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INTRODUCTION

Traditionally, a longitudinal incision is used for submucosal entry in POEM. Other variations like transverse or inverted T-incisions have been tried. We recently proposed a modified L-shaped incision, which eased and expedited entry in our pilot study.

AIM

To compare the procedural details between L-shaped and longitudinal incision for entry into submucosal space during POEM.

METHOD

Present study was a single center randomized trial. All patients for POEM were randomized into 2 groups; group A with L- shaped incision and group B with longitudinal incision. Primary objective was to compare the time required for the entry into submucosal space. The secondary objectives were to compare incision closure time, number of clips needed to close the incision and gas-related adverse events.

CONCLUSION

L-shaped mucosal incision for entry into submucosal space during POEM made the procedure easier and quicker as compared to longitudinal incision without significant change in clip requirement, closure time or complications.

REFERENCES

1. Rawal K K, Sadikot A, Kansagra C, Mori C. A modified mucosal incision for easy entry into the submucosal space during peroral endoscopic myotomy. *Cureus*. 2024;16:e72914. doi:10.7759/cureus.72914

RESULTS

A total of 27 Patients were randomized into group A (13) and group B (14). Endoscope entered the submucosal space without undermining the edges of the incision at the anal end in group A, thus making the entry easy. Entry time was significantly shorter in group A (median 1.23 minutes) as compared to group B (median 2.05 minutes, $p = 0.020$). Closure time and number of clips required for closure were same in both the groups. Gas-related complications were comparable between the 2 groups with a trend towards decreased adverse events in group A (Table 1).

Variables	L-shaped incision n=13 Median (Range)	Longitudinal incision n=14 Median (Range)	P value
Entry time (Min)	1.23 (1.06 - 3.05)	2.05 (1.13 - 2.80)	0.020
Closure time (Min)	7.55 (6.4 - 10.8)	8.43 (5.16 - 10.05)	0.406
Tunnel time (Min)	48.28 (35 - 55.28)	45.53 (28.78 - 61.23)	0.264
Myotomy time (Min)	32.17 (23.31 - 43.34)	30.43 (19 - 38.24)	0.164
Total time (Min)	85.54 (71.58 - 114.33)	84.88 (67.08 - 95.7)	0.166
No of clips	5.0 (3 - 8)	4.0 (3 - 10)	0.364
Capnoperitoneum	0.0 (0)	0.0 (0-2)	0.068

Table 1. Comparison of procedural details between two groups

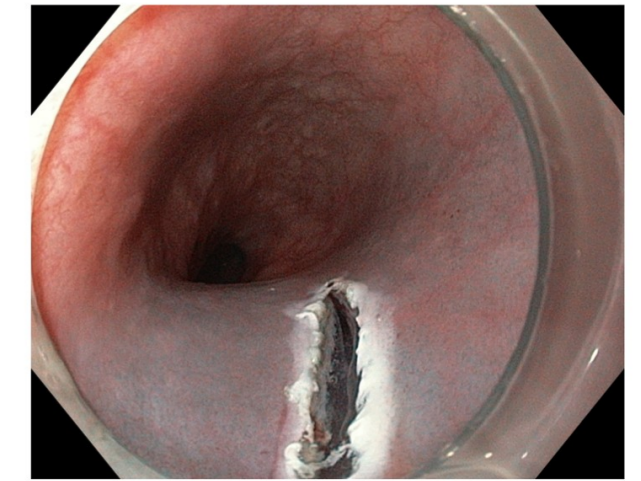


Figure 1 - Longitudinal Incision

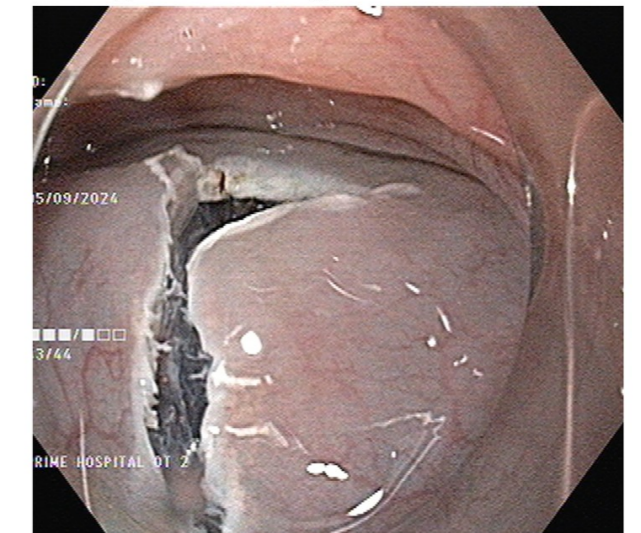


Figure 2 - L shaped Incision

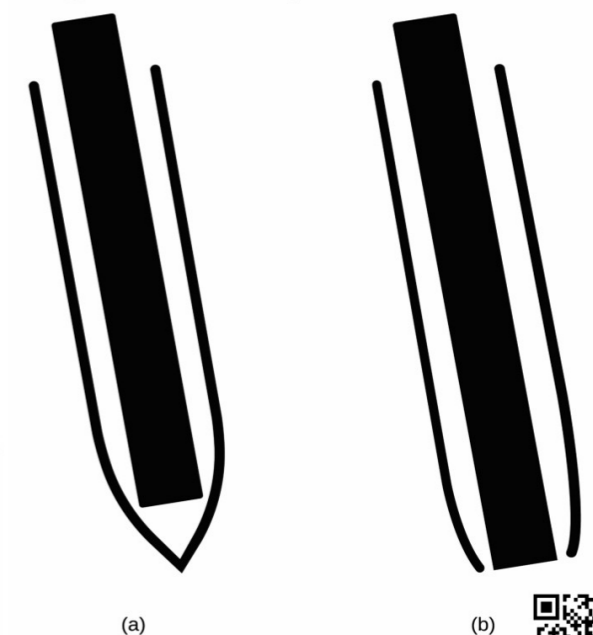


Figure 3

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