



EvoEndo Single-Use Endoscopy System



Table of Contents

Executive Summary	2
Background of Sedation-Free Transnasal Endoscopy	3
The EvoEndo Single-Use Endoscopy System	4
EvoEndo Implementation Value	6
EvoEndo System Benefits	7
Adoption of Sedation-Free TNE	8
Evidence-Based Practice Summary	9
References	10
Research Featuring EvoEndo	11
Contact Information	15

Executive Summary

The EvoEndo Endoscopy System is the only FDA-cleared product specifically designed for pediatric patients of all ages, enabling both sedation-free transnasal and traditional transoral endoscopy. EvoEndo pairs a single-use, ultra-slim, flexible scope suitable for small or challenging anatomy with a portable controller and a virtual reality-based system for patient distraction. Healthcare partners are equipped with high-resolution, reliable scopes that streamline processes, minimize costs, and expand patient access.

The EvoEndo Model LE Endoscope received FDA clearance in 2022, the only option available for sedation-free transnasal endoscopy for pediatric patients five and older. In 2025, the FDA cleared an expanded indication for the Model LE v2 110 Endoscope that eliminates the age restriction, making safe, transoral endoscopy available to infants and young children, a previously underserved population.



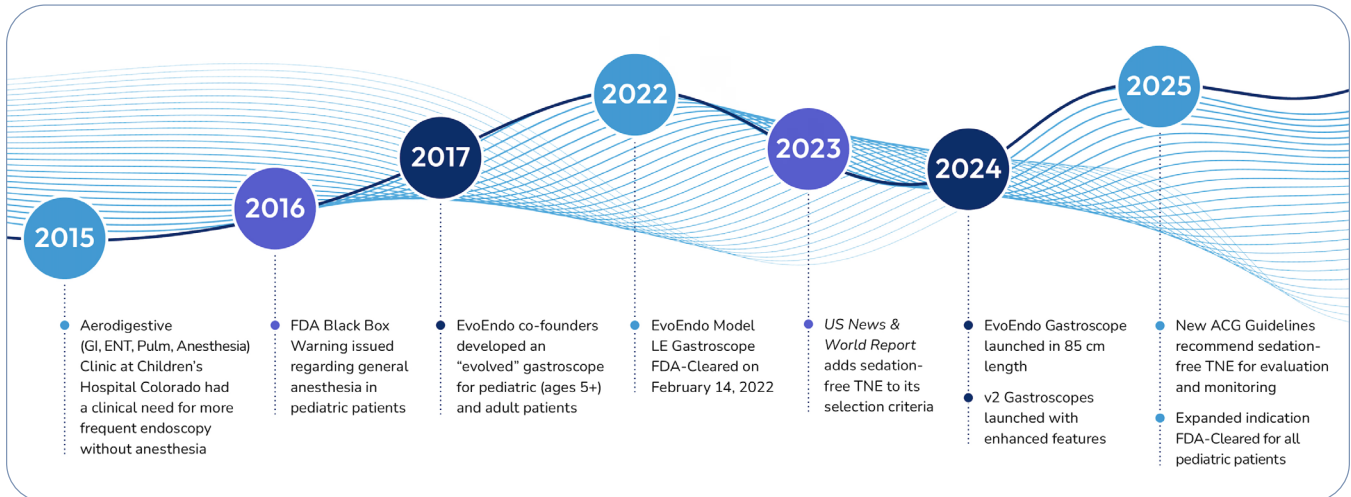
*This expanded clearance is **a major step forward**. Being able to use the EvoEndo system in children under five allows us to safely support diagnosis and care in even the youngest patients. It also opens the door to broader applications beyond transnasal endoscopy, giving pediatric specialists more flexibility to **deliver safer, more effective care** for this vulnerable population.”*

— Michael A. Manfredi, MD
Pediatric Gastroenterologist

The Model LE Endoscope is available in two lengths: the v3 85 cm for pediatric patients and the v2 110 cm for patients of all ages. EvoEndo is the leading choice for all endoscopies, from sedated transoral procedures in babies to sedation-free transnasal procedures preferred by older pediatric and adult patients.

Unsedated transnasal endoscopy (TNE) is now recommended by the American College of Gastroenterology (ACG) for regular endoscopic assessments and long-term monitoring, particularly in children, to minimize anesthesia exposure and associated costs. TNE is well tolerated and provides reliable histologic and endoscopic assessments. EvoEndo technology is the ideal solution for complying with these guidelines and aligns with evolving standards of care.

EvoEndo is committed to innovation, continuous product enhancement, and hands-on education to consistently advance patient outcomes, improve clinical efficiency, and elevate standards of care.

