Comparison of stent's patency and patients' survival between metal stents placement alone and metal stents placement after endobiliary radiofrequency ablation in unresectable malignant hilar obstruction

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DISCLOSURE

- All authors report no conflicts of interest.

WHAT THIS STUDY ADDS

Endobiliary radiofrequency ablation (RFA) has been considered a effective intervention for malignant hilar obstruction (MHO). However, the efficacy of endobiliary RFA in MHO is doubtful in view of stent patency and patients' survival.

BACKGROUND

- There’re little treatment options in MHO because of its poor prognosis.
- Endobiliary RFA has been adopted to resolve MHO, but it is still unclear **effectiveness** and there were **little studies** about this.

METHOD

- **Aim to** investigate the efficacy of endobiliary RFA for MHO
  - ***Stent's patency***
  - ***Patients' survival***
- **Design:** A retrospective observational study
- **Dataset:** Electronic medical record of Asan medical center, Seoul, Republic of Korea
- **Period:** From April 2016 to January 2020
- **Subjects:** 79 patients underwent unresectable hilar cholangiocell carcinoma or gallbladder cancer
- All procedures were performed by endoscopy specialist TJS.

RESULTS

Table 1. Clinical characteristics comparison between stent alone group and RFA-stent group

	RFA-stent group N(%) or mean (SD)	Stent alone goup N(%) or mean (SD)	P-value
Sample size	28	51	
Age (year)	68.8 (2.0)	65.0 (1.3)	0.22
Sex (male)	15 (53.6)	26 (51.0)	0.83
Cancer			0.20
Cholangiocell carcinoma	26 (92.9)	42 (82.4)	
Gall bladder cancer	2 (7.1)	9 (17.6)	
Bismuth type			0.66
1	1 (3.6)	1 (2.0)	
2	2 (7.1)	9 (17.6)	
3a	12 (42.9)	16 (31.4)	
3b	2 (7.1)	3 (5.9)	
4	11 (39.3)	22 (43.1)	
Distant metastasis	15 (53.6)	24 (47.1)	0.58
Major vessel invasion	17 (60.7)	33 (64.7)	0.73
Portal vein embolization	1 (3.6)	3 (5.9)	0.66
Chemotherapy	20 (71.4)	41 (80.4)	0.36

Continuous variable : t-test (after log-transformation)
categorical variable : Chi-square test or Fisher's exact test

