

## T-Cell lymphomas presenting as multiple colon ulcers and panniculitis: A case report

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### Abstract

**Introduction:** Primary colon T-cell lymphoma is an uncommon entity that may mimic Inflammatory Bowel Disease (IBD). The differential diagnosis of gastrointestinal malignant lymphoma must be considered when clinically diagnosed IBD is refractory to the medical treatment clinical behavior and the appearance of more symptoms. Subcutaneous panniculitis-like T-cell lymphoma (SPTCL) is also a rare cytotoxic T-cell lymphoma. **Case presentation:** The current study presents a rare case of primary colon T-cell lymphoma in a 31-year-old female with marked recent weight loss, fever, watery diarrhea and panniculitis of forearm and thigh, who received a laboratory checkup and endoscopic workup for colon biopsy. The initial pathological report was consistent with mucosal inflammation and benign colon ulcers. A biopsy of the panniculitis of forearm and thigh suspected T-cell lymphoma. Additional immunohistochemical stains were used accordingly, which showed positive results for CD3, CD4, CD8 antibodies confirming the diagnosis of lymphoma. That led to a review of colonoscopy done approximately 2 weeks after the previous examination. However, all colon ulcers surprisingly disappeared that led to diagnosis “wax and wane” ulcers. Then this patient was treated with CHOP chemotherapy and had good response. **Conclusion:** The endoscopic diagnosis of ulcerative colon T-cell lymphoma is frequently confused with inflammatory conditions of the large bowel such as IBD, and tuberculosis colitis. This case emphasizes the importance role of detail physical examination and endoscopy with biopsy in diagnosing rare diseases. Lymphoma should be suspected in colorectal lesions with systemic symptoms. Panniculitis can be also an indicator for a systemic diseases such as lymphoma.

**Keywords:** Colon ulcers, panniculitis-like T-cell lymphoma.

### I. Background

During the breakthrough period of researches on IBD, endoscopic images of colonic ulcers are often considered in the context of Ulcerative Colitis (UC) or Crohn's disease (CD);

however, other causes should not be misdiagnosed<sup>1</sup>. Primary gastrointestinal T-cell lymphoma is a less common cause that presenting with non-specific endoscopic findings<sup>2</sup>. The differential diagnosis of malignant lymphoma must be considered when clinically diagnosed IBD is refractory to the medical treatment and the appearance of more clinical symptoms. Subcutaneous panniculitis-like T-cell lymphoma (SPTCL) is characterized by multiple

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subcutaneous nodules or plaques that occur in the extremities. The histopathological findings and immunophenotype of SPTCL are specific and can help to confirm the diagnosis<sup>3</sup>. Therefore we herein report such a rare case involving a woman with a multiple colon ulcers and panniculitis lesion.

## 2. Case report

A 31-year-old woman presented with recurrent episodes of watery diarrhea and fever. These symptoms had persisted for approximately three years. The diarrhea recured intermittently, loose stools 5-6 times per day, without abdominal pain. Likewise, she experienced shaken fever with temperatures ranging from 38 to 39°C, and weight loss of 5 kg per year. She

denied bloody stool, nausea, vomiting, and sweating. There were no significant past medical history are recorded. At a previous hospital, a colonoscopy had revealed findings of colonic inflammation and shallow ulcers, leading to the initial diagnosis of Crohn's disease (CD). Therefore, she had received oral Mesalazine (2 grams daily) plus oral Metronidazol (2 grams daily). Her symptoms of fever improved but subsequently recurred. She reported new recurrent painless, purple nodes on her forearms and thighs. Several oval-sized lesion began to appear papules and swollen without pruritus, pain, and other discomfort, and persisted and expanded in the subcutaneous tissue. Physical examination suggested *PANICULITIS* (figure 1).

