



PARTIALLY COVERED VERSUS UNCOVERED SELF-EXPANDABLE METAL STENTS IN THE PALLIATIVE TREATMENT OF MALIGNANT DISTAL BILIARY OBSTRUCTION

Kyo-Sang Yoo*

*Department of Gastroenterology, Daejeon Eulji Medical Center, Eulji Univeristy, Daejeon, Korea



BACKGROUND/AIMS

- ◆ Self-expandable metal stents (SEMSs) are commonly used to relieve malignant biliary obstruction.
- ◆ Covered self-expandable metal stents (CSEMSs) were introduced to improve the patency of SEMSs by preventing tissue ingrowth. Unlike uncovered self-expandable metal stents (USEMSs), which are integrated into the tumor or duct wall, CSEMSs do not embed in the tumor or duct wall, but have an increased risk of migration.
- ◆ Although several retrospective studies comparing these two types of stents for malignant biliary obstruction have shown longer patency with CSEMSs, prospective, randomized trials have not been able to confirm these results.
- ◆ Partially covered self-expandable metal stents (PCSEMSs) has been introduced to reduce migration with advantage of CSEMSs preventing tumor ingrowth.
- ◆ The aim of this study was to compare stent patency and clinical outcomes between PCSEMSs and USEMSs in malignant biliary obstruction.

METHODS

- ◆ A total of 79 patients with malignant biliary obstruction were randomly assigned to either PCSEMSs (n=36) or USEMSs (n=43) for palliation of biliary obstruction.
- ◆ Duration of stent patency, procedure-related adverse events and intervention for stent occlusion were evaluated.

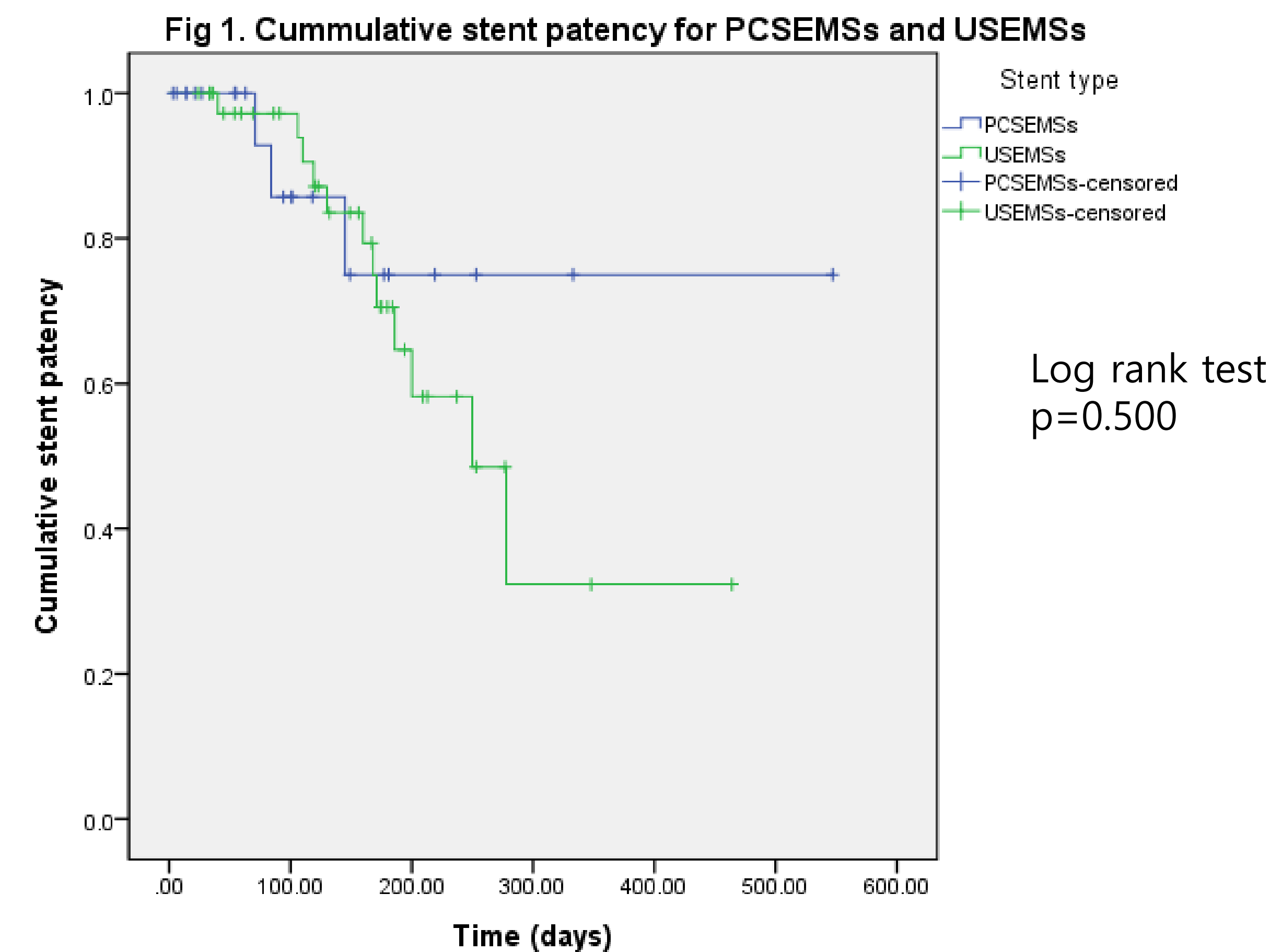


Table1. Mean period of follow-up days of the PCSEMSs and USEMSs

	PCSEMSs	USEMSs	P-value
Mean period of follow-up (days)	141.9±117.1	197.1±136.0	0.06

RESULTS

- ◆ The mean period of follow-up was 141.9±117.1 days for the PCSEMSs group and 197.1±136.0 days for the USEMSs group (P=0.06).
- ◆ Stent occlusion occurred in 4 patients after 102.2±32.5 days in the PCSEMSs group and in 14 patients after 145.4±70.3 days in the USEMSs group (P=0.258).
- ◆ Cumulative stent patency estimated by the Kaplan-Meier method showed no significant difference between PCSEMSs group and USEMSs group (P=0.76).
- ◆ There was no procedure-related adverse event in both groups. Additionally, migration of stent occurred in one patient of PCSEMSs group.

CONCLUSION

- ◆ There was no significant difference in stent patency time between PCSEMSs and USEMSs in the palliative treatment of malignant distal biliary obstruction.
- ◆ Migration of stent occurred in one patient of PCSEMSs group.
- ◆ Further studies with large population are warranted to validate these results.