RESULTS

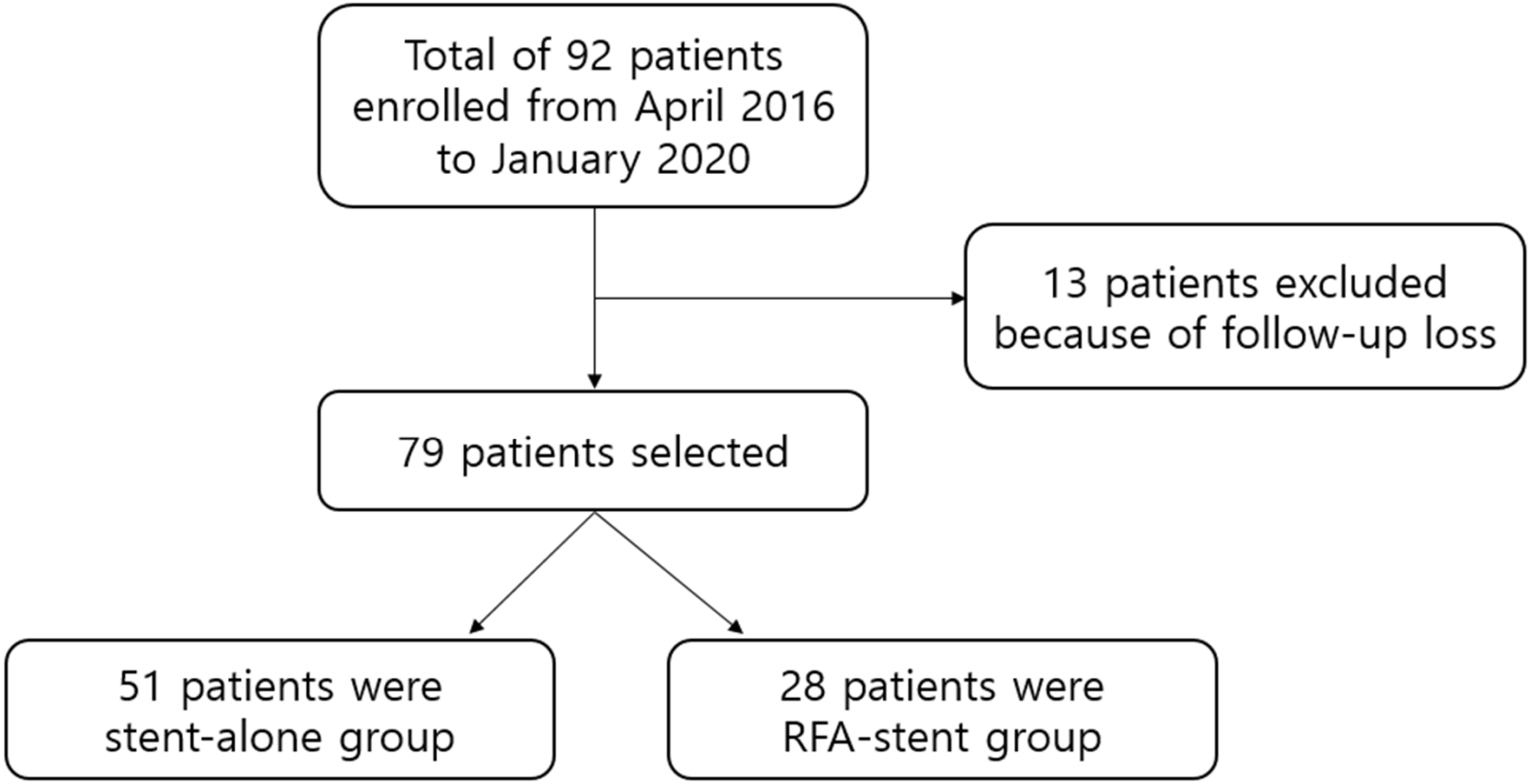
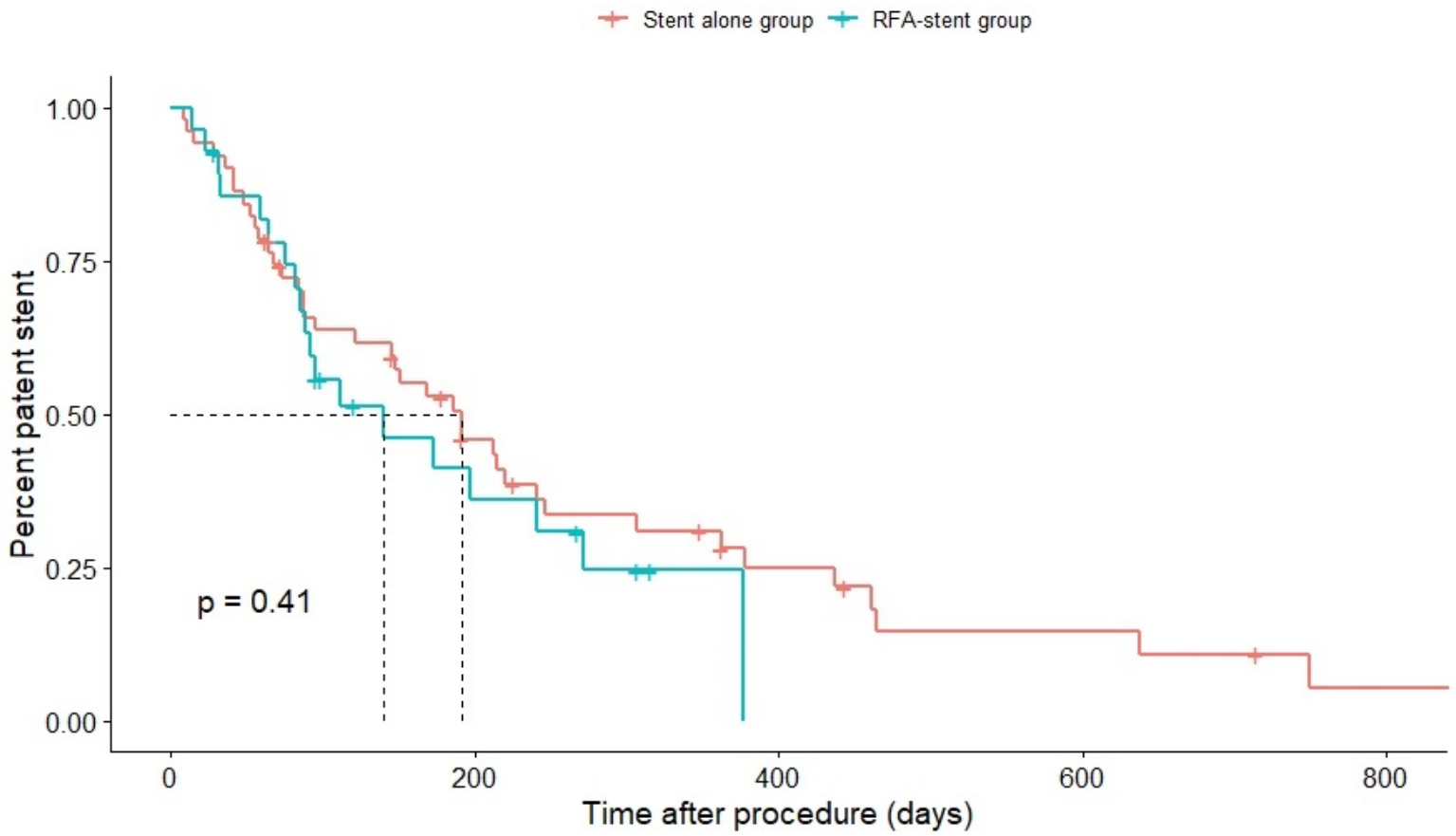


