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An unusual presentation of obstructive ileus, due to impacted Agile® patency capsule, in a patient with Crohn's disease

Christos Liatsos[a,b], Nikolaos Kyriakos[a], Emmanouel Panagou[a], Stefanos Karagiannis[b], Marios Giakoumis[a], Evangelos Kalafatis[a], Christos Mavrogiannis[b]

401 Army General Hospital, Athens University, Athens, Greece

A 23-year-old man presented to the Surgery Department with acute right iliac fossa pain. Computed tomography revealed thickening of the terminal ileum. He was treated with ciprofloxacin and metronidazole with clinical improvement. One month later, he was referred to the Gastrointestinal Department for further evaluation. A slight elevation of CRP (10mg/L) and mild anemia (Hb:12mg/dL) were noted. Endoscopically, scarce aphthoid ulcers along the colon and an edematous ileocecal valve were detected. Intubation of the terminal ileum was impossible. Histology revealed infiltration of the epithelium by polymorphonuclear leukocytes and discontinuous inflammation with deep extension into submucosa; findings compatible with Crohn's disease. Enteroclysis showed mild stenosis and filling defects of the terminal ileum wall suggestive of ulcerations [Fig. 1]. To determine the extent of the disease better, we decided to perform capsule endoscopy and an Agile® patency capsule was offered. Twenty hours later, the patient experienced severe right iliac fossa pain. X-ray imaging detected the capsule and air-liquid levels at the right iliac fossa [Fig. 2] and the patient was treated conservatively.

A few hours later the patient had fever (39.5^{0}C) and diarrhea. CRP and ESR were 168mg/L and 85mm/h respectively. A new X-ray showed the capsule at the same point. The following day, X-ray failed to identify the most probably dissoluted capsule. However, due to the aggravating patient's clinical status, i.v prednisolone was initiated. One day later, the patient had a remarkable clinical improvement, and the following days, CRP and ESR turned to normal.

Agile® patency capsule was recently developed and it is considered a safe procedure, as it combines a shorter dissolution time with a reduced risk of symptomatic entrapment [1]. However, in patients with known intestinal strictures, the Agile® patency capsule has been correlated with abdominal pain, vomiting, bloating or nausea [2]. In our patient it caused

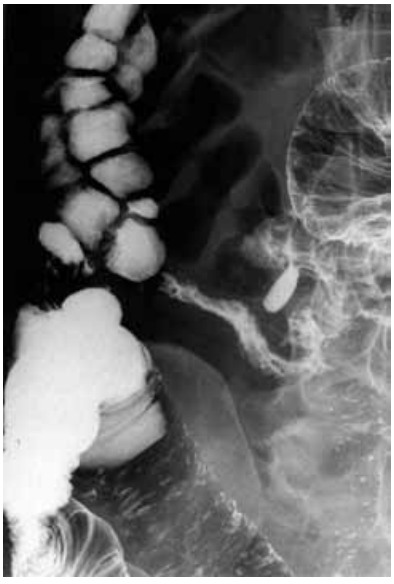

Figure 1 Enteroclysis: Mild stenosis and filling defects of the terminal ileum wall suggestive of ulcerations

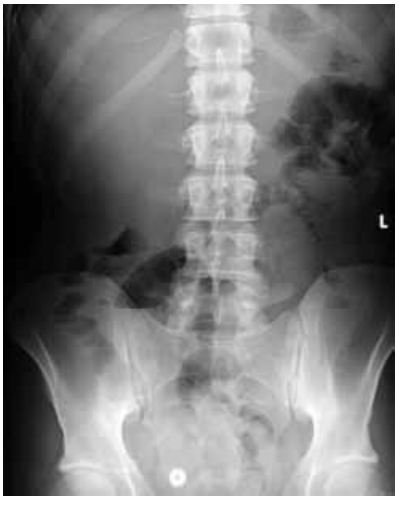

Figure 2 Abdominal X-Ray in the upright position: Agile® patency capsule in the right iliac fossa with a few small-bowel air-liquid levels

[a]Department of Gastroenterology, 401 Army General Hospital of Athens (Christos Liatsos, Nikolaos Kyriakos, Emmanouel Panagou, Marios Giakoumis, Evangelos Kalafatis), [b]Department of Gastroenterology, Faculty of Nursing, Athens University (Christos Liatsos, Stefanos Karagiannis, Christos Mavrogiannis), Athens, Greece

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Correspondence to: Christos Liatsos, MD, PhD, PO Box: 899, ZC:19009, Rafina – Dioni, Athens, Greece. Tel: +30-6945797262; fax: +30-210-7494095, e-mail: cliatsos@yahoo.com & nikos_kiriakos@yahoo.gr

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temporary intestinal obstruction, due to ileocecal valve stenosis, which relieved soon after prednisolone administration. It is interesting that in addition of the typical clinical and radiological picture of acute intestinal obstruction (pain, air-liquid levels), inflammatory signs (fever, diarrhea, ESR, CRP) were more prominent. These inflammatory signs could be attributed to absorption of infectious agents and/or toxins through the intestinal wall affected by Crohn's disease.

References

1. Karagiannis S, Faiss S, Mavrogiannis C. Capsule retention: a feared complication of wireless capsule endoscopy. *Scand J Gastroenterol* 2009;**44**:1158-1165.
2. Herrerias JM, Leighton JA, Costamagna G, et al. Agile® patency system eliminates risk of capsule retention in patients with known intestinal strictures who undergo capsule endoscopy. *Gastrointest Endosc* 2008;**67**:902-909.