A 76-year-old woman was referred to our endoscopy unit for endoscopic submucosal dissection (ESD) of a 3-cm-diameter nodule exhibiting high grade dysplasia and complicating a large Barrett's esophagus. A classic tunnel was created beneath the lesion (Fig. 1) with a HybridKnife Type T (ERBE Electromedizin, Tübingen, Germany). After incision of the mucosa on both sides of the tumor, the scope was withdrawn. A Resolution Clip (Boston Scientific, Natick, Massachusetts, USA) was inserted into the operative channel of the endoscope and attached to a 250-cm line made of nonabsorbable suture wire (Peters Surgical, Paris, France) bent in a U-shape. The scope was reinserted with the line in parallel, and the clip with the attached line was placed at the proximal side of the tunnel (Fig. 2 and Fig. 3). Constant countertraction, applied by grasping the external part of the line with a plastic 11 g Kocher forceps (Nessicare dressing kit, LCH Medical Products, Paris, France), facilitated excellent exposure of the remaining submucosal layers (Fig. 4 and Fig. 5) on both sides, greatly aiding dissection after tunneling (Fig. 6, Video 1).

The esophagus is often considered the most difficult location in which to perform ESD. The narrow diameter compromises scope maneuverability, and the thin wall increases the risk of perforation [1]. However, esophageal ESD is often essential, as indicated by the epidemiology of early-stage esophageal cancer in Europe and the high morbidity rate associated with esophageal surgical procedures. Technically, during ESD, it is essential to ensure good exposure of the submucosal layer after circumferential incision. Two relevant methods have been described. First, the clip-with-line method facilitates good countertraction of the lesion [2]. A clip is inserted into the operative channel of the scope, and a line running parallel to the scope is attached to the clip. The scope is reinserted, and the clip is placed at the proximal side of the lesion. Tension (applied with a 10-g weight or gentle, repetitive manual traction) creates countertraction, which facilitates good exposure of the submucosal layer. However, the clip-with-line method is not a panacea; it is not easy to position the clip effectively, and specimen rotation is still possible, particularly near the end of the procedure.

Other groups have described the tunnel technique [3]. After mucosal incision on the distal side and the proximal side, a submucosal tunnel is progressively created beneath the lesion. This allows good constant exposure of the submucosal...
layer, facilitating quick and safe dissec-
tion, especially when a HybridKnife is
used. However, the lateral margins of the
tunnel are difficult to resect, and at the
end of tunneling, resection can be very
challenging.
A combination of the clip-with-line meth-
method and the tunnel technique greatly facil-
itates esophageal ESD and may become
standard.

Endoscopy_UCTN_Code_TTT_1AO_2AG

Competing interests: None

Jérémie Jacques, Sophie Geyl,
Paul Carrier, Tessa Tabouret,
Veronique Loustaud-Ratti,
Denis Sautereau, Romain Legros
Service d’Hépato-gastro-entérologie,
CHU Dupuytren, Limoges, France

References
1 Oyama T. Esophageal ESD: technique and
prevention of complications. Gastrointest
Endosc Clin N Am 2014; 24: 201 – 212
2 Oyama T. Counter traction makes endo-
sopic submucosal dissection easier. Clin
Endosc 2012; 45: 375 – 378
3 Pioche M, Mais I, Guillaud O et al. Endo-
sopic submucosal tunnel dissection for
large esophageal neoplastic lesions. Endos-
copy 2013; 45: 1032 – 1034

Bibliography
DOI http://dx.doi.org/
Endoscopy 2015; 47: E307–E308
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Jérémie Jacques, MD
Service d’Hépato-gastro-entérologie
CHU Dupuytren
2 avenue Martin Luther King
87042 Limoges
France
Fax: +33-05-55058733
jeremiejacques@gmail.com