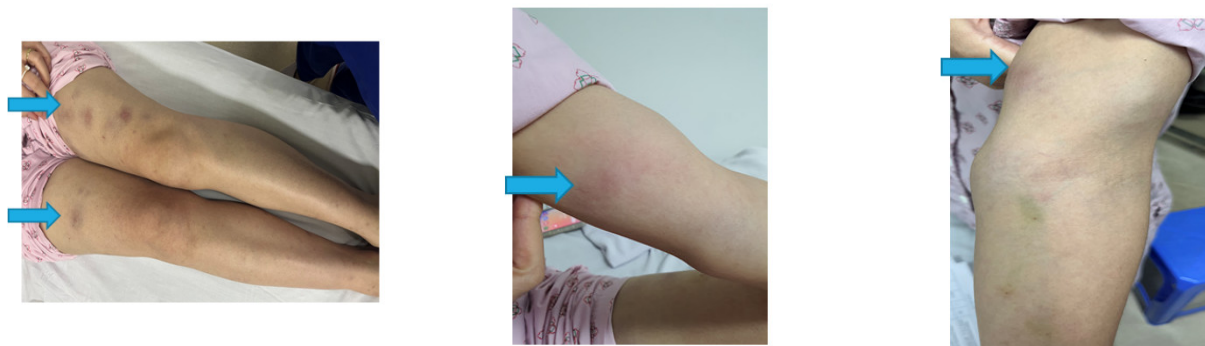


Figure 1: Paniculitis show painless, purple nodes on forearms and thighs (blue arrow)

Laboratory tests showed almost normal except the elevation of CRP, suggesting an underlying infection condition. For detail, serum CBC showed White blood cell of 6.99 G/l, Neutrophils cyte of 70.5%, Lymphocyte of 18.9%, Red blood cell of 4.38 T/l, Hemoglobin of 121 g/l, Hematocrite of 0.375 l/l, MCV of 85.6 fl, MCH 27.6 pg, MCHC of 323 g/l, PLT 220 G/l, ESR 61 mm. Serum CMP showed Glucose of 5.4 mmol/l, eGFR of 120 ml/min/1.73m<sup>2</sup>, AST of 50 U/l, ALT of 24 U/l, Bilirubin total of 10.6 umol/l, Protein of 91.6 g/l, Albumin of 40.7 g/l, Sodium of 132.9 mmol/l, Potassium of 3.7 mmol/l, Chloride 101.1 mmol/l, CRP of 46.5 mg/l.

Then colonoscopy was performed and showed multiple skip ulcers with exudative lesions and edematous margins, ranging in size from 0.3 to 1 cm, observed along the colon with normal-appearing basal mucosa (figure 2). The histopathological findings revealed chronic colitis. The colonic mucosal epithelium displayed glandular structures lined by cells with small, uniform nuclei and well-preserved polarity. The lamina propria showed infiltration by chronic inflammatory cells, including lymphocytes and neutrophils (figure 3).

We did further work-up but there are no specific finding. Colonic PCR tests for Tuberculosis, VZV, CMV, EBV were negative.

