A CASE OF CHRONIC INTUSSUSCEPTION CAUSED BY HEMANGIOMA OF THE CECUM

PEI-YAU LAN

Department of Pediatrics, Provincial Keelung Hospital*

Chronic intussusception is a rare disease in the childhood, while Holt\textsuperscript{1} stated that the incidence of chronic intussusception is three per cent of the whole intussusceptions in the childhood. Harada\textsuperscript{2} stated that chronic intussusception seems to be common in the young adults.

This paper reports on study of a case of chronic intussusception with hemangioma of the cecum.

CASE REPORT

An eight years old boy, native of Kwangtung.

Family history of this patient was nothing to be noted.

Past history of this patient was follows: He was born at term, delivery being normal. Measles, chicken-pox, pertussis and mumps were affected, the course of those diseases were smooth.

History of disease. In March '56 he had experienced severe abdominal pain without vomiting but subsided after medication. Since this episode the patient’s parents noticed a hen-egg-sized tumor in epigastrium of this patient. The size of the tumor had gradually enlarged, and he had suffered from occasional abdominal pain but no nausea and vomiting were detected. Appetite of this patient had gradually lost and became emaciated day by day.

He was admitted to the Provincial Keelung Hosp. Taiwan on 7-25'-'56 with a history of recurrent abdominal pain and an abdominal tumor of 4 months’ duration.

Physical examination on admission was found to be a poorly developed and nourished boy. The conjunctiva bulbi and palpebralis were not anemic, not icteric, the head, eye, nose and neck were normal. The thorax was symmetrical. The breathing sound was coarse. The heart examination was normal. The abdomen was distended especially in the epigastrium was present.

As Figure 1. a kidney-shaped tumor which was $11.5 \times 6.5$cm. in diameter. The upper margin was concaved, the lower one was convexed, the surface of the tumor was smooth, and the consistency was elastic firm. The tumor was well movable. There was no respiratory displacement. The liver and spleen were not palpable. No significant lymphadenopathy in the abdominal wall and inguinal region was palpated. No hemangioma of the skin was detected.

*Director: C.T. Kuo, M.D.
Laboratory findings:
1. Hemogram was normal.
2. Urine was normal.
3. Stool blackish hard, ascaris ova were found.
4. Mantoux-reaction was positive.
5. X-ray finding.
   a) Chest; no important change in the chest on 7-25'-'56.
   b) Simple abdominal film revealed suspicious shadow as the results of intussusception in the epigastrium on 7-25'-'56.
   c) Fluoroscopy and firm study of abdomen by barium meal showed a normal stomach. The passage of the barium was not disturbed. There were no tumor nor obstruction detected on 7-26'-'56.
   d) Fluoroscopy and film study of abdomen by barium enema showed a cupping in the transverse colon near the Flexura hepatica on 7-27'-'56.

Clinical course:
The patient was admitted on July 25,'56. On admission he complained of mild abdominal pain and an abdominal tumor. On the 2nd day, fluoroscopy and film study of the gastrointestinal tract under barium meal ware performed, the results were normal. There were no obstruction nor definite tumor shadow. Barium passed out after giving barium meal since the next day up to 2 days. On the 3rd day fluoroscopy and film study of G.I. tract under barium enema was performed, and detected the intussusception in the transverse colon. Then the patient was refered to the surgical ward for operation. On the following days his general condition was stationary. On the 12th hospital day he suffered from severe abdominal pain and bloody mucus stools but never vomited. So emergency operation was performed. The operative finding was as follows:
1. The type of intussusception was ileocolic type.
3. Chronic appendicitis.
4. Lymph node swelling of ileocecal region.
After operation his general condition got better and no more abdominal pain was detected, and his appetite was improved. He was discharged 2 weeks after operation with complete recovery.
Pathological finding of resected tumor mass was as follows:
Macroscopically, the wall of the intestine and appendix was hypertrophic. There was a hemangioma which was 2 cm. in diameter in the inner side of the cecum. The appendix took the traverse position to the cecum.
face of the cecum, we found an uneven tumor mass near the Banbrin’s area (?) and its overlying mucous membrane was eroded, the diameter of the tumor was about 3 cm. There were marked edema and hypertrophy in the valves and mucous membrane.

