Treating scar tissues during endoscopic submucosal dissection for gastrointestinal neoplasms

The extensive fibrosis in gastrointestinal neoplasms with severe scarring often makes endoscopic submucosal dissection (ESD) difficult and unsafe to perform. The submucosal fibrosis prevents the mucosa layer from lifting during injection. In addition, the vessels in scar tissues are sometimes extensive and barely visible. Moreover, the scar tissue is hard to cut with a standard endoscopic electrosurgical knife. Therefore, ESD for this type of lesion results in more complications, and is associated with a lower en bloc resection rate. Here, we describe a trick for dissection of these fibrotic tissues. A flat lesion was found near the cardia after previous endoscopic resection (Fig. 1). The biopsy demonstrated high grade intraepithelial neoplasia. The ESD was started at the non-scarring site to create a wider submucosal layer for dissection before exposing the scar (Fig. 2). A Coagrasper (FD-411UR; Olympus, Tokyo, Japan) was then used to grasp the fibrotic tissue. Using the electrosurgical generator (ESG-100; Olympus), a soft coagulation mode at 80W was used briefly to coagulate the vessels in the fibrosis, and subsequently a pulse-cut-slow mode at 40W was used to resect the tissue (Video 1). The process was repeated to dissect the remaining fibrosis (Fig. 3).

Competing interests: None

Peng Jin, Jian-qiu Sheng, Dong-liang Yu, Kuang-I Fu
Department of Gastroenterology, Beijing Military General Hospital, Beijing, China

Bibliography
DOI http://dx.doi.org/10.1055/s-0033-1377439
Endoscopy 2014; 46: E420
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Kuang-I Fu, MD
Department of Gastroenterology
Beijing Military General Hospital
Nanmenchang 5#
Dongcheng District
Beijing 100700
China
Fax: +86-10-66721299
fukuangi@hotmail.com

Video 1
Dissection of fibrotic tissues using a Coagrasper (Olympus, Tokyo, Japan) during endoscopic submucosal dissection.