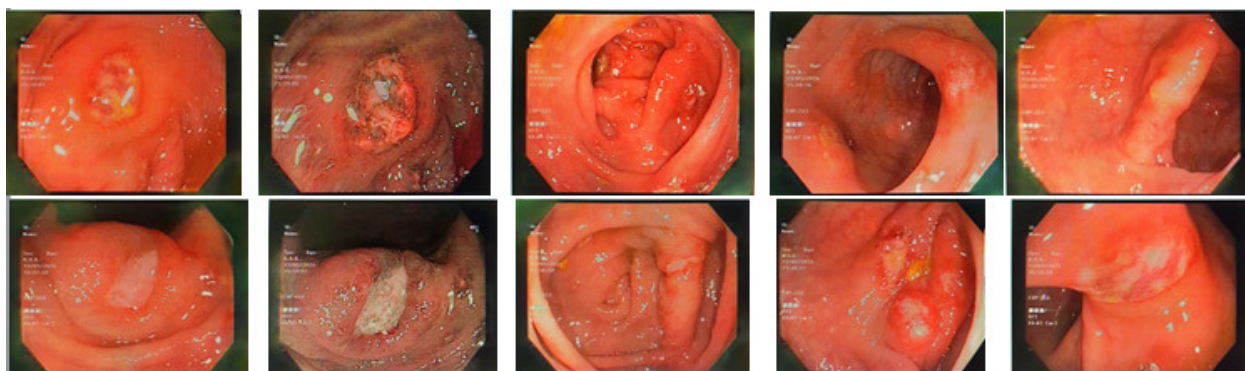


Figure 2: multiple ulcers along the colon

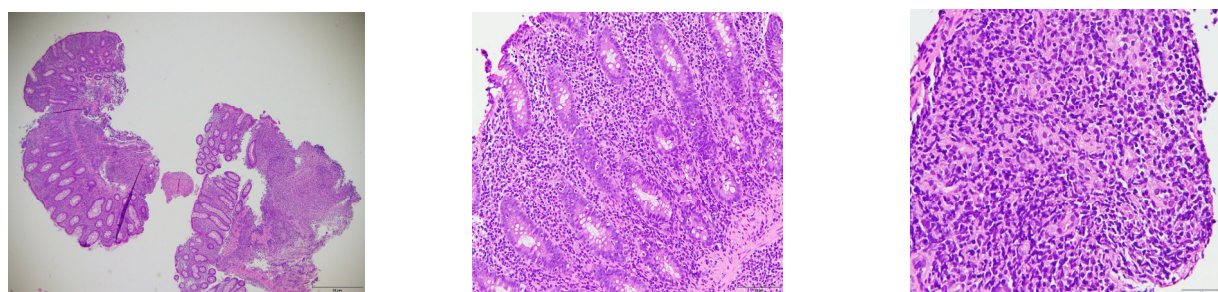


Figure 3: Histopathology showed chronic colitis with dense infiltration of lymphocytes and plasma cells

The colonoscopy followed-up 2 weeks later showed that colon ulcers became less in number and size without specific treatment. Therefore it suggested the image of “wax and wane” ulcers (figure 4)

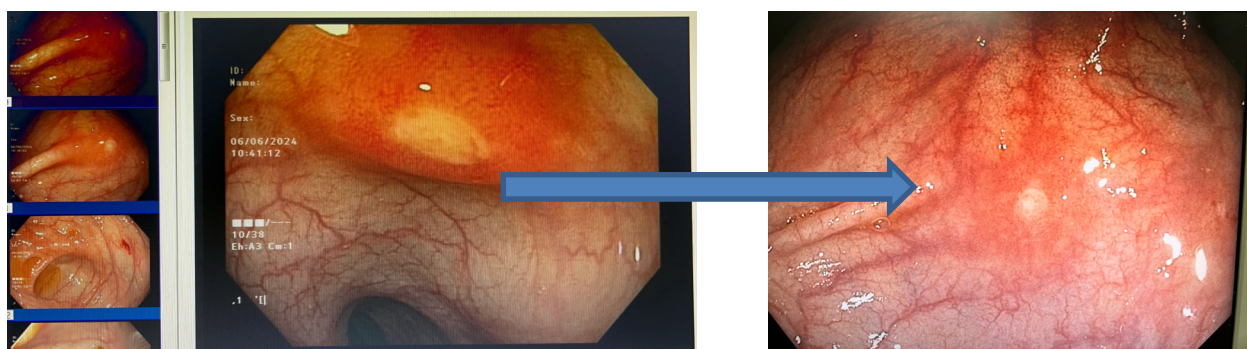


Figure 4: Colonoscopy showed the less size colon ulcers (blue arrow)

Besides, the “panniculitis” biopsy was performed and the histopathology showed a dense infiltration of lymphocytes and plasma cells, with scattered large cells displaying prominent nucleoli and numerous degenerated

and necrotic cells that suspected the diagnosis as lymphoma. To confirm the diagnosis, the immunohistochemistry show some positive biomarkers such as CD3, CD4, CD8, and some negative biomarkers such as CD20, CD30, and CD56 (figure 5).

