

Interesting Images

# Intussusception in Cronkhite–Canada Syndrome

Li Ma <sup>1</sup> , Ji Li <sup>2</sup>, Xiaoyin Bai <sup>2</sup>  and Qingli Zhu <sup>1,\*</sup> 

<sup>1</sup> Department of Ultrasound, Peking Union Medical College Hospital, Beijing 100730, China; litangpai@163.com

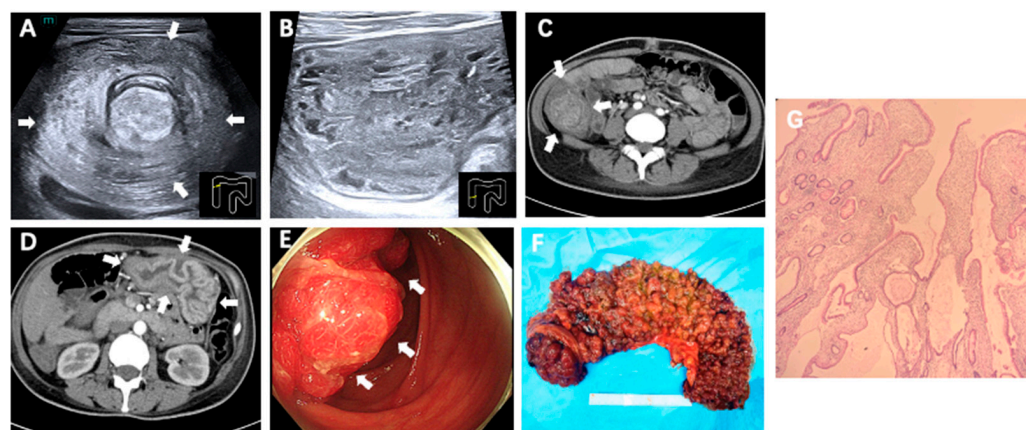
<sup>2</sup> Department of Gastroenterology, Peking Union Medical College Hospital, Beijing 100730, China; lij0235@pumch.cn (J.L.); baixiaoyin@pumch.cn (X.B.)

\* Correspondence: zqlpumch@126.com

## Abstract

Cronkhite–Canada syndrome is a rare, non-hereditary polyposis syndrome characterized by non-specific gastrointestinal symptoms accompanied by alopecia, cutaneous hyperpigmentation, and nail dystrophy. Characteristic endoscopic findings are diffuse sessile polypoid lesions with edematous mucosa. We report a case of a 44-year-old woman in whom intestinal ultrasound and CT revealed diffuse mucosal thickening and an ileocecal intussusception—findings that may not be pathognomonic but are highly unusual in adults. These imaging features served as critical red flags that directed the clinical suspicion toward Cronkhite–Canada syndrome and prompted timely endoscopic confirmation.

**Keywords:** Cronkhite–Canada syndrome; intussusception; cross-sectional imaging



**Figure 1.** A 44-year-old woman was admitted to our hospital due to continuous abdominal discomfort and diarrhea for over one year. The patient also complained of hypogeusia, alopecia, nail deformation, and palm hyperpigmentation. The patient was given a short course of oral corticosteroids 10 months ago, and her symptoms have since been partially relieved. Main laboratory test results: Body Mass Index, 21.1 kg/m<sup>2</sup>; white-blood-cell count,  $8.27 \times 10^9$ /L; hemoglobin, 108 g/L; albumin, 2.3 g/dL; C-reactive protein, 9.44 mg/L; and mild urine protein, (1+). Intestinal ultrasound revealed the concentric sign, indicating the intussusception of the terminal ileum into the ascending colon ((A), white arrows), and prominent mucosal thickening with small cystic spaces throughout the gastrointestinal tract, most notably in the ascending colon ((B), white arrows). Computed tomography (CT) also presented diffuse mucosal thickening and bowel-within-bowel configuration in the ileocecal region ((C), white arrows) and coarse mucosal folds of the stomach ((D), white arrows). Upper and lower endoscopy showed diffuse endoscopic polyposis extending from the stomach to the colon, most notably in the ascending colon



