

Usefulness of confocal laser endomicroscopy for the diagnosis of ileocecal lymphoma

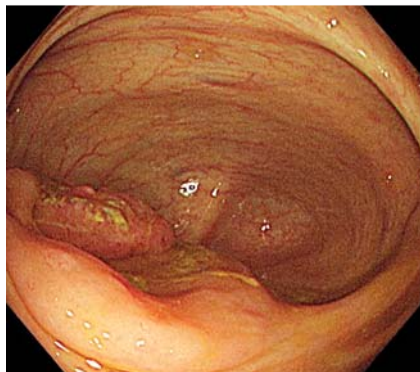


Fig. 1 Conventional endoscopy image. A tumor was identified on the ileocecal valve.

It is often difficult to diagnose malignant lymphoma in the gastrointestinal tract using endoscopy. We report the case of ileocecal lymphoma diagnosed by probe-based confocal laser endomicroscopy (pCLE) (ColoFlex UHD, Cellvizio; Mauna Kea Technologies, Paris, France).

The patient was a 52-year-old man who had a positive fecal occult blood test. He underwent colonoscopy and a tumor was found on the ileocecal valve (Fig. 1). A malignant tumor was suspected and a biopsy was taken. The lesion revealed high lymphocyte infiltration, but malignant lymphoma could not be diagnosed.

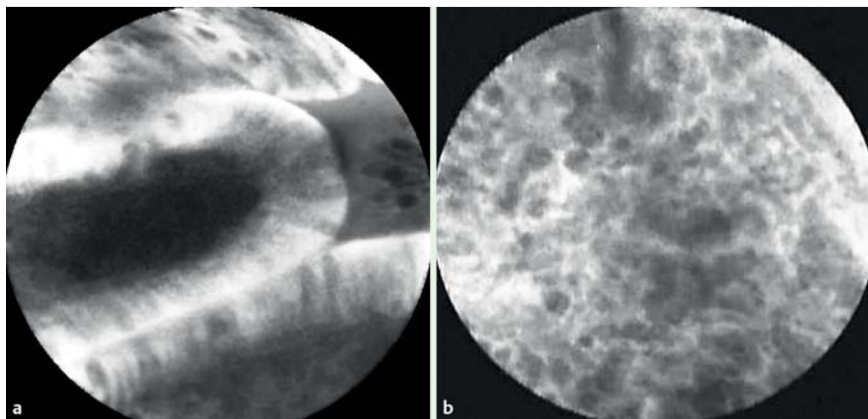


Fig. 2 Probe-based confocal laser endomicroscopy (pCLE) images. **a** pCLE showed uniformly villiform architecture on normal intestinal mucosa. **b** pCLE showed numerous small cells with destruction of normal mucosal structure on the tumor.

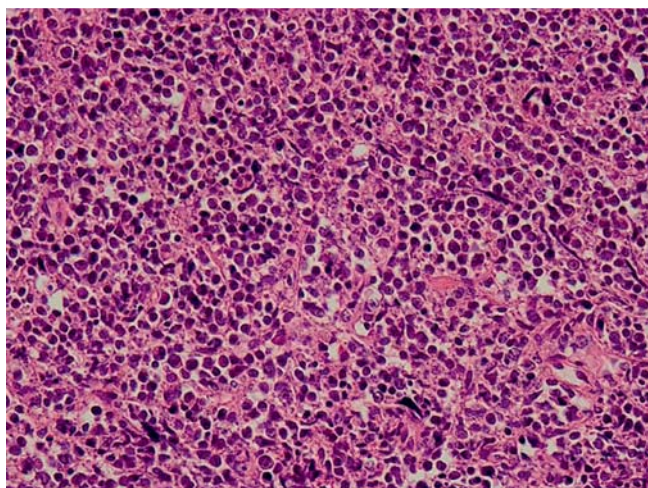


Fig. 3 Histological findings on the polypectomy specimen. Hyperplasia of moderate-to-large sized atypical lymphocytes was seen. The findings were similar to those from probe-based confocal laser endomicroscopy. (Stained with hematoxylin and eosin, original magnification, $\times 400$)

Further multiple biopsies were taken, but a diagnosis could still not be reached. Subsequently, fluorescein-dripping pCLE [1] was performed.

Within the lesion, pCLE identified numerous small cells with destruction of normal mucosal structure, which was similar to the image of malignant lymphoma that we have observed previously (Fig. 2, Video 1) [2]. Polypectomy was performed, and histopathological assessment showed hyperplasia of moderate-to-large sized atypical lymphocytes (Fig. 3). The cells were immunohistochemically positive for CD20, CD79a, bcl-2, and bcl-6, and negative for CD3, CD5, CD10, and cyclin D1, which resulted in the pathological diagnosis of diffuse large cell lymphoma. The patient was diagnosed as stage I diffuse large cell lymphoma. The patient subsequently received chemotherapy. As the tumor cell size in the histopathological assessment was close to that of the small cells in the CLE image, we believe that what we observed using pCLE were the lymphoma cells.

Endoscopy_UCTN_Code_CCL_1AC_2AH

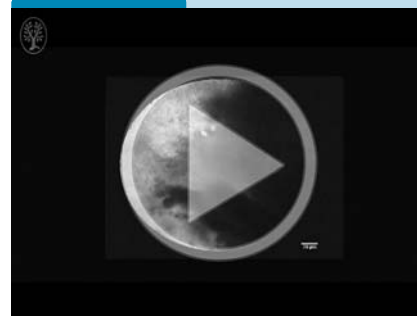
Competing interests: None

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Video 1



Probe-based confocal laser endomicroscopy showed numerous small cells, believed to be the lymphoma cells.

References

- 1 Nonaka K, Ohata K, Nakai Y. Probe-based confocal laser endomicroscopy of the duodenal mucosa with fluorescein dispersion. *Dig Endosc* 2014; 26: 604
- 2 Nonaka K, Ohata K, Ban S. In vivo imaging of duodenal follicular lymphoma with confocal laser endomicroscopy. *Endoscopy* 2015; 47 (Suppl. 01): E16–17

Bibliography

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