A novel polypectomy technique: the “ropeway method” for resection of large pedunculated polyps

Pedunculated polyps at narrow or sharply bending areas in the colonic lumen can be challenging for endoscopic resection [1–5]. We report a newly invented technique, the “ropeway method,” to improve endoscopic resection of pedunculated polyps assisted by traction. A 74-year-old woman was found to have a 3-cm pedunculated lesion in the sigmoid colon. We attempted to ligate the base of the stalk with an endoloop (MA-254; Olympus, Tokyo, Japan) before endoscopic resection. However, this proved impossible because the head of the polyp occupied the entire lumen and the base could not be identified. We performed this new method using two endoloops (▶Video 1; ▶Fig. 1). First, the stalk near the head was ligated by an endoloop (▶Fig. 2a), and a clip with a line was attached to the endoloop to apply traction. After the colonoscope was completely withdrawn, a transparent hood was attached to the tip of the colonoscope to secure the view. An additional endoloop was inserted through the working channel and the tip of the endoloop protruded slightly to make a small loop. The line connected to the lesion was passed through this loop. Reinserting the colonoscope while pulling distally on the line led the endoloop to the exact location on the base with the line appropriately stretched (▶Fig. 2b). In the same way, the snare wire was delivered between the two endoloops and the stalk was cut with electrocautery under direct vision (▶Fig. 2c). We confirmed that the remaining stalk was securely ligated by the second endoloop (▶Fig. 2d). The resected specimen was easily retrieved by pulling the line. Histological study showed a tubular adenoma with low-grade dysplasia.

The "ropeway method" enables safe and precise removal of the entire lesion and is a promising option for pedunculated lesions in difficult locations.
Fig. 2. a–d Endoscopic views showing: a the stalk near the head ligated by an endoloop; b an additional endoloop placed at the stalk base while traction was applied to the line; c the snare wire delivered between two endoloops; d the remaining stalk tightly ligated by the second endoloop.

The authors

Daiki Nemoto1, Yuki Nakajima1, Yasuke Takahata1, Kohei Suzuki1, Masato Aizawa1, Alan Kawarai Lefer2, Kazutome Togashi1
1 Division of Endoscopy, Fukushima Medical University Aizu Medical Center, Aizuwakamatsu, Japan
2 Department of Surgery, Jichi Medical University, Shimotsuke, Japan

Corresponding author

Daiki Nemoto, MD, PhD
Department of Coloproctology, Aizu Medical Center Fukushima Medical University, 21-2 Maeda, Tanisawa, Kawaihigashi, Aizuwakamatsu-city, Fukushima 969-3492, Japan
nemotoda@fmu.ac.jp

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