A 65-year-old man presented with hematochezia and fecal incontinence. For a long time he had been experiencing severe constipation and had needed to train to evacuate the bowels. Conventional colonoscopy revealed a hyperemic broad-based polypoid lesion with central ulceration in the lower rectum (Fig. 1). Magnifying colonoscopy with narrowband image system (NBI) revealed dilated brownish, oval-to-long pits and widening of the pericryptal space around the polypoid lesion (Fig. 2). There was no destruction of or irregularity in the pit pattern and no abnormalities in the microvessels. Autofluorescence imaging (AFI) revealed a magenta-colored elevation surrounding the yellowish-green ulcerated area (Fig. 3). Histological examination of biopsy specimens taken from the polypoid lesion revealed elongation and distortion of the crypts and fibromuscular obliteration in the mucosa (Fig. 4). On the basis of the clinicopathological features, a diagnosis of mucosal prolapse syndrome was made. The patient was successfully treated with bowel retraining to avoid straining at defecation and dependence on laxatives.