Endoscopic mucosal resection with a magnetic traction system: a new strategy to facilitate complete resection

En bloc endoscopic mucosal resection (EMR) with a snare is the standard resection technique for adenomas <25 mm [1]. One limitation of this technique is, when gravity is not helping, the lack of good exposure of the lesion margins before cutting to ensure successful complete excision [2]. An independent traction system with clip and rubber band, as described for endoscopic submucosal dissection procedures [2], is not currently applicable for EMR because the snare cannot be placed around the lesion after placement of the traction system (▶ Fig. 1; ▶ Video 1). A new traction strategy using traction magnetic clips (ProdiGI; Medtronic), initially developed for traction-assisted ESD to improve exposure of the submucosal layer, could be the awaited solution to overcome this limitation.

We report the case of a 77-year-old man, who presented with a cecal adenoma of 12 mm. In order to achieve better visualization of all the margins and ensure a complete resection, we opted to use a traction magnetic clip kit. We started by placing the first magnetic clip on the opposite colonic wall (at a 90° angle). After submucosal injection of the lesion had been performed and the colon was maximally insufflated, a second magnetic clip was placed at the top of the lesion. A 25-mm snare was then placed around the lesion. This was followed by colonic exsufflation in order to allow the two opposing magnets to pair. Afterwards, the colon was re-insufflated, resulting in traction of the lesion, which allowed optimal placement of the snare with direct visualization of all the margins. The lesion was then resected en bloc.

Up until now, there has never been a traction technique that could be applied during EMR; however, using those magnets, we have demonstrated that traction can be performed during EMR and may add extra value by ensuring a complete resection.

Competing interests

The authors declare that they have no conflict of interest.

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Fig. 1 Schematic representation of traction-assisted endoscopic mucosal resection: a, b using the magnetic clip traction method; and c showing why the classic traction method (double clip and rubber band) is not applicable.

Video 1 Endoscopic mucosal resection is performed with the magnetic traction system, which offers better exposure and thereby a new strategy to facilitate complete resection.
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