



JEJUNO-JEJUNAL INTUSSUSCEPTION – A CADAVERIC CASE REPORT

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ABSTRACT

During routine cadaveric dissection a rare condition jejunojejunal intussusception was found in an adult cadaver. It accounts for 5-10% of all intussusception and 1% of all bowel obstructions. The part of the intestine beyond the intussusception may or may not show necrosis and obstruction. Ultrasound and CT scans are the two most important radiological methods to diagnose intussusception.

KEY WORDS: Intussusception, intussusceptum, intussuscepiens, jejunum, intestinal obstruction.



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INTRODUCTION

Intussusception occurs when a segment of bowel invaginates into the adjoining segment of bowel. The part that prolapses into the other is called the *intussusceptum*, and the part that receives it is called the *intussuscepiens*. It is less common in adults and constitutes 1% of all bowel obstructions. It accounts for about 5-10% of all cases of intussusceptions and 0.003% -0.02% of all hospital admissions⁷. When it occurs there is a risk of compromising blood supply to the distal part of the intestine. There are three types in it ileocaecal, colo-colic and ileo-ileal in which ileocaecal is the most common form³

CASE REPORT

During one of the dissection sessions of anatomy in Saveetha Medical College, we, a group of four medical students, found an abnormality in the jejunum of a male cadaver around 60 years of age. It was a hard bulge in the beginning of the jejunum about 8cm from the duodeno-jejunal flexure. Out of curiosity, we tried to pull out the jejunum from each side. After discussion with our anatomy faculty we came to the conclusion that it was a jejuno-jejunal intussusception. It was 7.5cm long intussusception, with no signs of necrosis beyond the point of intussusception. The intestines looked healthy like that of a normal intestine. There were contents after the point of intussusception. Hence there wouldnt have been complete obstruction of the jejunum.

DISCUSSION

Intussusception in adults completely differs from that of children. The clinical picture in adults is subtle and diagnosis is therefore elusive. There is high incidence of intussusceptions in children because of relatively large size of large bowel than small bowel, swelling of Peyer's patches due to infection caused by sudden change in diet during weaning period causing alteration in the intestinal flora. Neoplasms were the most frequent causes of adult intussusceptions. Occurrences of intussusceptions in older children and in adults may be

due to submucous lipoma, leiomyoma, polyps in jejunum and other carcinomas. Intussusceptions can occur in children with upper respiratory tract infection which causes oedema of Peyer's patches^{1,5,2}. It occurs more commonly at junctions between the freely moving segments as well as retroperitoneal regions or post-operative adhesion segments⁸. Mostly the male child presents with sudden onset of pain, distension of abdomen, vomiting with passage of *red currant jelly stool*. On examination a mass is felt around the umbilical region which is sausage shaped with its concavity towards umbilicus. This mass often appears on and off with empty right iliac fossa (*sign of dance*). The majority of patients were brought to the operating room with a pre-operative diagnosis of small bowel obstruction and the surgeon confirms intussusceptions only intra-operatively¹. Sometimes the intussusceptions are asymptomatic as in this case report and may not even be identified by CT scan. Different imaging processes were used in the diagnosis of intussusceptions. Plain x-rays of the abdomen were non-specific and demonstrate the presence of multiple air/fluid levels, which suggests a mechanical obstruction. Intraluminal can be trapped between the walls of the intussusceptum and intussuscepiens and appear as "air crescent sign" in plain abdominal radiograph, but these findings lack sensitivity to confirm intussusceptions⁶. Barium enema shows typical claw sign or coiled spring sign. Ultrasound shows target sign or pseudokidney sign or bull's eye sign which is diagnostic. Barium examinations were restricted only to the routine checkup of the patients and should not be employed in acute condition due to the risk of bowel rupture and barium peritonitis⁹. Saline reduction can be done initially if intussusception is diagnosed early. Laparoscopy may be useful as a first step to confirm the presence of incompletely reduced intussusceptions and to facilitate reduction thus avoiding a larger incision. The intussusceptum is delivered through a transverse incision in the right side of the abdomen and reduced by squeezing the mass retrograde from distal to proximal until completely reduced. The recurrence rate after surgery is low. Bowel resection is required in the cases when the intussusceptions cannot be reduced⁴.



Figure 1
Showing jejunojejunal Intussusception: blue arrow – intussusceptum, red arrow – intussuscepiens, black arrow – cut end at deodenojejunal flexure .



Figure 2
showing reduced jejunojejunal intussusception: blue arrow – intussusceptum, red arrow – intussuscipien

CONCLUSION

The intussusception is the invagination of one part of bowel segment with the adjacent part of the gastrointestinal tract. The intussusception that is occurring in human beings are relatively found higher in infants than in adults. The condition of intussusception can be linked with poor absorption of the nutrients and can be correlated with body mass depending upon the place or site of intussusception. The CT scan is the best

method for detection and diagnosis and can be treated by reduction if not responding then resection. Proper treatment and care should be taken and the defect must be treated before ending up as necrosis which will lead to other severe disease.

CONFLICT OF INTEREST

Conflict of interest declared none.

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