Conversion of Endoscopic Nasobiliary Drainage to Internal Drainage by Means of Endoscopic Scissor Forceps

Endoscopic nasobiliary drainage (ENBD) [1] may cause undue stress, such as pharyngeal discomfort, in some patients. We have developed a new method for conversion from external to internal drainage by cutting the external drainage tube with endoscopically employed scissor forceps, which were developed in collaboration by the authors and the Olympus Company (Tokyo, Japan). The forceps can cut a tube with a maximum diameter of 7-F, and are designed so that the ENBD tube can be held at the depressed portion with the blade almost perpendicular to the longitudinal axis of the tube (Figure **1**). The external drainage tube is an Olympus nasal drainage tube (α-type pre-shaped, PBD-21Z).

A patient with bile duct carcinoma complained of severe pharyngeal discomfort after insertion of the ENBD tube, and the drainage was changed from an external to an internal one using our procedure. Until the time of the operation, no complications such as cholangitis, or migration or dislodgment had been seen, and the patient's quality of life remained at a high level. The cut end of the tube extracted in the operation was not sharp and no apparent deformation was seen (Figure **2**).

Our procedure is easily applied. On the other hand, however, there is the drawback of possible complications such as migration, dislodgment or perforation. We thought that with the use of an α-type tube, migration and dislodgment of the tube would be prevented because of the loop of the cut tube in the duodenum. We also believe that there is little risk of perforation of the duodenum by the cut edge of the tube, because it is unlikely that the tube will be cut at an acute angle.

Although further studies using a larger number of patients are needed, we think that our procedure is very beneficial to some patients. However, this procedure should only be used in exceptional situations, as change from a nasobiliary catheter to an internal stent would be the normal procedure of choice.

N. Uchida, T. Ezaki, H. Fukuma, K. Tsutsui, H. Kobara, M. H. Bang, M. Ogawa, K. Watanabe, M. Ono, A. Morishita, T. Ogi, H. Kamata, T. Masaki, S. Watanabe, S. Kuriyama
Third Dept. of Internal Medicine, Kagawa Medical University, Kagawa, Japan

References

[1] Nagai N. Study on endoscopic continuous pancreato-choledocho catheter-remaining method. Gastroenterol Endosc 1975; 17: 684–700

Corresponding Author

N. Uchida, M.D.
Third Dept. of Internal Medicine
Kagawa Medical University
1750-1 Ikenobe
Miki-cho, Kita-gun
Kagawa-ken 761-0793
Japan
Fax +81-87-8912158
E-mail: naohito@kms.ac.jp

Figure 1 The scissor forceps developed by the authors were designed to hold the endoscopic nasobiliary drainage (ENBD) tube at the depressed portion so that the cutting blade was almost perpendicular to the longitudinal axis of tube when cutting

Figure 2 The cut end of the extracted tube was not sharp and no apparent deformation was seen