

A Comparison of the Efficacy of Plastic Stent Placement Above and Across the Sphincter of Oddi for Benign Biliary Hilar Stricture

Hitomi Himei (姫井人美), MD,¹ Hironari Kato (加藤博也), MD*,¹ Yosuke Saragai (皿谷洋祐), MD,¹ Yuki Fujii (藤井佑樹), MD,¹ Tatsuhiko Yamazaki (山崎辰洋), MD,¹ Daisuke Uchida (内田大輔), MD,¹ Kazuyuki Matsumoto (松本和幸), MD,¹ Shigeru Horiguchi (堀口繁), MD,¹ Koichiro Tsutsumi (堤康一郎), MD,¹ Hiroyuki Okada (岡田裕之), MD.¹

¹ Department of Gastroenterology and Hepatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan

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***Corresponding author:** Hironari Kato, MD

Department of Gastroenterology and Hepatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences

2-5-1 Shikata-cho, kita-ku, Okayama 700-8558, Japan

Tel: +81-86-235-7219 Fax: +81-86-223-5991

E-mail: katou-h@cc.okayama-u.ac.jp

ABSTRACT

Objectives: We investigated the efficacy and safety of endoscopic plastic stent (PS) placement for hilar benign biliary strictures (BBSs) and compared cases with PS placement above and across the sphincter of Oddi (inside stent (IS), and usual stent (US)).

Methods: Patients who underwent initial endoscopic PS placement for hilar BBSs between August 2012 and December 2021 were retrospectively analyzed.

Results: 88 patients were investigated with hilar BBSs. Clinical success was achieved in 81 of these cases (92.0%), including 38 patients in the IS group and 43 patients in the US group. Unexpected stent exchange (uSE) before the first scheduled PS exchange occurred in 18 cases (22.2%). The median time from first stent placement to uSE was 35 days. There was no significant difference about the rate and the median time to uSE between the two groups. The rates of adverse events such as pancreatitis or cholangitis in the two groups did not significantly differ. However, the rate of difficult stent removal in IS group (15.8%) was significantly higher than that in US group (0%) ($p=0.0019$).

Conclusion: US placement is preferable to IS placement for scheduled stent exchange, as it offers the same effectiveness and adverse events with easier stent removal.

Key words: Benign biliary stricture, Inside stent, Plastic stent