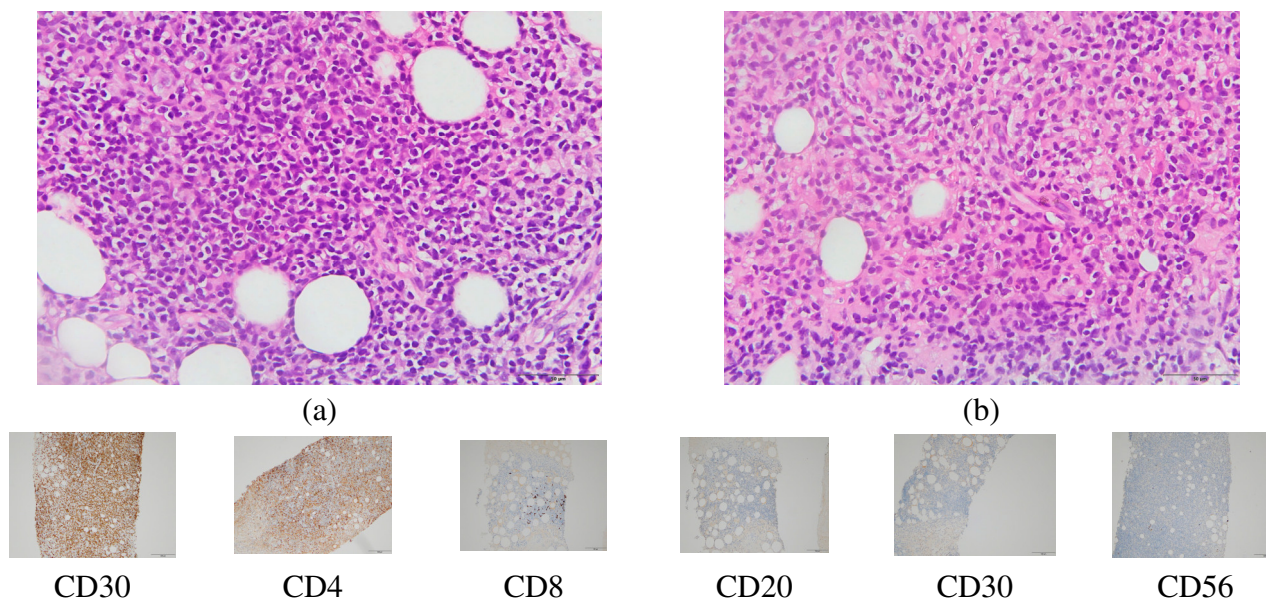


Figure 5: Pathology and immunohistochemistry of skin lesion that lead to diagnosis Lymphoma

The specimen from the colonoscopy biopsy was reviewed again accordingly, and further immunohistochemical studies showed the similarity to those observed in the skin lesions. Therefore, the final diagnosis was T-Cell non-Hodgkin lymphoma stage IVB, that included lesions in skin and colon. This patient had treatment with CHOPE (etoposide, prednisone, vincristine, cyclophosphamide, and doxorubicin). After that, her symptoms included diarrhea and fever improved after the first cycle of the chemotherapy. Moreover, the skin lesions were smaller and nearly disappeared after four months.

### 3. Discussion

Colorectal ulcers were a clinical common symptom of variety causes that including: infections such as tuberculosis, CMV, Shigella, Salmonella, Entamoeba histolytica; ischemic colitis, drug-induced colitis, radiation colitis, eosinophilic colitis, IBD, malignancy or colorectal secondary metastatic lesions<sup>4</sup>.

Panniculitis were inflammation of the subcutaneous fat that can be caused by infection such as bacterial, mycobacterial, fungal,

protozoal, or viral infections. It can be caused by trauma, deposition, enzymatic destruction, malignancy or inflammatory disorder, IBD. The features of subcutaneous panniculitis lymphoma included multiple subcutaneous plaques and nodules that have overlying erythema and painless with the size ranged from 0.5 to 2.0 cm<sup>3</sup>.

This patient had three symptoms included recurrent colorectal ulcers, shaked fever and panniculitis that lead to some diagnosis such as malignancy, IBD or Tuberculosis. Spontaneous healing wax-and-wane clinical course could lead to delayed diagnosis. The histopathology and immunohistopathology of colon ulcers and skin panniculitis lesions confirmed the diagnosis Lymphoma.

