Target Sign: Endoscopic Sign of the Colonic Perforation

Target Sign: Sinal Endoscópico de Perfuração

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Figure 1 – Endoscopic image of the 20 mm non-granular laterally spreading tumor in the descending colon

Figure 2 – A: The ‘target sign’ was observed after endoscopic mucosal resection of the colonic lesion; B: The defect in the muscularis propria (‘target sign’) was closed by endoscopic clipping.

A 68-year-old man underwent an en bloc endoscopic mucosal resection (EMR) of a 20 mm non-granular laterally spreading tumor, type 0-IIa of the Paris classification, in the descending colon (Fig. 1).

During the procedure, unintentional resection of the muscularis propria (‘target sign’) was observed immediately (Fig. 2A); the defect was closed by endoscopic clipping using four clips (Fig. 2B); no clinical or radiologic signs of the pneumoperitoneum were present. The patient was discharged two days later, completely asymptomatic.

Colonic perforation may occur in 2% - 10% of patients undergoing colonic EMR and endoscopic submucosal dissection. Commonly, diagnosis is delayed and depends on clinical and radiologic findings.

The ‘target sign’ white center (muscularis propria and/or serosa) with surrounding stained area (stained submucosa), is an endoscopic marker for resection of the muscularis propria and indicates a potential colonic perforation.

Recognition of the ‘target sign’ allows prompt endoscopic diagnosis and management of potential colonic perforation.

REFERENCES