Case 808

Eurorad

Crohn's disease of the ileum

Published on 16.06.2001

DOI: 10.1594/EURORAD/CASE.808
ISSN: 1563-4086
Section: Abdominal imaging
Case Type: Clinical Cases
Authors: A. Loshkajian , R. Sigal
Patient: 25 years, male

Clinical History:

Chronic abdominal pain
Imaging Findings:

Chronic abdominal pain, weight loss and rectal bleeding. An enteroclysis is performed. The enteroclysis focussed on the ileum reveals stricture (arrows) of the terminal ileum, villous abnormality, coarse granular surface and longitudinal ulcers
Discussion:

Suspected Crohn’s disease is one of the commonest indications for contrast studies of the small bowel examination. The distribution of small bowel Crohn’s disease is best assessed by enteroclysis and CT. The terminal ileum is nearly always involved in small bowel disease and is the only site in up 30 % of patients. Skip lesions are seen in up 20% . Crohn’s disease is typically asymmetrical -both circumferentially and longitudinally. The radiology encompasses diagnosis, assessment of extent and distribution of disease and the imaging of the complications. Although the sensitivity of enteroclysis is reported as extremely good in detecting Crohn’s disease, the radiographic features often do not correlate well with disease activity. The features seen on small bowel contrast studies can be classified as superficial, transmural and extramural abnormalities. Superficial abnormalities : early changes that are described include thickened folds due to mucosal edema, aphtoid transverse and longitudinal ulcers, punctate collections of barium and small nodules. The longitudinal ulcers usually occur along the mesenteric border. « Cobblestone » aspect is frequent. Abnormal mucosal folds are seen; these are thickened and may be nodular especially when associated with aphtae. Transmural abnormalities : Crohn’s disease is typically a transmural process. Deep ulceration is seen as fissure ulcers and penetrating ulcers. « Cobblestoning » is a feature of intersecting longitudinal and transverse ulcers with intervening heaped-up edematous longitudinal and transverse ulcers. Deep ulcerations may result in the sinuses and fistulae. Thickened bowel wall may be manifest as separations of loops. Luminal narrowing is always present to some degree and may be due to spasm and edema during the acute phase or compression from mesenteric disease or later due to fibrotic strictures. The Cronh’s disease typically affects the bowel asymmetrically involving the mesenteric aspect and adjacent mesentery more severly than the antimesenteric border. A typical feature of Crohn’s disease is a gradation of abnormalities along the affected segment of bowel. This may help in the differentiation from other pathologies such as tuberculosis. Extramural abnormalities : mesenteric inflammation masses and abscesses may induce compression and displacement of bowel loops
Differential Diagnosis List: Crohn's disease of the ileum

Final Diagnosis: Crohn's disease of the ileum

References:

Kidd R, Mezwa DG, Ralls PW, Balfe DM, Bree RL, DiSantis DJ, Glick SN, Levine MS, Megibow AJ, Saini S, Shuman WP, Greene FL, Laine LA, Lillemoe K. Related Articles

Imaging recommendations for patients with newly suspected Crohn's disease, and in patients with known Crohn's disease and acute exacerbation or suspected complications.
Radiology. 2000 Jun;215 Suppl:181-92. (PMID: 20492024)
Bartram CI.
Small bowel enteroclysis: cons.
Abdom Imaging. 1996 May-Jun;21(3):245-6. (PMID: 96269761)
Sarrazin J, Wilson SR.
Manifestations of Crohn disease at US.
Radiographics. 1996 May;16(3):499-520. (PMID: 97052990)

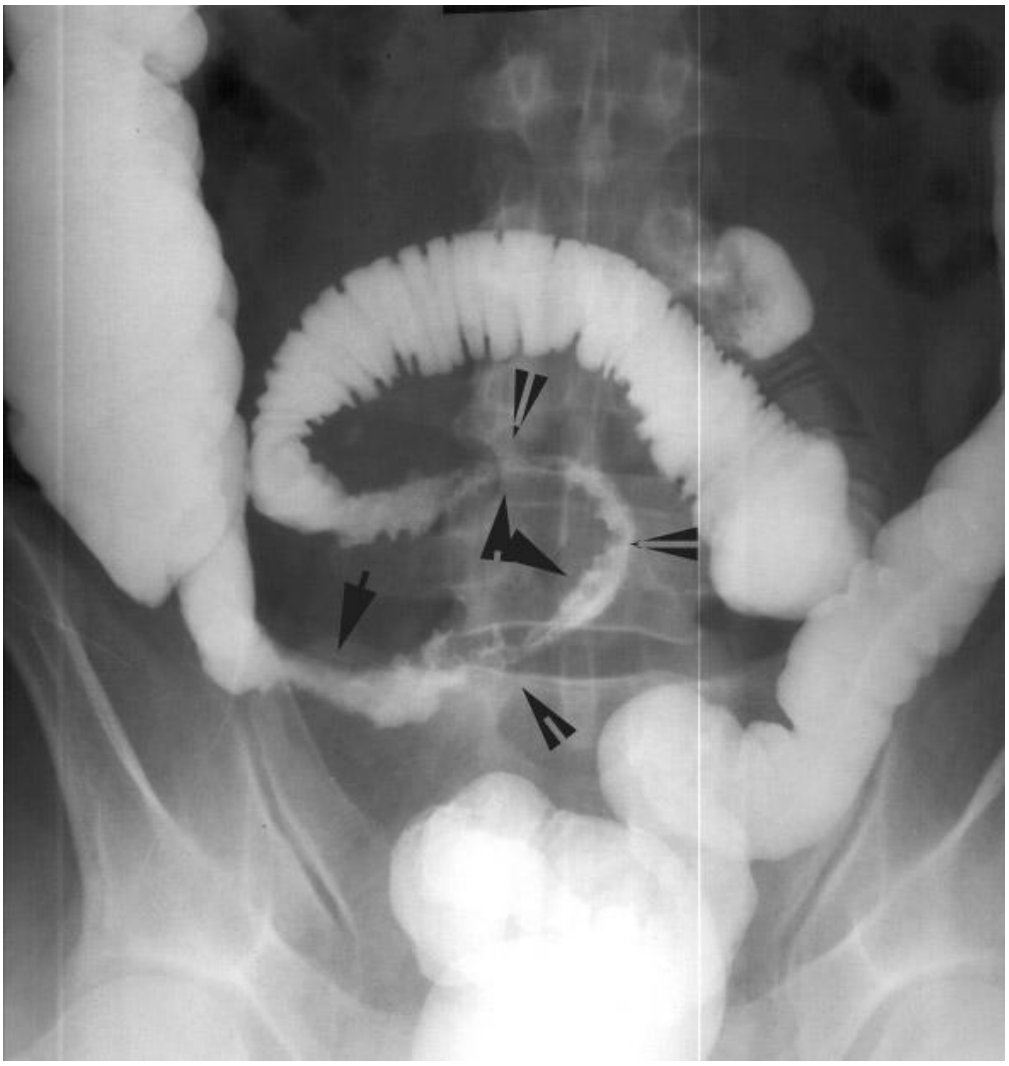
Figure 1

a

Description: Stricture of the terminal ileum (arrows), associated to villous abnormality, coarse granular surface and ulcerations **Origin:**

Figure 2

a



Description: The enteroclysis focussed on the ileum reveals villous abnormality, coarse granular surface producing a « cobblestone » pattern appearance. **Origin:**