

**ULTRASOUND GUIDED HYDROSTATIC REDUCTION OF CHILDHOOD INTUSSUSCEPTION**

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Article Received on 28/12/2021

Article Revised on 18/01/2022

Article Accepted on 08/02/2022

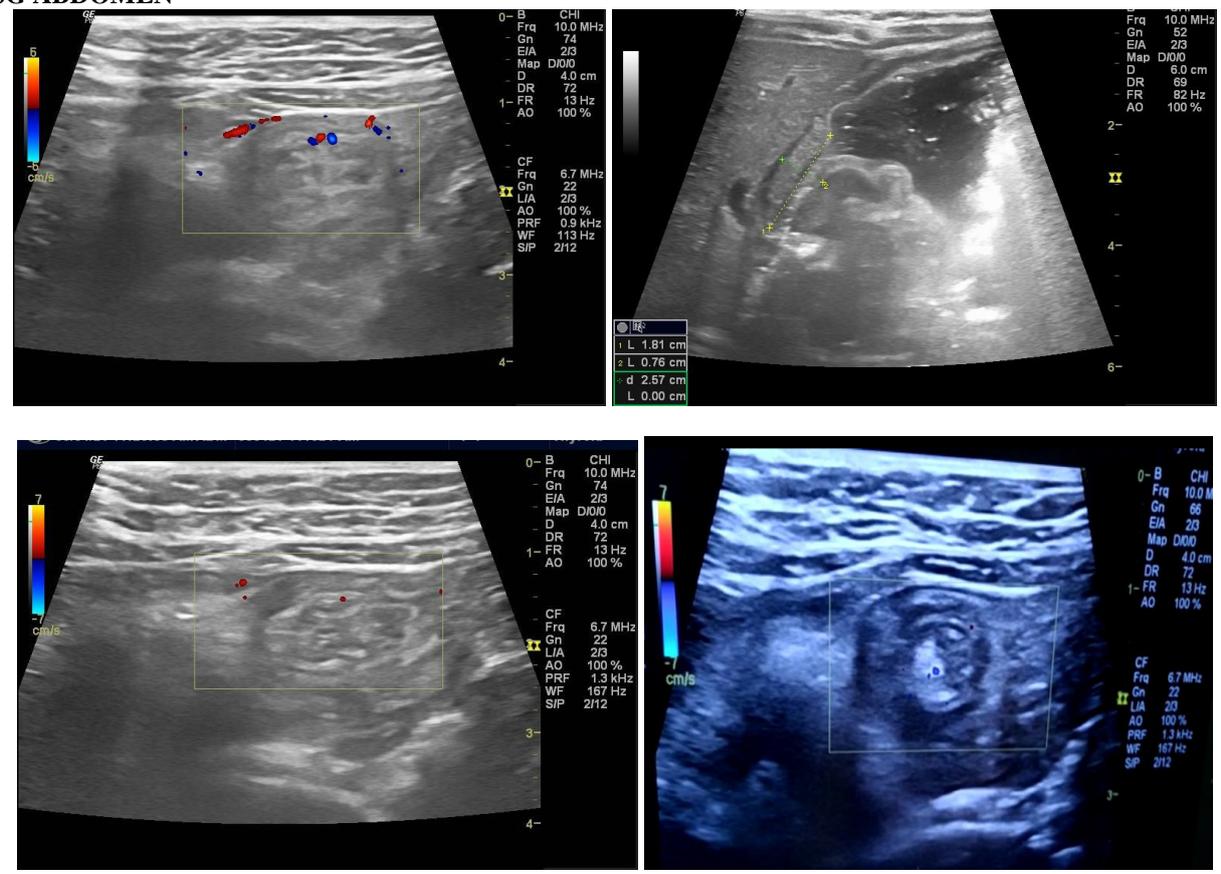
**INTRODUCTION**  
Intussusception is defined as telescoping of a segment of intestine into an adjacent distal segment. It is a common abdominal emergency in children less than 2 years of age (1). Maximum incidence is between 6 to 9 months of age (2). It is more common in small bowel than large bowel. Presents with vomiting, bloating and blood in stools. On clinical examination a palpable mass is often felt at the right side of abdomen.

**CASE REPORT**

2 years old Male child presented to pediatric emergency department with history of acute pain abdomen since last

4 hours with repeated episodes of vomiting. Ultrasound revealed presence of concentric alternating echogenic and hypoechoic bands giving classical ‘Target sign’.

**USG ABDOMEN**



- Based on the sonographic features a diagnosis of intussusception was established and patient was immediately referred to interventional radiology

dept. for UGHR. The presence of hyperechoic core represented the mesenteric fat with diameter of fatty core exceeding that of outer wall suggestive of colo-

colic intussusception and UGHR was planned. A written informed consent was taken from patient's parent before performing the procedure. Patients was assessed by a paediatric surgeon, who was present throughout the procedure. Blood samples are

taken for electrolytes and cross-matching. Sedation was achieved by intramuscular meperidine hydrochloride (0.5 mg/kg dose). Blood pressure and pulse rate are monitored before, during the procedure and post procedure for a day.



