Toxic megacolon as complication in ulcerative colitis: a case report

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Section: Abdominal imaging
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Patient: 30 years, male

Clinical History:

We present a case of a 30 year old man with an acute exacerbation of ulcerative colitis. The diagnosis of ulcerative colitis was been 7 years before through endoscopy.

Imaging Findings:

A 30 year old man presented to us with acute onset of abdominal pain, fever, profuse diarrhoea and enterorrhagia. The abdominal radiograph (Fig 1) showed marked dilatation of the colon above all in correspondence of transversum and in right and left flexures, in descending colon and sigma. The abdominal CT (Fig 2) demonstrated marked dilatation in the same districts. The colonic distension was 65 mm and 6 cm of diameter respectively in correspondence of ascendant cecum and transverse; there was also the presence of lymph nodes in the paraotic zone with a maximum diameter of 5.2 mm. CT confirmed the suspect of tossic megacolon. The opaque clisma (Fig 3) made after the total colectomia showed a normal rectal stump with regular anastomosis.

Discussion:

Toxic megacolon (TM) is an infrequent but devastating complication of colitis. Numerous forms of colonic inflammation can take to TM but the majority occur in individuals with inflammatory bowel disease (IBD). The mechanisms involved in development of TM are not clearly delineated, but chemical mediators such as nitric oxide and interleukins may play a pivotal role in the pathogenesis [1].

The frequency is 1.6-21.4% among patients with ulcerative colitis and 0.3-2% in those with Crohn's disease. The main characteristics of TM are toxaemia, sepsis and distension of the colon due to the diminished muscular tone, loss of motor activity and increased amount of colonic gas. Sepsis and/or perforation of the large bowel can complicate this situation. The most important diagnostic procedure is the abdominal X-ray. Should the diameter of colonic distension exceed 60mm, the diagnosis of TM can be confirmed [2].

CT scanning may also play an important role the management of TM, as it may be the only non invasive mode to detect sub clinical perforations and abscesses [1].

Conservative treatment of TM consists of water and electrolyte replacement, total parenteral nutrition, administration of corticosteroids and broad-spectrum antibiotics and repeat patient’s prone positioning. If medical therapy is not successful during the first 72 hours, surgical intervention is indicated [2].The most common procedure is subtotal colonic resection with creation of an ileostomy [2] but also total colectomia and immediate ileum-rectal anastomosis [3].

Differential Diagnosis List: Tossic megacolon as complication of ulcerative colitis
**Final Diagnosis:** Tossic megacolon as complication of ulcerative colitis

**References:**


**Description:** abdominal radiograph showed marked dilatation of colon above all in correspondence of trasversum and in right and left flexures, in descending colon and sigma

**Origin:**
Figure 2

Description: The abdominal TC demonstrated marked dilatation in the same districts. The colonic distension was 65 mm and 6 cm of diameter respectively in correspondence of ascendent ceco and trasversum Origin:

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Description: The abdominal TC demonstrated marked dilatation in the same districts. The colonic distension was 65 mm and 6 cm of diameter respectively in correspondence of ascendent ceco and trasversum Origin:
Description: The opaque clisma made after the total colectomia showed a normal rectal stump with regular anastomosis. Origin: