newborn babies. But it can also occur in older children, teenagers, and adults.<sup>1</sup>

About 90% cases are idiopathic. The majority of cases occur in the region of the ileocecal valve, and no lead point can be precisely identified. Other types of intussusception that are rarer and have an anatomic lead point include ileoileal, colocolic, and ileoileocolic. Almost all cases of colocolic intussusception occur with a lead point such as polyp or tumoral mass. In a significant number of these cases, juvenile polyps were identified as leading point.<sup>2</sup>

Intussusception lead points are more common in neonates, older children, and cases restricted to the small intestine. Colocolic intussusception in the adults is almost always a complication of preexisting colonic disease, usually carcinoma or polypoid tumor. Pediatric patients presenting with documented colocolic intussusception should suggest the possibility of a colonic polyp or other mass lesions.<sup>3</sup>

### Case report

A 1-year-old girl presented with history of colicky abdominal pain since 6 hours and non-passage of stools and flatus since 8 hours. The parents also gave history of 4 episodes of vomiting, vomitus contained food particles. Vomitus was not blood stained, foul smelling or bilious.

The baby was born at full term through normal vaginal delivery with birth weight of 2.9 kg and breast fed up to 6 months of age. Patient has been weaned since 6 months of age.

Child is immunized appropriate to age. There was no history of any prior surgeries or medical illnesses.

On examination, child was irritable and restless. His vital signs were pulse rate 104 beats/min; axillary temperature 98.2 F; respiratory rate 20 breaths/min. Per-abdomen examination revealed abdomen was uniformly distended with tenderness in right iliac fossa. Hernial orifices were free. No free fluid.

On auscultation borborygmi was heard.

On digital rectal examination, finger was stained with stools, not blood stained.

Laboratory investigations revealed the following: haemoglobin 12.1 g/dL; haematocrit-38.2%; platelets-267,000/mm<sup>3</sup>, white blood cell (WBC) count- 9200/mm<sup>3</sup>; renal function and serum electrolytes were within normal limits.

Ultrasound abdomen and pelvis showed multiple dilated bowel loops with sluggish to ileo pelvic talis is seen in abdomen.

The child was taken up for emergency laparotomy. Intraoperatively ilio-ileal intussusception was noted at 2 levels with multiple enlarged mesenteric lymph nodes. The intussusceptions were reduced manually. On further exploration of the distal end of bowel, appendix was found to be elongated and inflamed. Appendectomy was done, and the sample sent for histopathological examination.



**Figure 1:** Intra-operative finding

#### Discussion

Intussusception occurs when one segment of bowel telescopes into an immediately adjacent segment; almost invariably, proximal segment into the distal. Intussusception is the leading cause of intestinal obstruction in the young child. It is believed that hyperplasia of Peyer's patches in the terminal ileum may be the initiating event. The condition is encountered most commonly in children, with a peak incidence between 6 and 24 months of age<sup>4</sup>

Around 90% of cases are idiopathic. The incidence of intussusceptions with leading points in paediatric cases is approximately 2-12%, with most common causes being Meckel's diverticulum and Henoch- Schönlein purpura. Other causes include lymphoma, duplication, haemangioma, and polyps of the intestine.<sup>5-7</sup> Intussusception is noted to be a major cause of intestinal obstruction in children.

Paediatric patients with colocolic intussusception should suggest the possibility of a colonic polyp or mass lesion.

Although Mahmudloo et al. reported a case of colo-colic intussusception without a pathologic lead point in a 7-year-old boy,<sup>1</sup> but the majority of the case reports in the literature reported juvenile polyps responsible for this variety of intussusception in the pediatric age group<sup>2</sup>. Similar cases caused by juvenile colonic polyp in pediatric age group were reported by Arthur et al.<sup>3</sup> and Abrahams et al.<sup>8</sup>

#### Conclusion

Ileo ileo colic Intussusception is a rare finding in children that may cause intussusception which does not resolve spontaneously.

#### References

1. R. Mahmudloo, S. Gheibi, and S. N. Vahed, "Colocolic intussusception without lead point; A case report and literature review," *Iranian Journal of Pediatrics*, 2008;18(4):pp. 373–376
2. R. J. Ippolito and R. J. Touloukian, "Colocolic intussusception in an older child. Caused by a polyp of the distal colon," *Clinical Pediatrics*, 1978;17(9):720-26
3. A. L. Arthur, R. Garvey, and D. G. Vaness, "Colocolic intussusception in a three-year-old child caused by a colonic polyp," *Connecticut Medicine*, 1990;54(9): 492–494
4. "Intussusception" Schwartz Principles of surgery, 10th Ed., McGraw Hill Education, 2015, p.1170
5. Ksia A, Mosbahi S, Brahim MB, Sahnoun L, Haggui B, Youssef SB, et al. Recurrent intussusception in children and infants. *Afr J Paediatr Surg*. 2013 Oct;10(4):299.
6. Mills RW, McCrudden K, Gupta VK, Britton A, Al Qahtani M, Hasan RA. Intussusception caused by heterotopic pancreatic tissue in a child. *Fetal Paediatr Pathol*. 2011 Mar;30(2):106-10.
7. Sonmez K, Turkyilmaz Z, Demirogullari B, Karabulut R, Kale N, Basaklar A. Intussusception in children: Experience with 105 patients in a department of paediatric surgery, Turkey. *South Afr J Surg*. 2012 May;50(2):37-9.
8. R. B. Abrahams, A. Franco, and K. N. Lewis, "Paediatric colocolic intussusception with pathologic lead point: a case report," *Journal of Medical Cases*, 2012;3(1): 84–88, 2012