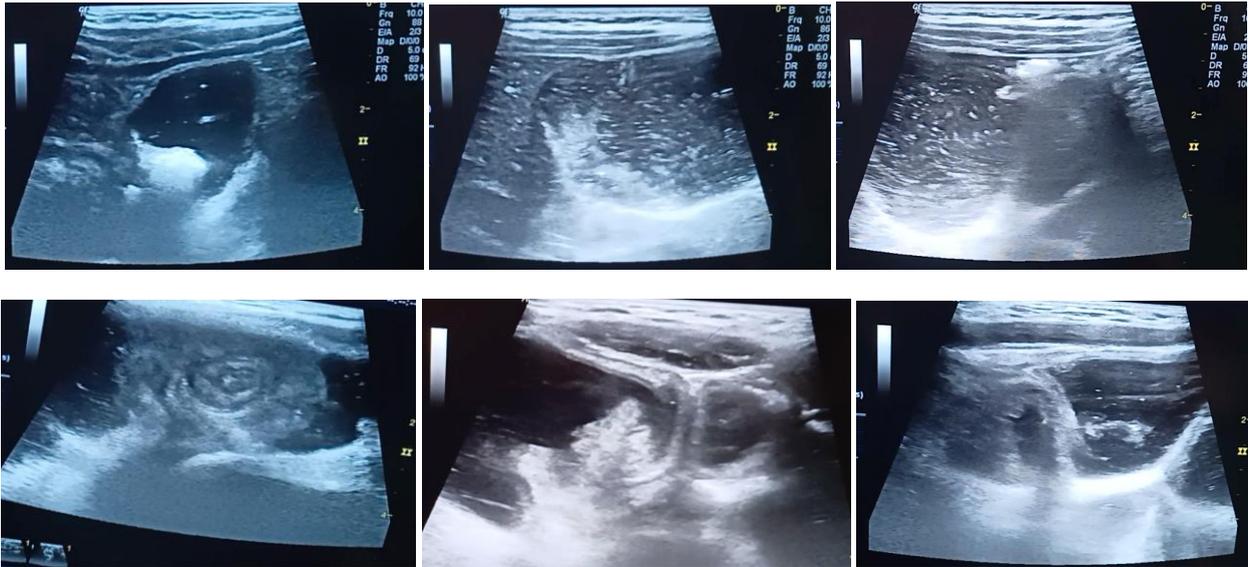
Balloon was inflated with 20-40 cc of air to completely occlude the rectum.



Insertion of a Foley's catheter into rectum



Max. 3 attempts of instillation of normal saline from 3 meters height with each attempt lasting for max. duration of three minutes along with continuous USG monitoring

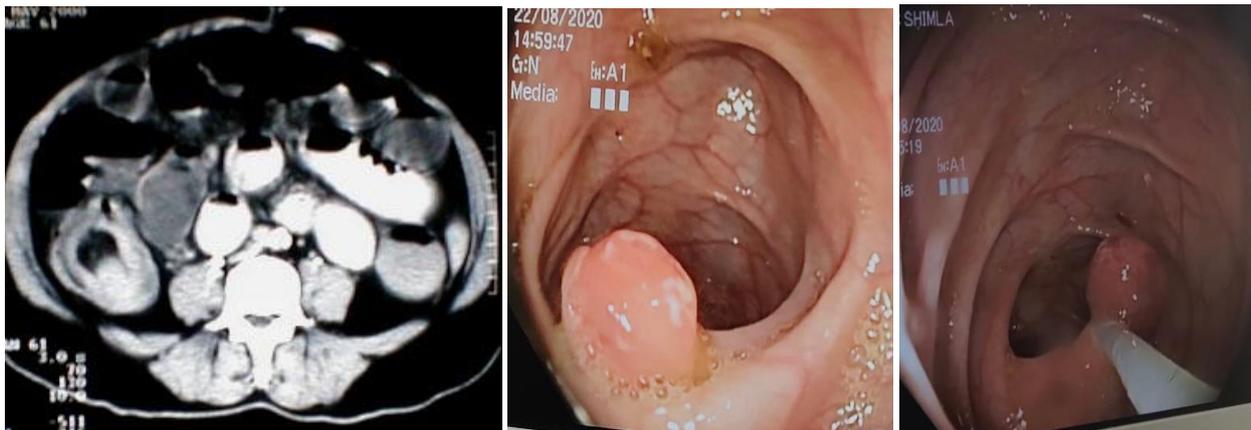


Tracing fluid reaching into the descending colon (Fig 8), transverse colon (Fig 9), hepatic flexure (Fig 10), with reduction in size and proximal migration of the telescoped gut loop (Fig 11), edematous ileocecal valve (Fig 12) and fluid finally reaching into the terminal ileum (Fig 13)

## RESULT

The case of colo-colic intussusception was reduced successfully in the first attempt. On post reduction CT Scan a submucosal polyp was identified as a lead point

and patient was then referred to paediatric department for further evaluation and management. On follow-up, colonoscopy revealed a submucosal polyp and endoscopic resection (polypectomy) was done.



## DISCUSSION

Non-operative management of intussusception is seldom practiced, especially in middle- and low-income group countries, mainly due to lack of expertise. Our experience shows that UGHR is highly successful for reducing a uncomplicated case of intussusception. UGHR is simple, effective, economical, has no radiation hazards and is associated with very low perforation rate.

## REFERENCES

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2. Marsicovetere P, Ivatury SJ, White B, *et al.* Intestinal intussusception: etiology, diagnosis, and treatment. *Clin Colon Rectal Surg*, 2017; 30: 030–9.