

論 文 要 旨

Efficacy and safety of a novel anti-reflux metal stent during
neoadjuvant chemotherapy for pancreatic cancer:
A prospective multicenter exploratory study

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Background/Purpose: The benefits of anti-reflux metal stents, used for treating biliary obstruction in patients receiving neoadjuvant chemotherapy (NAC) for pancreatic cancer, are yet unknown. Herein, the safety and efficacy of the novel duckbill-type anti-reflux metal stent (D-ARMS) were prospectively evaluated for biliary drainage. Additionally, the incidence of recurrent biliary obstruction (RBO) after placement of D-ARMS vs conventional covered self-expandable metal stents (CCSEMSs) was retrospectively compared.

Methods: Patients that received D-ARMS (n=33) for treatment of distal biliary obstruction before the NAC between September 2019 and January 2021 and those that received CCSEMSs (n=38) between January 2013 and August 2019 were included in the historical control group. Technical and clinical successes, rate of RBO, and cumulative incidence of RBO were compared between the two groups.

Results: The technical success rate was 100% for both the D-ARMS and CCSEMS groups, and the clinical success rate were not significantly different (93.9% and 89.5%, respectively; $P=0.68$). In the multivariate analysis, D-ARMS was identified as the independent factor for cumulative incidence of RBO ($P=0.03$). The cumulative incidence of RBO was significantly lower in the D-ARMS group than that in the CCSEMS group ($P=0.04$).

Conclusions: D-ARMS is safe and effective in patients receiving NAC.