Microscopically, there was diffuse hemangioma invasion of the cecum especially in the mucosa, submucosa and muscle layers. The surface of cecum was eroded and covered with a layer of necrotic substance. Chronic inflammatory finding was markedly. There are many hemosiderin in or out of the cells of the surface of the tumor. The appendix was intact except the hypertrophy of the wall.

The most interesting finding in the abnormality was vascular distribution of the mesocolon just above the appendix, where we found thick walled vessel or capillaries. This finding was same as the tumor. By serial sections we found a direct communication between the hematoma which was capillary type in the wall of cecum and mesocolon. It seemed to be this child has malformation of tissue development in the local vessels, that changed to neoplastic nature.

DISCUSSION

Chronic intussusception in childhood is rare. Nelson stated that chronic intussusception is apt to occur in infants during a severe diarrheal disturbance or in older children, when intussusception is a rare entity. The obstruction is not complete and circulation in the mesentery is not entirely shut off. Pain and vomiting may not be severe and there may not be bloody mucous movements. The general condition may continue to be good or there may be gradually loss of strength, there is always the danger of sudden development of strangulation.

Fanconi also stated that chronic intussusception in childhood is very rare. The characteristic features is recurrent attack of abdominal pain in the midportion of the abdomen, but sometimes the location is difficult to determine.

This case also had recurrent attack of abdominal pain in the midportion of the abdomen and an abdominal tumor in the mesogastrium, but had neither bloody mucous movements nor vomiting except on the operation day. The onset of intussusception in this case is unclear, but was suspected to develop since March ’56 when he was attacked by severe abdominal pain. The pain was subsided after treatment, but mild abdominal pain and anoxia had persisted and Aug. 5th’56, the patient suffered from complete intussusception which needs emergency operation.

There are many etiologic factors of chronic intussusception reported. In children, Yoshida reported a case due to the polyps of cecum. Yoshitake reported a case due to polyposis in the upper portion of the intestine, but many cases could not found the causes. It is possible that primary lesion such as tumor of intestine, mesenterium commune, cecum mobile puls secondary factors such as change of formula, diarrhea, ascariasis etc may play a role.

The etiology of chronic intussusception in this case is due to Hemangioma of cecum and mesenterium commune. The hemangioma of intestine is very rare. According to Pearce’s report, among 300 cases of benign tumor of intestine only one case of lymphoangioma was detected. Rickman has reported a case of he-
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Chronic intussusception with hemangioma. Weddle\(^3\) has reported a case of hemangioma with intussusception. The hemangioma of the cecum with chronic intussusception and mesenterium is very rare. There is no report about hemangioma of the cecum with chronic intussusception in our recent literature. The site of chronic intussusception is common in the ileocecal region. Harada\(^2\) reported 6 cases of chronic intussusception in childhood, among these 3 cases was ileocecal type. Generally much proved in the ileocecal region. Our case is the ileocolic type.

As regard to duration, Yoshitake\(^5\) reported a case of 9 months durated, Harada\(^2\) reported a case of 10 days durated, 2 cases of 15 days durated, a case of 20 days durated, a case of 30 days durated and a case of 37 days durated. The duration of intussusception in this case is about \(4\frac{1}{2}\) months, so this case is a moderate durated case.

**SUMMARY**

1) I reported a case of eight years old boy who suffered from the hemangioma of the cecum with chronic intussusception and mesenterium commune.  
2) The duration of the intussusception is suspected to be \(4\frac{1}{2}\) months.  
3) There were only anorexia and mild abdominal pain during the course of disease, but no vomiting and bloody mucous stool prior to got complete intussusception.  
4) Hemangioma of the cecum with chronic intussusception and mesenterium commune is very rare and a review of literature was presented briefly.  
5) The pathological study revealed that, malformation of tissue development of the vessels in the cecum, then changed to neoplastic growth.  

(The summary of this case was also reported in 19th paediatric science lecture meeting)

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**REFERENCES**