A novel technique for biliary biopsy using the sheath of a plastic stent and a non-return valve

Endoscopic transpapillary biopsy has been widely performed for the diagnosis of biliary disease. Direct-vision biliary biopsy using peroral cholangioscopy has been reported to be very useful [1–4]. At centers where peroral cholangioscopy is unavailable, biliary biopsy can be performed under fluoroscopic guidance. It is however sometimes difficult to obtain adequate biopsy specimens owing to issues with guidance of the biopsy forceps. Hijioka et al. reported a useful technique for biliary biopsy using mini-forceps with a biliary dilator [5]. Herein, we report a useful modification of their procedure.

A 70-year-old man with obstructive jaundice due to gallbladder cancer (▶ Fig.1) was referred to our hospital for right-sided hemihepatectomy. Biopsy specimens from the left biliary duct were needed to determine the extent of liver resection required. The system of a 7-Fr biliary plastic stent (Flexima; Boston Scientific, Marlborough, Massachusetts, USA) with the stent removed was used to perform the biopsy (▶ Fig.2a). Without a sphincterotomy having been performed, the system was inserted into the biliary duct together. The tip of the outer sheath has a radiopaque marker (black arrow). The mini-forceps (arrowhead) and guidewire (white arrow) are passed into the sheath together. c The end of the outer sheath with a non-return valve (black arrow).

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Endoscopy_UCTN_Code_TTT_1AR_2AD

Competing interests
None
The Authors

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DOI http://dx.doi.org/10.1055/j-0042-118704
Endoscopy 2017; 49: E9 – E10
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X