

Colonic NK/T-cell lymphoma mimicking Crohn's disease



Fig. 1 Computed tomographic scan of the abdomen showed asymmetric bowel wall thickening at the ascending colon, the ileocecal valve (*), and the terminal ileum (arrow).

A 29-year-old man presented at another institution with bloody diarrhea. Colonoscopy showed multiple discrete ulcers in the ascending colon. Histological study revealed moderate chronic inflammation with negative stain for acid-fast bacilli. A computed tomographic scan showed asymmetrical thickening of the ascending colonic wall with no lymphadenopathy (Fig. 1). After a month's trial of anti-tuberculosis medication, the diarrhea still persisted. Subsequent colonoscopy showed more extensive colonic ulcers from the sigmoid to the ascending colon (Fig. 2). The second histological study

revealed more severe inflammation. At this point, Crohn's disease was suspected, and the patient's diarrhea partially improved after prednisolone treatment (40 mg/day). However, a month later, he developed sudden abdominal pain. He underwent an emergency right hemicolectomy as treatment for spontaneous ileal perforation (Fig. 3). Histological study demonstrated more severe ulcers with granuloma and reactive nodes. The patient was kept on prednisolone (40 mg/day) and azathioprine (2 mg/kg per day). Two weeks later, the patient was referred to our hospital with more bloody diar-

rhea, fever, weight loss, and new-onset epistaxis. Physical examination showed a right nasopharyngeal mass. Serum LDH level was elevated at 552 U/L. Histological study of a specimen from the nasopharyngeal mass demonstrated small lymphoid cells with immunohistochemical staining reported as positive for CD3, CD56, and EBER, and negative for CD20 (Fig. 4). Similar to the nasopharyngeal mass, additional staining of the previous colonic specimen found a positive result for CD3, CD56, and EBER in a small number of small lymphoid cells (Fig. 5). Colonic NK/T-cell lymphoma was now diagnosed. Sadly, the patient died from an invasive fungal infection before chemotherapy could be given.

Colonic NK/T-cell lymphoma is a rare and aggressive disease [1]. Due to the non-specific clinical and endoscopic findings, its diagnosis is very difficult. Despite clinical signs suggesting lymphoma, histological analysis without special staining did not allow a confirmed diagnosis in some cases [2]. One fifth of patients with colonic NK/T-cell lymphoma were misdiagnosed as having Crohn's disease and intestinal tuberculosis [3]. Severe ileocolonic ulcers with spontaneous perforation should prompt consideration of the possibility of a non-Crohn diagnosis such as NK/T-cell lymphoma.

Endoscopy_UCTN_Code_CCL_1AD_2AC

Competing interests: None

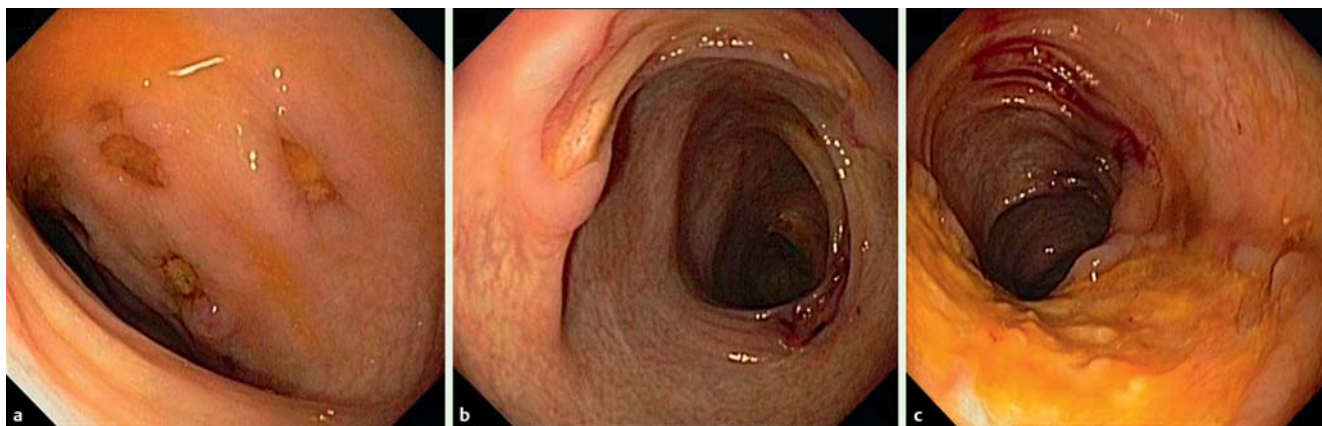


Fig. 2 Colonoscopy showed: **a** multiple discrete deep round ulcers at the sigmoid colon; **b, c** large well-defined colonic ulcers with intervening normal colonic mucosa at the transverse colon and the ascending colon.

