

Intussusception Presenting as Rectal Prolapse

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ABSTRACT:

Intussusception is the invagination of a segment of the intestine into the lumen of the distal or proximal segment. It is one of the commonest causes of intestinal obstruction in the toddlers. Ileo-colic intussusception is the most common type. At times the intussusceptum may protrude through the anal canal and mimic a rectal prolapse. The diagnosis may be delayed in such cases leading to increase morbidity as well as mortality. Therefore, a high index of suspicion is required in such cases. In this case where a colo-colic intussusception presented like rectal prolapse. Emergency surgical reduction was carried out under general anaesthesia and the baby had a smooth recovery.

Keywords: Anal canal, Intussusception, Intestine, Prolapse.

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INTRODUCTION:

Intussusception is defined as the invagination of a segment of the intestine into the lumen of the distal or proximal segment. The invaginating loop is known as intussusceptum and the receiving part is called intussuscepiens. Intussusception is the most common cause of acute intestinal obstruction in children under 2 years of age.¹ Children present usually with the classical signs of small bowel obstruction (SBO). Bilious vomiting, abdominal distension, and severe colicky pain abdomen is accompanied by red currant jelly stools and palpable mass in the lower abdomen. At times the invaginating loop may protrude through the anal canal and present as a prolapsed rectum. In one case series its prevalence has been claimed to be 29% of all the cases.² A high index of suspicion is required in such cases as prompt management is required in order to avoid ischaemic injury to the involved loop of intestine. Here we present a similar case of a baby girl who presented with a mass protruding through the anus.

CASE REPORT:

A three years old baby girl presented to the emergency department in the evening with history of severe colicky pain in the abdomen and anorexia since morning. She developed a mass protruding through the anus in afternoon which gradually increased in length. She was also passing mucus and blood in stools. On examination she was irritable and crying with pain. An almost 15 cm long mass was coming out of anus (Figure.1). Her pulse rate was 120/min. She looked pale and was afebrile. She had guarding and tenderness in her lower abdomen however, no mass was palpable. A finger could be easily passed between the two loops of the protruding gut and anal canal. Her blood complete counts and electrolytes were normal. Ultrasound of the abdomen was suggestive of "target sign" with central echogenic and peripheral hypoechoic portion of gut in the pelvis. Longitudinal scan showed "pseudo-kidney sign". On colour doppler blood flow was present in both loops, suggesting colo-colic intussusception. She was admitted and prepared for emergency laparotomy. Under general

Figure.1 Intussusception protruding through anus mimicking rectal prolapse



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Figure.2: Last part of intussusception being reduced easily



anaesthesia the intussusception was kept in hot saline packs for 10 minutes and then reduction was tried through anus but could not be reduced. A lower transverse incision was made and the intussusception was reduced easily (Figure.2). She made an uneventful recovery and was discharged on second post-operative day.

DISCUSSION:

Intussusception is a well-known cause of intestinal obstruction in children. The exact aetiology is still unknown and almost 81% of the cases are idiopathic.³ Various conditions have been found to be associated with it.⁴ Adenovirus infection⁵ as well as vaccination against rota virus have been proposed to increase the risk of intussusception.⁶ It can occur at any age, but 80-90% of the cases are usually less than two years old.⁷ Ileo-colic is the most common type but it is uncommon to prolapse through the anus. The colo-colic or sigmocolic is the relatively uncommon but likely to protrude through the anus as it was found in our case. Pathological lead point (PLP) may be present in 20% cases and mostly presenting in children more than one year of age. The age of patient in our case was 3 years however, there was no PLP. Patients present with signs of SBO. Vomiting is almost found in more than 80% cases. Our patient had nausea but no vomiting because the obstruction was distal and moreover, she presented early to the emergency department. Ultrasound of the abdomen is the investigation of choice with more sensitivity and high specificity.⁸ Once there is prolapse of intussusception it can be easily diagnosed by insinuating finger between the anal canal and the intussusception to differentiate it from the rectal prolapse. In rectal prolapse a finger cannot be passed freely beyond anus between the prolapsing mucosa and the anal canal but it will easily go around the intussusception. Spontaneous resolution of the intussusception may occur in a few cases but most would require hydrostatic reduction or surgery. Recurrence is more in cases of hydrostatic reduction. Similarly, children older than one year, having vomiting and palpable mass were found to be at high risk of recurrence.⁹

A high index of suspicion is needed to diagnose children having protrusion of the intussusception through anus. These are the cases confused with rectal prolapse. Moreover, they do not present with the classical signs of the disease. Delayed treatment may lead to gangrene of the involved segment of the gut thus increasing the morbidity and mortality by many folds.¹⁰

CONCLUSION:

Both intussusception and rectal prolapse are common in toddlers. Rectal prolapse is usually managed conservatively. On the other hand intussusception if left untreated can lead to gangrene of the involved segment of intestine and has high mortality and morbidity. A high index of suspicion is needed to differentiate the two conditions and initiate prompt management.

Authors Contribution:

Asrar Ahmad: MOK Case
Irum Saleem: Literature
Mahwish Mahboob Bhutta: Write up
Mehwish Mughal: Referencing
Nisar Ahmad: Discussion

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