Endoscopic Removal of a Lymphangioma of the Colon: Case Report of the Diagnostic Value of an Endoscopic Ultrasound Probe

A 57-year-old woman was admitted to our hospital for examination and treatment of a submucosal tumor in the cecum. A double-contrast barium enema revealed a well-defined polypoid lesion with a smooth surface, measuring 12 mm, on the ileocecal valve. Colonoscopy showed a slightly yellowish, sessile polypoid lesion with a smooth surface on the ileocecal valve. The lesion was relatively soft, and demonstrated a cushion sign. We inserted a flexible ultrasound probe through the biopsy channel of the colonoscope during direct visualization of the lesion, and carried out endoscopic ultrasonography (EUS) using the ultrathin mechanical radial-manual linear scanning probe (Fujinon ultrasound probe system SP-501, frequency 15 MHz, Fuji, Tokyo, Japan). EUS demonstrated multiple echo-free spaces in the submucosa, without any continuity with the muscularis propria layer (Figure **1**). The lesion was therefore diagnosed as a lymphangioma, and was considered to be safely resectable by endoscopic polypectomy. A snare polypectomy was performed. No bleeding or other complications occurred. The cross-section of the resected specimen showed multiple cystically dilated spaces that were filled with serous liquid. The histological diagnosis was lymphangioma of the colon (Figure **2**).

In this case, EUS using an ultrasound probe showed a multiple cystic lesion in the submucosal layer. This finding is similar to the EUS findings of previously reported cases (1–4). The cross-sections of the resected specimens were consistent with the EUS findings in this and previously reported cases (1–4). EUS findings can therefore be regarded as very useful in diagnosing lymphangioma of the colon.

Recently, lymphangiomas of less than 20 mm in diameter have often been removed using snare polypectomy (2–5). Unnecessary surgery should be avoided, because of the lesion's benign nature. However, severe complications such as perforation have been associated with endoscopic polypectomy for submucosal tumors. Endoscopic polypectomy is contraindicated if the lesion has

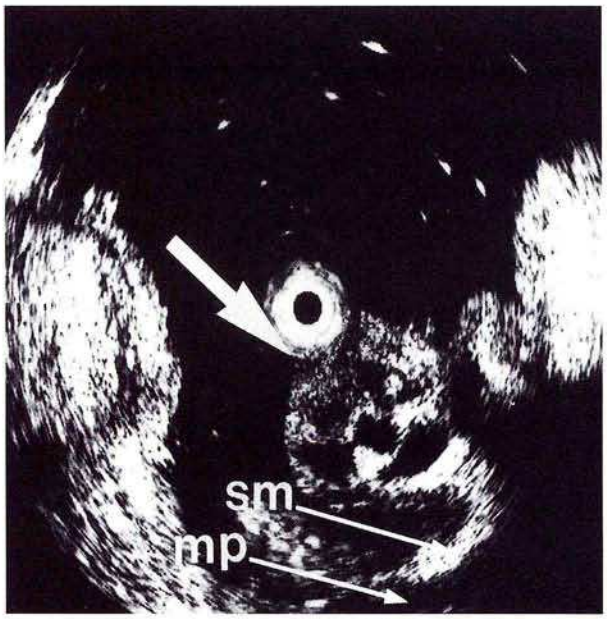

Figure 1: EUS demonstrates a multiple cystic lesion (arrow) located in the submucosal layer (sm), without continuity with the muscularis propria layer (mp).

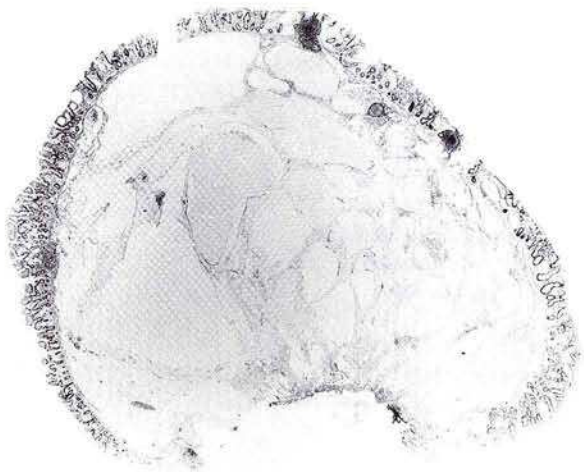

Figure 2: The histological examination reveals lymphangioma. The polyp consists of various-sized cystic lymphatic spaces lined by thin endothelial cells, which are located in the submucosa and the mucosa (hematoxylin-eosin, original magnification × 12).

infiltrated into the muscularis propria or is located in the subserosa, or if the lesion is too large to snare. EUS has become an indispensable procedure for diagnosing submucosal tumors and planning treatment. Endoscopically guided ultrasonography using an ultrasound probe can be performed easily during conventional colonoscopy, and is valuable in assessing the exact location and spread of a submucosal tumor.

Y. Iwakiri, K. Akahoshi, S. Hamada, Y. Chijiiwa, H. Nawata, I. Sasaki
Third Dept. of Internal Medicine, Second Dept. of Pathology, Faculty of Medicine, Kyushu University, Fukuoka, Japan

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Corresponding Author
Y. Iwakiri, M.D.
Third Dept. of Internal Medicine
Faculty of Medicine
Kyushu University
Maidashi 3-1-1, Higashi-ku
Fukuoka 812-82
Japan
Fax: +81-92-642-5297