



Evaluation of EverLift™ in the performance of cold snare polypectomy (CSP) for 4-9mm polyps

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BACKGROUND & AIM

- Currently, CSP without submucosal injection is recommended for removing polyps <10mm.¹
- While submucosal injection of viscous agents has been found to be helpful in the removal of polyps ≥20mm, no study has evaluated its use in smaller polyps.²
- In June 2020, EverLift™ submucosal lifting agent (GI Supply, Mechanicsburg, Pennsylvania) was approved by the United States Food and Drug Administration.³
- We investigate the potential role of EverLift™ in CSP.

METHODS

- The study is a single-center prospective randomized clinical trial evaluating CSP of nonpedunculated 4-9mm polyps, with or without submucosal injection of EverLift™.
- Patients ≥18 years of age presenting for colonoscopy were recruited between September 16, 2020 and May 31, 2021.
- Each eligible polyp identified underwent block randomization to CSP with or without EverLift™.
- Following CSP, two biopsies were performed at the CSP site margin.
- Data collected included patient demographics, use of anticoagulation, history of liver disease, polyp size and morphology, CSP time, and need for additional snaring or hemostatic clips.
- The primary outcome was complete resection rate, defined by absence of residual polyp in the margin biopsies.

RESULTS

Table 1. Patient characteristics by intervention (with vs without EverLift)

	With EverLift™ (N=105)	Without EverLift™ (N=109)	p-value
Mean age (± SD)	68.9 (7.9)	68.7 (7.8)	0.820
Male (%)	102 (97.1)	107 (98.2)	0.621
Race/ethnicity			0.980
White, N (%)	75 (71.4)	74 (67.9)	
Asian, N (%)	3 (2.9)	3 (2.8)	
African American, N (%)	10 (9.5)	12 (11.0)	
Hispanic, N (%)	13 (12.4)	16 (14.7)	
Other, N (%)	4 (3.8)	4 (3.7)	
Mean height, cm (± SD)	176.6 (7.1)*	177.2 (7.6)	0.608
Mean weight, kg (± SD)	96.6 (20.5)*	94.6 (20.3)	0.471
Mean BMI (± SD)	31.0 (6.5)*	30.1 (6.0)	0.323
Anticoagulation, N (%)	14 (13.3)	9 (8.3)	0.231
Liver disease, N (%)	2 (1.9)	3 (2.8)	0.682
Indication			0.766
Screening, N (%)	1 (1.0)	3 (2.8)	
Surveillance, N (%)	73 (69.5)	73 (67.0)	
FIT positive, N (%)	8 (7.6)	10 (9.2)	
Diagnostic, N (%)	23 (21.9)	23 (21.1)	
Sedation			0.672
Moderate sedation, N (%)	94 (89.5)	98 (89.9)	
Monitored anesthesia care, N (%)	3 (2.9)	5 (4.6)	
No sedation, N (%)	8 (7.6)	6 (5.5)	
Mean Boston Bowel Prep Score (± SD)	7.6 (1.2)	7.7 (1.2)	0.734
Mean withdrawal time, min (±SD)	31.1 (14.0)***	30.3 (12.7)**	0.670

WORKS CITED

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Table 2. Polyp characteristics by intervention (with vs without EverLift)

	With EverLift™ (N=142)	Without EverLift™ (N=149)	p-value
Mean polyp size, mm (±SD)	5.3 (1.5)	5.3 (1.5)	0.949
Location of polyp			0.892
Cecum, N (%)	13 (9.2)	13 (8.7)	
Ascending, N (%)	39 (27.5)	42 (28.2)	
Hepatic flexure, N (%)	5 (3.5)	7 (4.7)	
Transverse, N (%)	48 (33.8)	50 (33.6)	
Descending, N (%)	19 (13.4)	14 (9.4)	
Sigmoid, N (%)	14 (9.9)	20 (13.4)	
Rectum, N (%)	4 (2.8)	3 (2.0)	
Pathology			0.189
Tubular adenoma, N (%)	124 (87.3)	126 (84.6)	
Sessile serrated polyp, N (%)	7 (4.9)	3 (2.0)	
Hyperplastic polyp, N (%)	10 (7.0)	15 (10.1)	
Normal colonic mucosa, N (%)	1 (0.7)	5 (3.4)	
Polyp morphology			0.567
Is, N (%)	122 (85.9)	129 (86.6)	
IIa, N (%)	19 (13.4)	19 (12.8)	
IIb, N (%)	1 (0.7)	0 (0.0)	
Isp, N (%)	0 (0.0)	1 (0.7)	
Positive margin, N (%)	2 (1.4)	4 (2.7)	0.428
Additional polypectomy needed, N (%)	6 (4.2)	5 (3.4)	0.697
Polypectomy by fellow, N (%)	13 (9.2)	25 (16.8)	0.054
Hemostatic clip used, N (%)	19 (13.4)	5 (3.6)	0.002
Mean polypectomy time, s (SD)	109.8 (56.0) ⁺	38.8 (54.5) ⁺	<0.0001

CONCLUSIONS

- Submucosal injection of EverLift™ increased time needed and use of hemostatic clips in CSP of 4-9mm polyps.
- There was high complete resection rate with or without EverLift™, with no significant difference between the two cohorts.
- Overall, this study supports that CSP of 4-9mm polyps can be performed safely and sufficiently without submucosal injection of EverLift™ (ClinicalTrials.gov ID: NCT04551014).

FOOTNOTES

- *Data not available for one patient
- **Data not available for four patients
- ***Data not available for two patients
- +Data not available for three polypectomies
- SD = Standard deviation

FUNDING

None to disclose