Bahrain Medical Bulletin, Vol.26, No.1, March 2004

Intussusception in an Adult Due to Ectopic Gastric Mucosa in an Adenomatous Polyp without Meckel's Diverticulum

Seif Eldin Ibrahim Mahdi, MD, FRCSI* EnNazeer Osman Ahmed, MBBS, MD*
Mohamed A/Atti, MBBS, MD* Mohamed E Ahmed, MS, FRCSI, MD*
Ahmed M El Hassan, MRCPath**

We present a young adult who had an emergency laparotomy for acute small bowel obstruction. An ileo-ileocaecal intussusception was found & reduced. The segment of the ileum containing the leading point was resected; examination of which revealed an adenomatous polyp harboring ectopic gastric mucosa in non Meckel's diverticulum. The patient had uneventful postoperative course with no further complications. In an adult with intussusception resection of the affected segment should always be considered, even if it is viable in order not to miss an underlying pathology.

Bahrain Med Bull 2004;26(1):

Heterotopic gastric mucosa (HGM) in the small bowel is a rare anomally[1]. Approximately 30 cases of (HGM), located in the small bowel beyond the ligament of Treitzs and not associated with Meckel's diverticulum, have been reported[2]. Very few were reported in adult with intestinal obstruction in the absence of Meckel's diverticulum[3]. The clinical picture, usually, is that of acute intestinal obstruction , perforation of intestinal ulcer or intestinal bleeding and anemia[4]. We report on an adult with a single episode of small bowel intestinal obstruction due to heterotopic gastric mucosal polyp without Meckel 's diverticulum.

THE CASE

Twenty seven years old male was admitted to the casualty with a clinical picture of acute small bowel obstruction. He gave no history of previous attack of similar nature. Plain X-rays revealed features of small bowel obstruction. An emergency laparotomy was done and an ileo-ileocaecal intussusception was found, which was reduced manually. Enterectomy of a bowel segment forming the leading point was done. Pathological examination of the resected specimen revealed 2 x 2 cm polypoid mass that was not felt intra- operatively. The mass was found harboring an ectopic gastric mucosa with parietal and chief cells. In one area the glands were tubular and lined by columnar epithelium while in other areas there was tubulovillous congestion. The patient had uneventful post operative course and on follow-up there was no further complaints.

* Department of Surgery
** Dept of Pathology
Faculty of Medicine
University of Khartoum
Sudan

DISCUSSION

Intussusception is one of the most common causes of intestinal obstruction in infancy and childhood[5]. Most of the childhood Intussusception is idiopathic[6].

In adults Intussusception, however, an underlying pathology is found in over 90% of cases[7]. Among various underlying causes of intussusception that has been reported in the literature are lymph node[8], an inflammatory polyp[9], Leiomyoma[10], Peutz Jegher syndrome[11], infilteration of bowel wall in chronic lymphatic leukaemia[12] and metastatic testicular tumour[13].

Gastric heterotopia as a cause of Intussusception was reported in few cases[2,3,14-17]. The lesion can be congenital or acquired. The acquired form is secondary to inflammatory bowel disease[3]. Most of the patients are children. Only one case report of intussusception due to gastric heterotopia in adults was found and it was due to underlying intestinal tuberculosis[3].

The diagnosis of gastric heterotopia as a cause of intussusception is challenging. Bertin reported a child who had three laparotomies before the resection of the segment of the small bowel revealed the presence of normal function gastric mucosa[17].

Recently intra- operative endoscopy could reveal heterotopic gastric mucosa in a child who had several attacks of intestinal obstruction and when both physical examination and barium enema fail to make the diagnosis[14].

CONCLUSION

Our patient is unique that he had intussusception due to gastric heterotopia, which is not secondary to other pathology. In the absence of diagnostic facilities resection of small bowel segment in adult with intussusception is recommended.

REFERENCES

1. Galligan ML, Ulich T, Lewin KJ. Heterotopic gastric mucosa in the jejunum causing intussusception. Arch Pathol Lab Med 1983;107:335-6.
2. Turck D, Bonnevalle M, Gottrand F, et al. Intra-operative endoscopic diagnosis of heterotopic gastric mucosa in the ileum causing recurrent acute intussusception. J Pediatr Gastroenterol Nutr 1990;11:275-8.
3. Atik FA, Ricci M, DelGrand JC, et al. Obstruction of terminal ileum due to heterotopic gastric mucosa. Kev Assoc Med Bras 1998;44:340-3.
4. Lambert MP, Heller DS, Bethel C. Extensive gastric heterotopia of the small intestine resulting in massive gastro intestinal bleeding, bowel perforation, and death: report of a case and review of literature. Pediatr Dev Pathol 2000;3:277-8
5. Stringer MD, Pablot SM, Brazeton RJ. Pediatric intussuscetpion. Br J Surg 1992;79: 867-76.
6. Amir A, Hamza A. Intussusception in infants and children CMD thesis in surgery. University of Khartoum, 1998.

7. Huang WS, Changchien CS, Lu SN. Adult intussusception: A 12-year experience with emphasis on etiology and analysis of risk factors. Chang Gung Med J 2000;23:284-90.
8. Morgan DR, Mylankal K, Elbarghouli N, et al. Small bowel haemangioma with local lymph node involvement: presenting as intussusception. J Clin Pathol 2000;53:552-3.
9. Kuesterman SA, Saleels SF, Teplick SK. Jejunal intussusception caused by inflammatory fibroid polyp. Radiographics 1999;19:539-41.
10. Ueda Y, Tominaga M, Nishijima N, et al. Laparoscopy for adult intussusception caused by leiomyoma of the jejunum. J Clin Gastroenterol 1998;27:255-6.
11. Kilgus M, Rochlin MA, Largiader F. Intussusception of the small bowel due to Petez-Jeghers syndrome: a case report. Hepatogastroenterology 1998;45:545-5.
12. Handa H, Murakami H, Tamura J, et al. Intussusception as a complication of chronic lymphocytic leukaemia. J Med 1998;29:237-40.
13. Hofflander R, Beckes D, Kapre S, et al. A case of jejunal Intussusception with gastro intestinal bleeding caused by metastatic testicular germ cell cancer. Digestive Surgery 1999;16:439-40.
14. Cervetto JL, Carpareta E, Singer S, et al. Gastric polypoid heterotopy in the small intestine. Acta Gastroenterol Lantinoam 1987;8:131-3.
15. Erez L, Kovalivker M, Lew S, et al. Ectopic gastric mucosa in a polyp causing ileoileal intussusception: a case report of a three month old baby. Eur J Pediatr Surg 1991;1:118-20.
16. Tsubore M, Kozuka S, Taki T, et al. Heterotopic gastric mucosa in the small intestine: Acta Pathol Jpn 1984;34:1425-31.
17. Bertin P. Ileo-ileal intussusception over an islet of heterotopic gastric mucosa without Meckel's divereticulum. Clin Paediatr 1981;22:7-11.