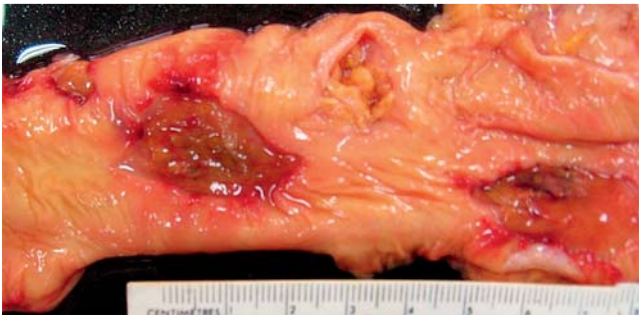


Fig. 3 Colonic specimen shows multiple large ulcers with evidence of recent hemorrhage.

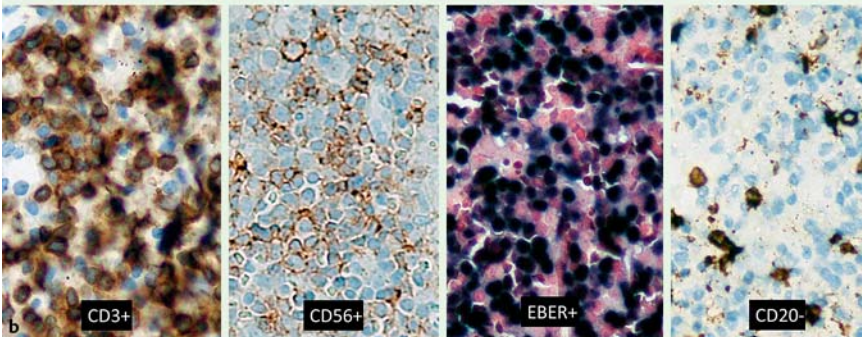
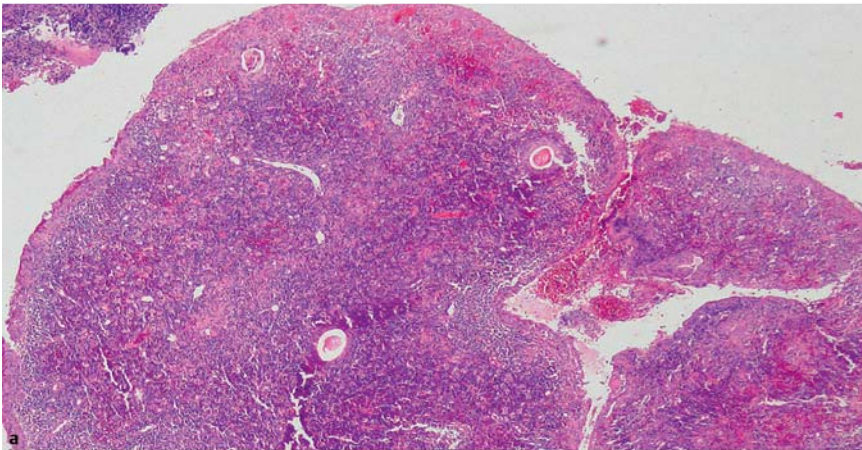


Fig. 4 **a** Histological section of the nasopharyngeal specimen shows a mass containing small lymphoproliferative cells. **b** Immunohistochemical study was positive for CD3, CD56, and EBER and negative for CD20.

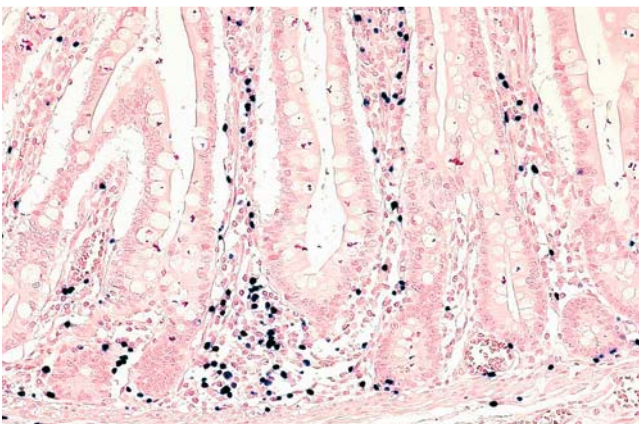


Fig. 5 Immunohistochemical staining of the colonic specimen was positive for EBER cells among other inflammatory cells that had infiltrated the lamina propria.

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References

- 1 Jiang M, Chen X, Yi Z et al. Prognostic characteristics of gastrointestinal tract NK/T-cell lymphoma: an analysis of 47 patients in China. *J Clin Gastroenterol* 2013; 47: e74–79
- 2 Zheng S, Xu H, Ouyang Q et al. A case of rapid growing colonic NK/T cell lymphoma complicated by Crohn's disease. *Chin J Cancer Res* 2013; 25: 119–123
- 3 Mahuad CV, Bilbao ER, Garate GM et al. Primary NK/T cell lymphoma nasal type of the colon. *Rare Tumors* 2013; 5: e9

Bibliography

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