Academic Editor: Anastasios Koulaouzidis

Received: 2 June 2026

Revised: 23 July 2026

Accepted: 23 July 2026

Published: 31 July 2026

**Copyright:** © 2026 by the authors.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

((E), white arrows). The patient was given 40 mg/day of prednisone after admission, but her symptoms were not fully relieved. The gastroenterologist successfully reduced the intussusception via colonoscopy; however, the patient subsequently experienced a recurrence complicated by acute intestinal obstruction, ultimately necessitating a right colectomy. Gross surgical specimen showed dense polypoid lesions (F). Histopathology (H&E, original magnification 40×) found these polypoid lesions were hamartomatous polyps featuring crypt architectural distortion and stromal edema without dysplasia (G). The constellation of clinical, endoscopic and histopathological features was consistent with Cronkhite–Canada syndrome (CCS), a non-familial polyposis syndrome characterized by non-specific gastrointestinal symptoms in association with alopecia, cutaneous hyperpigmentation, and nail dystrophy [1]. The diagnosis relies on characteristic endoscopic, dermatologic, and pathological features [2]. The pathological mucosal changes in CCS may cause protein leakage and lead to protein-losing enteropathy. Glucocorticoids are generally effective in CCS, and anti-tumor necrosis factor has been reported to be effective in refractory cases [3,4]. Importantly, a significant risk of malignant transformation persists; therefore, a rigorous, lifelong endoscopic surveillance strategy is essential [5,6]. Here, we report the imaging features of CCS as diffuse mucosal thickening and ileocecal intussusception. Several cases of ileocecal intussusception in CCS have been reported, but its incidence remains unclear [7,8]. Although these findings may not be pathognomonic, they can serve as critical red flags that direct clinical suspicion toward CCS and prompt timely endoscopic confirmation, thereby facilitating early diagnosis and appropriate management.

**Author Contributions:** Conceptualization, L.M. and Q.Z.; investigation, L.M.; resources, J.L.; data curation, X.B.; writing—original draft preparation, L.M.; writing—review and editing, Q.Z.; visualization, X.B.; supervision, J.L.; funding acquisition, L.M. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by Natural Science Foundation of Beijing, grant number 7264314.

**Institutional Review Board Statement:** Ethical review and approval were waived for this study because it reports a single retrospective case with no intervention and no impact on patient management. All data were anonymized, and written informed consent was obtained from the patient, in accordance with institutional policies and the standards for Interesting Images publications.

**Informed Consent Statement:** Written informed consent has been obtained from the patient to publish this paper.

**Data Availability Statement:** The original contributions presented in this study are included in the article. Further inquiries can be directed to the corresponding author.

**Acknowledgments:** We sincerely thank Lai Xu, from the Department of General Surgery, Peking Union Medical College Hospital, for providing the picture of the gross specimen. During the preparation of this manuscript, the authors did not use generative AI for the purposes of formatting the text and improving the linguistic structure.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## Abbreviations

The following abbreviations are used in this manuscript:

CCS    Cronkhite–Canada syndrome  
CT     Computed Tomography

## References

1. Daniel, E.S.; Ludwig, S.L.; Lewin, K.J.; Ruprecht, R.M.; Rajacich, G.M.; Schwabe, A.D. The Cronkhite-Canada Syndrome. An analysis of clinical and pathologic features and therapy in 55 patients. *Medicine* **1982**, *61*, 293–309. [[CrossRef](#)] [[PubMed](#)]
2. Kunishi, Y.; Yoshie, K.; Kato, Y.; Maeda, S. Polypoid lesions in the stomach and the colon: Cronkhite-Canada syndrome. *Lancet Gastroenterol. Hepatol.* **2021**, *6*, 770. [[CrossRef](#)] [[PubMed](#)]

3. Boland, B.S.; Bagi, P.; Valasek, M.A.; Chang, J.T.; Bustamante, R.; Madlensky, L.; Sandborn, W.J.; Harismendy, O.; Gupta, S. Cronkhite Canada Syndrome: Significant Response to Infliximab and a Possible Clue to Pathogenesis. *Am. J. Gastroenterol.* **2016**, *111*, 746–748. [[CrossRef](#)] [[PubMed](#)]
4. Watanabe, D.; Ooi, M.; Hoshi, N.; Kohashi, M.; Yoshie, T.; Ikehara, N.; Yoshida, M.; Yanagita, E.; Yamasaki, T.; Itoh, T.; et al. Successful treatment of Cronkhite-Canada syndrome using anti-tumor necrosis factor antibody therapy. *Endoscopy* **2014**, *46*, 476–477. [[CrossRef](#)]
5. Watanabe, C.; Komoto, S.; Tomita, K.; Hokari, R.; Tanaka, M.; Hirata, I.; Hibi, T.; Kaunitz, J.D.; Miura, S. Endoscopic and clinical evaluation of treatment and prognosis of Cronkhite-Canada syndrome: A Japanese nationwide survey. *J. Gastroenterol.* **2016**, *51*, 327–336. [[PubMed](#)]
6. Maruno, T.; Kikuyama, M. Cronkhite-Canada syndrome associated with sigmoid colon cancer. *Clin. Gastroenterol. Hepatol.* **2011**, *9*, e118–119. [[CrossRef](#)]
7. Dong, J.; Ma, T.S.; Tu, J.F.; Chen, Y.W. Surgery for Cronkhite-Canada syndrome complicated with intussusception: A case report and review of literature. *World J. Gastrointest. Surg.* **2022**, *14*, 200–210. [[CrossRef](#)] [[PubMed](#)]
8. Ishikawa, E.; Kudo, M.; Minami, Y.; Ueshima, K.; Kitai, S.; Ueda, K. Cecal intussusception in an adult with Cronkhite-Canada syndrome relieved by colonoscopy. *Intern. Med.* **2010**, *49*, 1123–1126. [[CrossRef](#)] [[PubMed](#)]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.