Clinical Image

A Case of Intussusception Caused by Diffuse Large B-Cell Lymphoma in Ileocecal Region

Shuaiyang Zhou[1], Wen Zhang[1], JianzhongWu[2], Zhi Zhang[2], Zhenguo Qiao[1]

[1]Department of Gastroenterology, Suzhou Ninth People's Hospital, Affiliated Wujiang Hospital of Nantong University, Suzhou, China

[2]Department of General Surgery, Suzhou Ninth People's Hospital, Affiliated Wujiang Hospital of Nantong University, Suzhou, China

Address for Correspondence: Zhenguo Qiao, Department of Gastroenterology, Suzhou Ninth People's Hospital, Affiliated Wujiang Hospital of Nantong University, Suzhou, China
qiaozhenguo@ntu.edu.cn or qzg66666666@163.com

DOI: 10.4274/balkanmedj.galenos.2020.2020.4.223

Received: 29 April 2020
Accepted: 08 September 2020

Cite this article as: Zhou S, Zhang W, Zhang Z, Qiao Z. A Case of Intussusception Caused by Diffuse Large B-Cell Lymphoma in Ileocecal Region. Balkan Med J

A 28-year-old female patient was admitted to our hospital due to "intermittent blood defecation for more than ten days". Physical examination only showed the appearance of anemia. Abdominal CT showed soft tissue shadow in ileocecum along withmultiple small lymph nodes in the ileocecal part (Figure 1A). Then the patient underwent laparoscopic assisted radical right hemicolectomy. Intraoperative investigation revealed that the lesion was located in the ileocecal region, and the terminal ileum was inserted into the ascending colon, the size of which was about 4*3cm. There was no enlarged lymph node in the mesenteric root, so ileocecal carcinoma was considered (Figure 1B, 1C). Postoperative pathology showed diffuse infiltration by atypical lymphoid cells (Figure 1D). Highly atypical tumor cells characterized by large volume, sparse cytoplasm, irregular nuclei, and coarse chromatin could be seen under a high-power field (Figure 1E). Immunopathology: (tumor tissue) CD10 (+), CD79a (+) (Figure 1F), CD20 (+) (Figure 1G), bcl-6 (+), Ki-67 about 90% (+) (Figure 1H), C-MYC about 3% (+); CK, CD23, CD3, MUM-1, bcl-2, CD5, CyclinD1, EBV (-). The patient was then transferred to hematology department for further treatment.

Intussusception is an obstructive disease caused by the insertion of a segment of bowel into a similar bowel cavity. Most of intestinal intussusception has obvious mechanical causes, such as intestinal polyps, intestinal tumors, intestinal duplication and so on. As a kind of non-Hodgkin's lymphoma, diffuse large B-cell lymphoma affects the gastrointestinal tract mainly in the ileum. However, there are few reports of intussusception caused by diffuse large B-cell lymphoma in the ileocecum. Adult

intussusception is rare, accounting for only about 1% of intestinal obstruction, and the small intestine is more than the colon. More than half adult intussusception is attributed to intestinal malignant tumors. Studies have found that the most common cause of ileocolon intussusception is primary adenocarcinoma, and other rare causes such as lymphoma are rarely reported(1-3).CT is the first choice to diagnose the disease.A variety of CT findings such as typical concentric circle sign, kidney shape, double tube sign and so on are helpful for our diagnosis. Once intussusception is diagnosed, intervention should be carried out as soon as possible to avoid intestinal necrosis. Adult intussusception often starts more rapidly, and is often secondary to tumors. Surgical treatment is usually recommended when the diagnosis is clear.

Diffuse large B-cell lymphoma is a common type of non Hodgkin's lymphoma, accounting for almost 1/3 of all cases. More than 50% of patients have extranodal lesions when diagnosed. Most common extranodal lesions are gastrointestinal tract and bone marrow. This time, the first symptom of our patient is intestinal symptoms. In addition to the surgical treatment of intussusception, treatment of primary disease can not be ignored (4). The treatment of diffuse large B-cell lymphoid has gradually entered the mode of targeted drug combined chemotherapy. However, we need continuously adjust the corresponding treatment plan according to the specific condition to improve the survival rate.

Informed consent: The patient provided written informed consent for publication of the data in this study.

REFERENCES

1.Eisen LK, Cunningham JD, Aufses AH. Intussusception in adults:institutional review. J Am Coll Surg 1999; 188:390-5.

2.Hong KD, Kim J, Ji W, Wexner SD. Adult intussusception: a systematic review and meta-analysis. Tech Coloproctol 2019; 23:315-24.

3.Azar T, Berger DL. Adult intussusception. Ann Surg 1997; 226:134-8.

4.Kristin E Hunt, Kaaren K Reichard. Diffuse large B-cell lymphoma. Arch PatholLab Med 2008; 132:118-24.

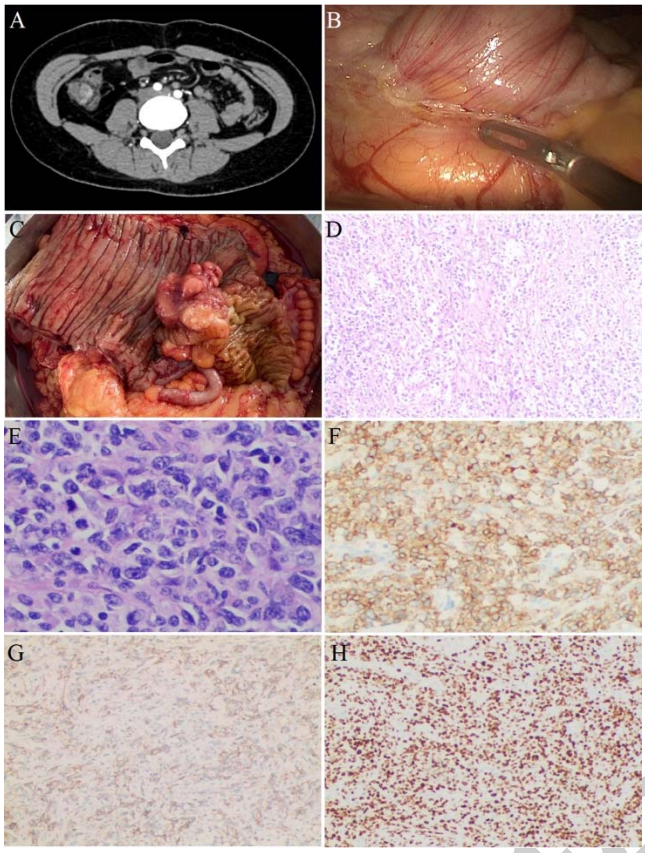

FIG. 1 (A) Computed tomography scan of abdomen suggests that the ileocecal end is nested in the colon, with a local "vortex sign". (B, C) The lesion is located in the ileocecal region, the size of which was about 4*3cm. (D) Postoperative pathology shows diffuse infiltration by lymphoid cells (x100). (E) Highly atypical tumor cells can be seen under a high-power field (x400). (F) Positive staining for CD79a in the tumor cells (immunohistochemistry x200). (G)Positive staining for CD20 in the tumor cells (immunohistochemistry x100). (H) High proliferative index with Ki-67 (immunohistochemistry x 100).