between the PS and SEMS groups, missing response occurred in patients who died before the first appointment, and they were assigned to unsuccessful drainage in the analysis.

Finally, in this study, we focused on the efficacy of SEMS and PS in unresectable hilar cholangiocarcinoma; thus, the patients in both groups did not receive any treatment modalities that affected patient survival such as chemotherapy, brachytherapy, and external beam radiation.

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Use of a convex probe-endobronchial US endoscope in EUS of the rectum and FNA

To the Editor:

A 52-year-old white man was referred to the gastroenterology clinic for evaluation of a rectal mass felt on physical examination and confirmed on colonoscopic examination as an external compression. He had a history of locally invasive bladder cancer; bladder resection and ileal conduit were performed a year ago. Magnetic resonance imaging of the pelvis revealed a 1.8 × 2.1 × 2.9-cm mass posterolateral to the rectum on the right side, causing an indentation along the lateral wall of the rectum (Fig. 1). EUS with FNA was planned, but on the day of the procedure, the EUS processor had malfunctioned. An Olympus BF-UC-UC160F-OL8 EBUS endoscope (Olympus America Inc, Center Valley, PA) was used for rectal EUS. The US processor used was the EU-ME1. This revealed a 1.8-cm hypoechoic mass beside the posterior wall of the rectum (Fig. 2). FNA was performed with a 22-gauge needle. Pathology showed malignant cells, urothelial primary (Figs. 3 and 4). The convex probe-endobronchial US (CP-EBUS) endoscope is used mainly for mediastinal lymph

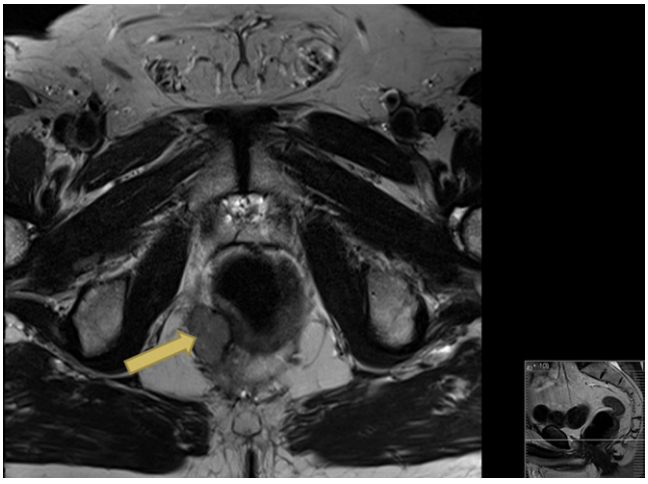

Figure 1. MRI pelvis. Arrow indicates perirectal mass.

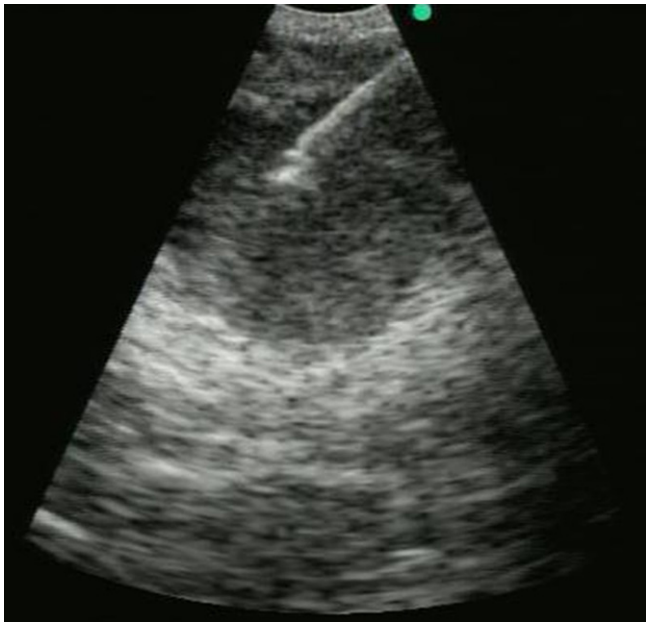

Figure 2. EUS image of needle in mass.

