

Title:

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Authors:

Akira Hokama, Atsushi Iraha

DOI: 10.17235/reed.2022.9132/2022 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Hokama Akira, Iraha Atsushi. Comb sign in Crohn's disease. Rev Esp Enferm Dig 2022. doi:

10.17235/reed.2022.9132/2022.

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Comb sign in Crohn's disease

Akira Hokama¹, and Atsushi Iraha²

¹Department of Endoscopy,

²Department of Medicine #1,

Graduate School of Medicine, University of the Ryukyus, Okinawa, Japan

Key words: comb sign, Crohn's disease

Correspondence to Akira Hokama, MD, PhD.

Department of Endoscopy, Graduate School of Medicine, University of the Ryukyus, 207 Uehara, Nishihara, Okinawa 903-0215, Japan

Tel: +81-98-895-1144

Fax: +81-98-895-1414

E-mail: hokamaakira@gmail.com

Dear Editor,

We present a case of a 13-year-old boy with Crohn's disease (CD) who presented with abdominal pain and diarrhea. On examination, there was tenderness on the lower abdomen. Laboratory examinations showed elevated inflammatory parameters. A CT scan showed active inflammation of the ileum and rectosigmoid colon with the comb



sign (Fig. 1). A diagnosis of exacerbation of CD was made. The patient resolved with bowel rest and intravenous hyperalimentation.

The comb sign refers to hypervascularity of the mesentery with vascular dilatation, tortuosity, and wide spacing of the vasa recta that are aligned as the teeth of a comb.

It is attributed to the increase flow, fibrofatty proliferation, and desmoplastic reaction of the mesentery.

This sign is not always pathognomonic for CD and the differential diagnosis includes vasculitis, mesenteric thromboembolism, and bowel strangulation; however, it may help identification of acute exacerbation in known CD and differentiating active CD from hypovascular disease such as lymphoma.
The comb sign and enlarged mesenteric lymph nodes can be highly correlated with the endoscopic severity rather than mural thickening and stratification in CD.

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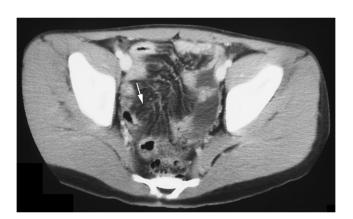


Figure 1

Fig. 1. A CT scan showing mural wall thickening of the ileum and rectosigmoid colon and the comb sign, which is hypervascularity of the mesentery with wide spacing of the vasa recta (arrow).