

Clinical Outcome of Endoscopic Submucosal Dissection for Early Gastric Cancer: A Retrospective Single-Center Study

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OBJECTIVE

- Endoscopic submucosal dissection (ESD) is a minimally invasive treatment for early gastric cancer. However, the outcomes of ESD for early gastric cancer in the United States are not well studied because of the low prevalence of gastric cancer.
- We aimed to assess the efficacy, and safety of ESD for early gastric cancer in the United States.

METHODS

- We performed a single-center retrospective analysis of patients who underwent gastric ESD between June 2018 and December 2021.
- The main outcome measures were en-bloc resection rate, R0 (complete) resection rate, procedure time, tumor size, hospital length of stay (LOS), histology, and complication rate.
- Complete resection (R0) was defined as en-bloc resection with lateral and deep margins free of neoplasia on histologic evaluation.

BASELINE CHARACTERISTICS

Age, y, median (IQR)		71 (68.9-76.8)
Sex, men/women, n		30/16
ASA grade, n (%)	I	0
	II	0
	III	5 (10.9)
	IV	41 (89.1)
Anesthesia, n (%)	Profopop	7 (15.2)
	General anesthesia	39 (84.8)
Lesion site, n (%)	Antrum	10 (21.7)
	Body	24(52.2)
	Cardia	12 (26.1)
Type of injection, n (%)	Eleview	11 (23.9)
	Orise	35 (76.1)
Device, n (%)	Dual knife	29 (63.0)
	Proknife	17 (37.0)
Interventions before ESD, n (%)	Tattoo into the lesion	6 (13.0)
	Lesion with scar	10 (21.7)
	Radiofrequency ablation	1 (2.2)
	ESD	4 (8.7)
	EMR	4 (8.7)

OUTCOMES

En bloc resection, n (%)		43 (94.5)
R0 resection, n (%)		36 (78.3)
Procedure time, min, median (IQR)		87.5 (69.3-118.8)
Tumor size, mm, median (IQR)		26 (20-35)
Length of hospital stay, d, mean ± SD		1.8±1.4
Histology, n (%)	Low-grade dysplasia	6 (13.0)
	High-grade dysplasia	5 (10.9)
	pT1a	21(45.7)
	pT1b	12(26.1)
	Neuroendocrine tumor	2(4.3)
Adverse event, n (%)		3 (6.5)
Type of adverse event, n (%)	Delayed bleeding	3 (6.5)
	Perforation	0
	Infection	0
	Hypotension	0

RESULTS

- The median procedure time was 87.5 min (range, 69.3-118.8 min). The median tumor size was 26mm (range, 20-35 mm). Mean hospital length of stay was 1.87±1.38 days. The most common histologic type was pT1a (45.7%), followed by pT1b (26.1%), low-grade dysplasia (13.0%), high-grade dysplasia (10.9%), and neuroendocrine tumor (4.3%).
- There were 3 adverse events all of which were delayed bleeding and no perforations were reported.

CONCLUSIONS

- Our study showed that gastric ESD is a safe and effective method for early gastric cancer. ESD should be considered to patients with suitable lesions in the U.S.

REFERENCES

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