Figure 1. Flowchart summarizing patients selection process

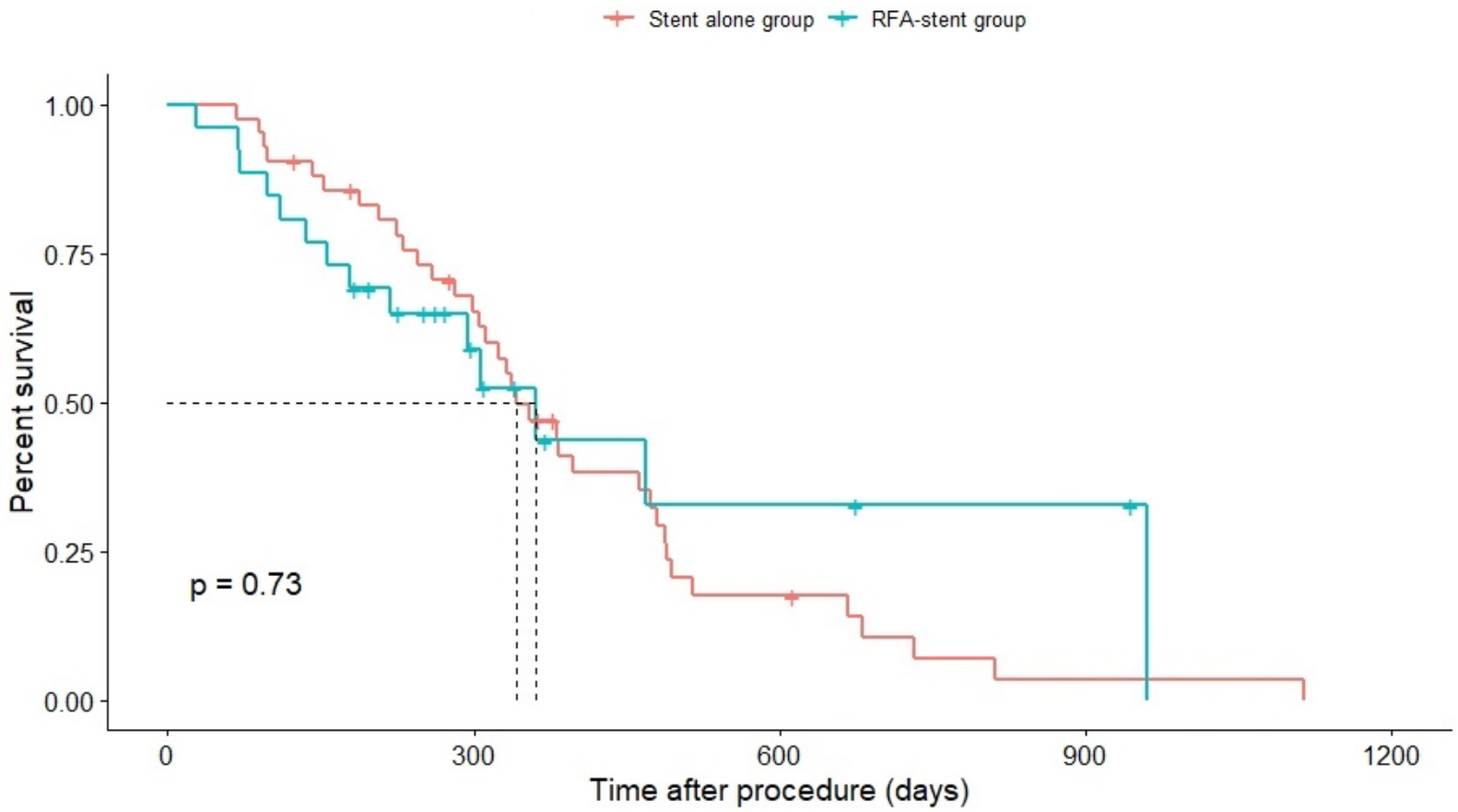
RESULTS

Figure 2. Comparison of stent patency between stent alone group and RFA-stent group



RESULTS

Figure 3. Comparison of patients' survival between stent alone group and RFA-stent group



CONCLUSION

Treatment with metal stents placement after endobiliary radiofrequency ablation (RFA) in malignant hilar obstruction (MHO) was not associated with improving stent's patency or patient's survival rates.