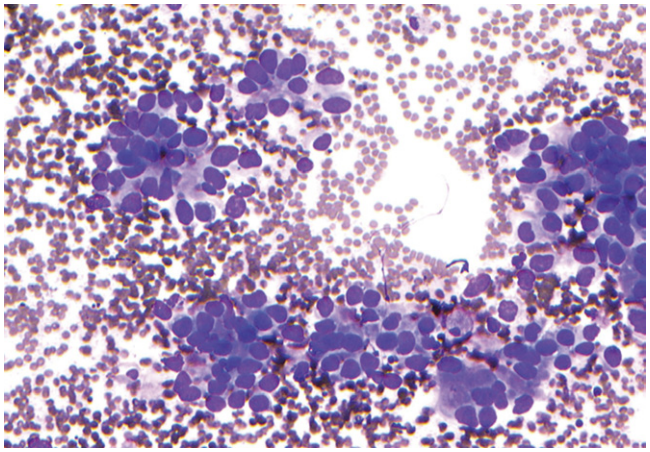

Figure 3. Rectum FNA: positive for malignant cells. Diff Quick smear: high-power image showing groups of malignant cells. The cells are large and have a high nucleus-to-cytoplasm ratio.

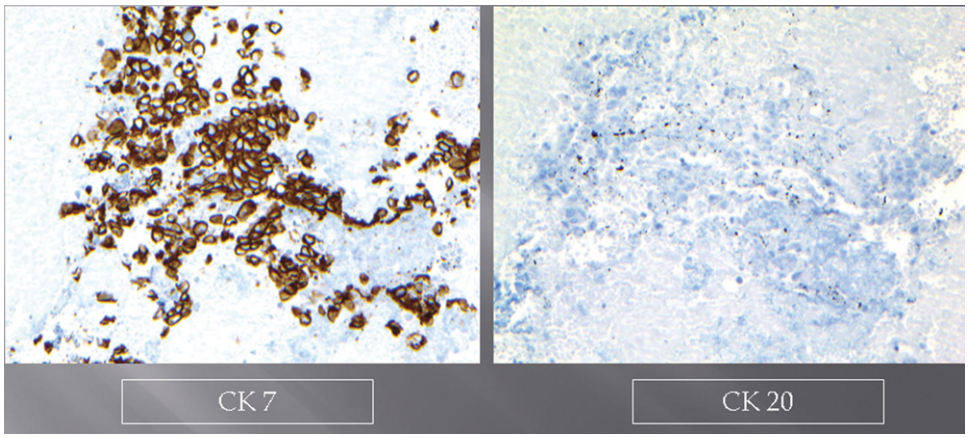

Figure 4. Immunohistochemical stains showing that the tumor cells are strongly positive for cytokeratin (CK) 7 and negative for cytokeratin 20 and prostate-specific antigen. This immunohistochemical staining pattern and morphology is in keeping with urothelial carcinoma.

TABLE 1. Differences between the CP-EBUS endoscope and the linear echoendoscope

	Olympus GF-UC140P-AL5 (EUS)	Olympus BF-UC160F-OL8 (EBUS)
Optical system		
Field of view, deg	100	80
Direction of view, deg	55 forward oblique	35 forward oblique
Depth of view, mm	3-100	2-50
Insertion tube		
Total length, mm	1575	890
Air insufflation	Available	Unavailable
Distal end outer diameter, mm	14.2	6.9
Channel inner diameter, mm	2.8	2
Ultrasonic functions		
Display mode	B mode, M mode, D mode, flow mode, power flow mode	B mode, color power Doppler mode
Scanning method	Electric curved linear array	Electric curved linear array
Scanning direction	Parallel to insertion direction	Parallel to insertion direction
Frequency, MHz	5, 6, 7.5, 10	7.5
Scanning range, deg	180	50

CP-EBUS, Convex probe-endobronchial US; *deg*, degrees; *EBUS*, endobronchial US.

