

Clinical Image

Fat Halo Sign: Not Only Inflammatory Diseases

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The fat halo sign (in colonic imaging) corresponds to a feature seen on CT abdominal scans, and represents by widened and fat-infiltrated sub-mucosal layer of the bowel, between the muscularis propria and the mucosa. It is characterized by an inner (mucosa) and outer (muscularis propria and serosa) ring of enhancing bowel wall along with a non-enhancing middle layer of fat (submucosa) [1-3].

It can be seen in chronic forms of inflammatory bowel diseases such as Crohn's disease, ulcerative colitis [4], however it can also represent a normal finding that is possibly related to obesity [5]. And it has been described in cases of graft vs host disease, as well it may be seen in non-functional post-surgery digestive segments as seen in the images above, showing a fat halo sign of the submucosal layer involving all segments of the non-functional colon the patient has a terminal ileostomy.

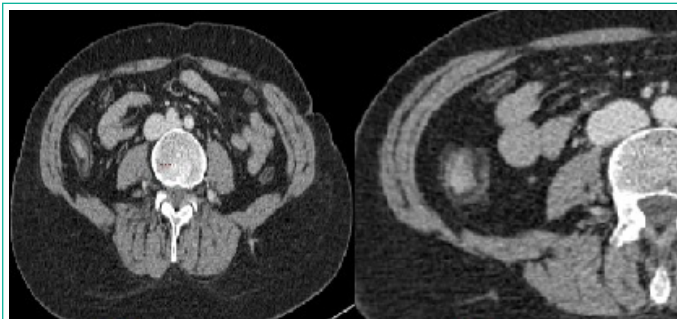


Figure A and B: Axial views of an abdominal enhanced CT scan in portal phase showing fatty infiltration of the submucosa of all segments of the nonfunctional colon in a patient operated for rectal adenocarcinoma with terminal ileostomy

References

1. Wittenberg J, Harisinghani MG, Jhaveri K, Varghese J, Mueller PR. Algorithmic approach to CT diagnosis of the abnormal bowel wall. *Radio Graphics*. 2002; 22: 1093-1109.
2. Mukesh G Harisinghani, Jack Wittenberg, Winnie Lee, Steven Chen, Ana Luiza Gutierrez, et al. Bowel Wall Fat Halo Sign in Patients Without Intestinal Disease. *AJR Am J Roentgenol*. 2007; 181: 781-4.
3. Ahualli J. The fat halo sign. *Radiology*. 2007; 242: 945-946.
4. Gore RM, Balthazar EJ, Ghahremani GG, Miller FH. CT features of ulcerative colitis and Crohn's disease. *AJR Am J Roentgenol*. 1996; 167: 3-15.
5. Harisinghani MG, Wittenberg J, Lee W, Chen S, Gutierrez AL, et al. Bowel wall fat halo sign in patients without intestinal disease. *Am J Roentgenol*. 2003; 181: 781-784.