Gastrointestinal tract was the most common extranodal site involved by lymphoma, approximately around 5% to 20%. Gastrointestinal lymphoma was usually secondary to the widespread nodal diseases. Primary gastrointestinal lymphoma is an uncommon entity and primary colon lymphoma is even rarer. Location of gastrointestinal lymphoma was mostly in the stomach (60-70%), small intestine (20-30%), and rarely in colorectum, (5

to 10%). The gastrointestinal manifestation in lymphoma could include abdominal pain, weight loss, fever, abdominal mass, bloody stool, nausea, vomiting, altered bowel habits or obstruction. The colonic lymphoma lesions in endoscopy was relatively diverse, including polypoid type, ulcerative type, and mixed type. The majority of enteropathy-associated T-cell lymphomas present predominantly as ulcers or strictures in the endoscopic examinations, while primary B-cell lymphomas commonly present as exophytic lesions<sup>2,4,5</sup>.

Our study aims to emphasize the difficulty in differentiating this ulcerative form of colon T-cell lymphoma from Crohn's Disease which is a chronic inflammatory disease of the intestines with ulcer and fistula formations based on endoscopic observations alone and a single biopsy. Like Inflammation Bowel Diseases, T-cell lymphoma may be characterized by the presence of multiple colon ulcers. Typically, the histological composition of T-cell lymphoma is made of medium to large atypical cells located in the base of the ulcer with extension to the muscle layer and the adjacent mucosa. However, it is common that biopsy specimens show only mixed inflammatory changes where the lymphoma cells are hard to be identified. The differential diagnosis of malignant lymphoma must be considered when clinically diagnosed CD is refractory to the medical treatment or when its clinical behavior becomes aggressive. In this case, the symptom panniculitis play an important role in diagnosing Lymphoma. Subcutaneous panniculitis-like T-cell lymphoma (SPTCL) is characterized by multiple subcutaneous nodules or plaques that occur in the extremities, and it has a poor prognosis if accompanied by hemophagocytic syndrome. The histopathological findings and immunophenotype of SPTCL are specific and can help to confirm the diagnosis<sup>3,6,7</sup>.

#### 4. Conclusion

The endoscopic diagnosis of ulcerative colon T-cell lymphoma is frequently confused with

inflammatory conditions of the large bowel such as IBD, and tuberculosis colitis. This case emphasizes the importance role of detail physical examination and endoscopy with biopsy in diagnosing rare diseases. Lymphoma should be suspected in colorectal lesions with systemic symptoms. Panniculitis can be also an indicator for a systemic diseases such as Lymphoma.

#### References

1. Spiceland CM, Lodhia N. Endoscopy in inflammatory bowel disease: Role in diagnosis, management, and treatment. *World J Gastroenterol*. 2018;24(35):4014-4020. doi:10.3748/wjg.v24.i35.4014
2. Ghimire P, Wu GY, Zhu L. Primary gastrointestinal lymphoma. *World J Gastroenterol WJG*. 2011;17(6):697-707. doi:10.3748/wjg.v17.i6.697
3. The pathophysiology and current treatments for the subcutaneous panniculitis-like T cell lymphoma: An updated review - Lin - 2023 - Asia-Pacific Journal of Clinical Oncology - Wiley Online Library. Accessed May 7, 2025. <https://onlinelibrary.wiley.com/doi/10.1111/ajco.13787>
4. Quayle FJ, Lowney JK. Colorectal Lymphoma. *Clin Colon Rectal Surg*. 2006;19(2):49-53. doi:10.1055/s-2006-942344
5. Khan A, Ahmed M, Khan HM, Andrawes S, Deeb L. Primary Non-Hodgkin Lymphoma of the Colon: A Rare Gastrointestinal Malignancy: 1030. *Off J Am Coll Gastroenterol ACG*. 2015;110:S446.
6. Musick SR, Lynch DT. Subcutaneous Panniculitis-Like T-cell Lymphoma. In: *StatPearls*. StatPearls Publishing; 2025. Accessed May 7, 2025. <http://www.ncbi.nlm.nih.gov/books/NBK538517/>
7. Wu PH, Chu KE, Lin YM, Huang SH, Wu CC. T-Cell Lymphomas Presenting as Colon Ulcers and Eosinophilia. *Case Rep Gastroenterol*. 2015;9(2):246-252. doi:10.1159/000437294