node staging for lung cancer. It has also been used for diagnosis of intrapulmonary tumors, unknown hilar and mediastinal lymphadenopathy, and mediastinal tumors.[1] We believe that this is the first case in which a CP-EBUS endoscope has been used in the rectum. The main differences between the CP-EBUS endoscope and the linear echoendoscope are listed in Table 1. There is no channel for air insufflation or water irrigation. Water or air could be delivered through the 2-mm instrument channel. There is 1 wheel for control of up and down deflection of the tip of the endoscope. There is no control for right to left deflection as is available with the EUS endoscope. However, right and left movement can be achieved by clockwise and anticlockwise torque on the endoscope. A possible limitation is a narrow scanning range of 50 degrees versus 180 degrees with the linear echoendoscope. EUS in the rectum is used for local staging of rectal cancer,[2] restaging after chemoradiation,[3-5] detection of recurrent rectal cancer,[6] subepithelial lesions of the rectum,[7] rectosigmoid endometriosis,[8] and anal sphincter defects.[9-11] The CP-EBUS endoscope could be used effectively for all the indications described. Because the distal end outer diameter of the CP-EBUS endoscope is much smaller than the curvi-

linear EUS endoscope, this endoscope makes the procedure less uncomfortable and may require less sedation.

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Submucosal saline solution injection combined with endosonography for distinguishing between stages T1a and T1b of early esophageal cancer

To the Editor:

Accuracy in preoperative staging of early esophageal cancer (EEC), specifically stage T1a or T1b, is essential for determining appropriate therapy.[1,2] Currently, the most available method for the staging of EEC is EUS.[3,4] Historically, EUS has had poor and varying accuracy in distinguishing between tumors confined to the mucosa (T1a) and those that invade the submucosa (T1b).[4,5] Improvements in EUS methods are therefore necessary for more definitive T1 staging of EEC.

Submucosal saline solution injection (SSI) is routinely used before EMR and endoscopic submucosal dissection (ESD) to minimize damage to the surrounding tissue of the esophageal wall. When SSI is performed, a water cushion forms in the loose connective tissue of the submucosa, which may serve as a good medium for US. Therefore, we proposed that SSI could improve the diagnostic accuracy in the preoperative EUS staging of EEC.

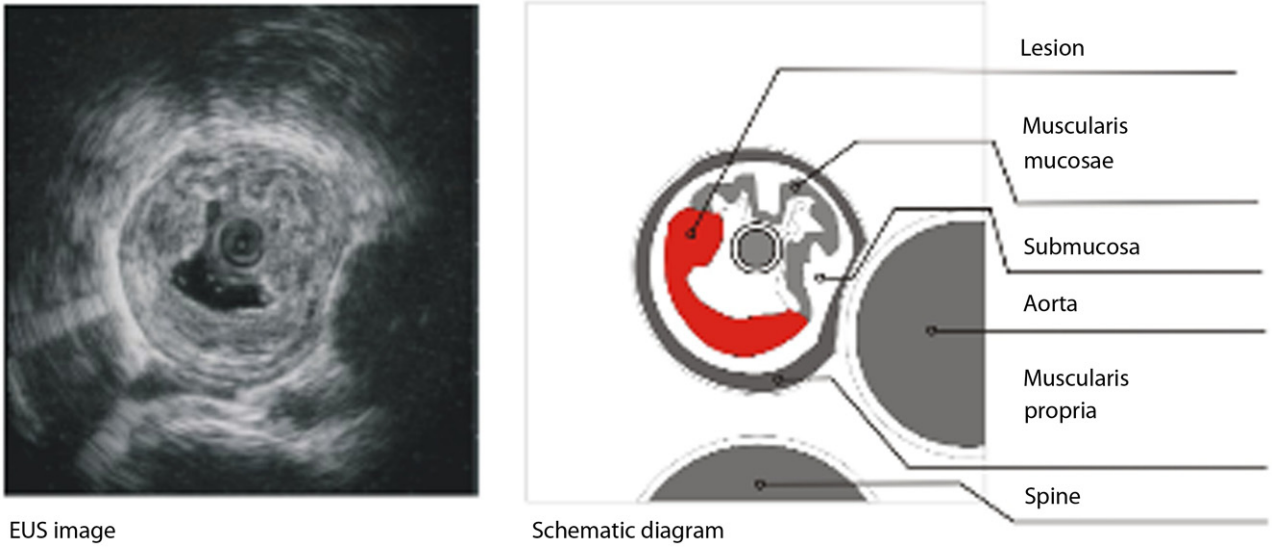

Figure 1. Stage T1b of early esophageal cancer visualized by regular EUS (the schematic diagram on the right). The lesion and infiltration depth in the submucosa were difficult to distinguish from the mucosa.