Colorectal lesions with a nongranular depressed component are difficult to snare and have a high risk of submucosal invasion; thus, en bloc resection of these lesions is mandatory, usually by endoscopic submucosal dissection (ESD) [1, 2].

Underwater endoscopic mucosal resection (UEMR), described by Binmoeller in 2012 [3], allows endoscopic resection without prior submucosal injection, as the colonic lesion “floats” in a lumen filled with water along with the mucosa and submucosa. Endoscopic ultrasound has shown that when the lumen is filled with water, the muscularis propria retains a circular configuration and does not follow the involutions of the mucosa and submucosa [3].

Cap-assisted EMR using a straight distal attachment has been described to resect polyps not easily amenable to standard EMR [4, 5].

Herein, we present the case of a 16 mm, nongranular, 0-IIa + IIc “u”-shaped lesion, which was partially hidden by a fold and difficult to face, located in the sigmoid colon (►Fig. 1, ►Fig. 2).

►Fig. 1 Nongranular 0-IIa + IIc “u”-shaped lesion, which was difficult to face.

►Fig. 2 Evaluation under white-light imaging.

►Fig. 3 Japan NBI Expert Team type 2b pattern under evaluation with narrow-band imaging and near focus.

►Fig. 4 Pit pattern Vi (severe) under evaluation with crystal violet and near focus.

►Fig. 5 Cap-suction underwater endoscopic mucosal resection.
Evaluation under narrow-band imaging (NBI) with near focus showed Japan NBI Expert Team (JNET) type 2b (▶Fig. 3) and chromoendoscopy showed pit pattern Vi severe-type (▶Fig. 4). En bloc “classic” UEMR was attempted but it was not possible to snare the lesion. Thereafter, with the lumen filled with water, a conic cap (ST hood DH-30CR; Fujifilm Europe, Düsseldorf, Germany) was used to gently aspirate the 0-IIc component, facilitating the infolding of the lesion into the gravity-free underwater environment; the lesion was then easily snared and resected by underwater EMR (▶Fig. 5, ▶Video 1).

As UEMR is a reversible technique because there is no injection and no deformity of the working space, we recommend trying this approach first for en bloc resection of nongranular 0-IIc lesions without overt features of malignancy, as it is a fast and cheap technique compared with ESD or endoscopic full-thickness resection. If classic UEMR does not seem feasible, conic cap aspiration before UEMR may be helpful for resection of flat depressed lesions.

Competing Interest

The authors declare that they have no conflict of interest.

The authors

Hugo Uchima1& Anna Calm1, Juan Colán-Hernández2, Raquel López2, Caterina Fumagalli2, Alba Hernández2, Vicente Moreno3

1 Endoscopy Unit, Gastroenterology Department, Hospital Universitari Germans Trias i Pujol, Badalona, Barcelona, Spain
2 Pathology Department, Hospital Universitari Germans Trias i Pujol, Badalona, Barcelona, Spain
3 Corresponding author

Hugo Uchima, MD
Gastrointestinal Endoscopy, Hospital Universitari Germans Trias i Pujol, Carretera de Canyet S/N, Badalona, Barcelona 08916, Spain
huchima.germanstrias@gencat.cat

References


