Adult Intussusception

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A sixteen-year-old male presented with a history of abdominal pain and vomiting for two days. CT scan revealed ileoileal intussusception and volvulus with free fluids. Exploratory laparotomy revealed gangrenous bowel. Intussusception and volvulus found approximately 10 to 15 cm away from the ileocecal valve. The gangrenous bowel segment was resected using a stapler. The patient had an uneventful recovery.

Adult intussusception is rare and differs from pediatric intussusception in presentation, etiology and management. The diagnosis could be delayed due to its non-specific, intermittent and longstanding symptoms. The majority of the cases are diagnosed during emergency laparotomy. A CT scan could be helpful in making the diagnosis earlier. In adults, simple bowel resection is the best modality of treatment. Recently, most surgeons recommend surgical resection, especially in colonic cases, where malignancy is usually present. The extent of resection and reduction of the intussusception is still controversial.

THE CASE

A sixteen-year-old male with no known medical illness presented with a history of abdominal pain and vomiting for two days. The patient presented to the emergency department with abdominal pain one day before; the patient was managed conservatively and discharged with instructions to return if symptoms did not improve. The pain was intermittent in the epigastric region, not radiating to any other area. On the day of admission, the pain was severe and continuous, tense, slightly distended and the abdomen was very tender. He vomited greenish watery vomitus ten times. The patient could not tolerate oral intake and was complaining of anorexia. There was no history of nausea or fever. The temperature was 37°C, blood pressure was 133/88 mmHg, the pulse rate was 85 beats per minute, respiratory rate was 15 breaths per minute and the oxygen saturation was 100% on room air. The abdomen was soft but slightly tender all over, mainly in the epigastric region. Bowel sounds were positive. Laboratory tests were within normal limits: WBC 10,000, hemoglobin 15.7. X-ray abdomen showed fecal load. Previous surgical history was positive for appendectomy performed five months ago.

CT scan revealed ileoileal intussusception and volvulus with free fluids. Exploratory laparotomy revealed gangrenous bowel. Intussusception and volvulus found approximately 10 to 15 cm away from the ileocecal valve. The gangrenous bowel segment was resected using a stapler. The rest of the procedure was unremarkable. The patient had an uneventful recovery and was discharged after six days.
DISCUSSION

Intussusception is a rare cause of acute abdomen in adults; it represents 1% of bowel obstructions and 0.003% to 0.02% of all hospital admissions\(^ 1 \). Intussusception in adults differs from pediatric intussusception in various aspects. The majority of the cases occurs in the small or large bowel in approximately 90% of the reported cases; the rest involves the stomach or the surgically made stoma in adults\(^ 2 \). Most of the adult cases are found in females. Sixty-six percent of lead points in the small bowel tend to be benign compared to 30% in the large bowel\(^ 3-4 \).

In the pediatric age group, intussusception presents with abdominal pain, palpable abdominal mass and red current-jelly like stool. On the other hand, intussusception in adults presents with atypical symptoms which would make the diagnosis more difficult. The symptoms in adults include an abdominal pain on and off, vomiting, nausea, diarrhea associated with bleeding and in some cases, abdominal mass was reported\(^ 5 \).

There are several radiological investigations to diagnose intussusceptions. These modalities include abdominal X-ray, ultrasound, CT scan and MRI. Recently, CT scan has become the diagnostic modality of choice for intussusception in adults\(^ 6 \). A study revealed that abdominal CT scan could have a diagnostic accuracy of 83%. For the previously mentioned reasons, CT scan has become the preferred modality for diagnosing intussusception compared to colonoscopy, ultrasonography or X-rays.

CONCLUSION

In intussusception, a part of gastrointestinal tract slides into another neighboring portion. It is rare in adults and varies in presenting symptoms, making the diagnosis more difficult. The best diagnostic tool is CT scan. Surgical resection is the preferred modality of treatment in adults and should not be delayed.

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REFERENCES