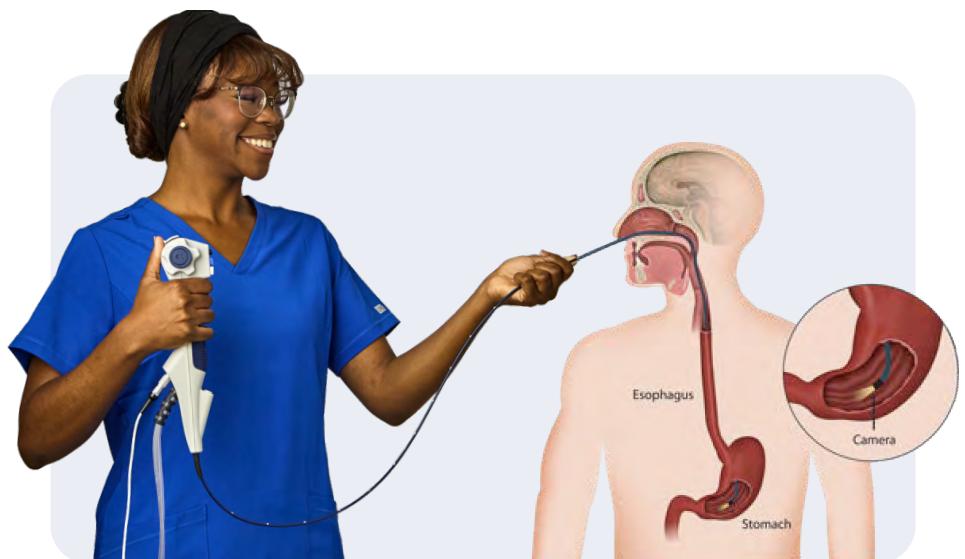


Background of Sedation-Free Transnasal Endoscopy

The pediatric gastroenterology community is seeking lower-risk, sedation-free alternatives to traditional endoscopy to avoid exposing patients to unnecessary anesthesia, especially those who require multiple endoscopies. Until now, no technology had been specifically designed and FDA-cleared for sedation-free transnasal endoscopy in pediatric patients. Some technologies have been used off-label, but they suffer limitations, including time-consuming and expensive maintenance, potential for cross-contamination, and design that does not accommodate pediatric anatomy. EvoEndo overcomes these limitations with its single-use, ultra-thin scopes.

In 2025, ACG published new guidelines that provide evidence-based recommendations for the diagnosis and management of various gastrointestinal and liver diseases, helping clinicians make informed decisions and improve patient care. The ACG Guidelines for Eosinophilic Esophagitis (EoE) mark a shift toward safer and more accessible care, especially for pediatric patients. The published guidelines state, "Unsedated transnasal endoscopy is now used, particularly in children, to minimize anesthesia exposure and costs." It is safe, well tolerated, and can provide endoscopic and histologic measures (EREFS and esophageal biopsies) to assess response.

US News & World Report has integrated sedation-free TNE in the annual "Best Hospitals" honor roll criteria. These prestigious rankings serve as a trusted guide for families seeking top-quality care providers and underscore the importance of innovative and patient-centered treatments.

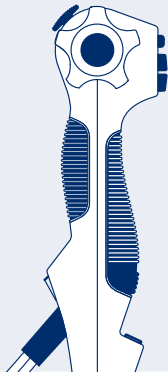


EvoEndo Single-Use Endoscopy System

The EvoEndo Single-Use Endoscopy System is the only product on the market with high-definition image quality, 4-way steering, air/water/suction functionality, and a 2.0 mm working channel, all in an ultra-slim 3.5 mm diameter disposable scope. The working channel accommodates most standard pediatric accessories, and scopes are available in both 85 and 110 cm lengths, making them suitable for small or challenging anatomy covering a broad range of indications.

The EvoEndo System is lightweight, portable, and deployable across multiple care settings, allowing for point-of-care service. This makes diagnostic and therapeutic endoscopy more accessible, timely, and convenient for both patients and physicians.

EvoEndo remains committed to expanding access and elevating the standard of care for every patient and is already available in over 60 facilities nationwide, with additional locations coming soon.



EvoEndo Model LE Single-Use Gastroscopes

- Enables full transnasal and transoral EGD
- Better fits small or challenging nasal anatomy
- Features working channel that accommodates most standard pediatric accessories in a narrow outer diameter
- Eliminates the risk of scope cross-contamination



Indications for Use

The EvoEndo Model LE Gastroscopy is intended for the visualization of the upper digestive tract in adults and pediatric patients, specifically for the observation, diagnosis, and endoscopic treatment of the esophagus, stomach, and duodenal bulb. The gastroscopy is a sterile single-use device and can be inserted orally or transnasally. The 110 cm gastroscopy is intended to be used in adult and pediatric populations. The 85 cm gastroscopy is intended to be used in the pediatric population. The EvoEndo Controller is intended for use with an EvoEndo Endoscope for endoscopic diagnosis, treatment, and video observation.

EvoEndo Controller

- Lightweight and portable at 6" x 8.5" and just 2 pounds
- Easy to set up – plug and play
- Enables scaling to multiple sites
- Allows integration with some third-party endoscopy reporting software (e.g., Provation)

EvoEndo Patient Experience Kit¹

- Virtual reality patient distraction via single-use VR goggles²
- Stress-relief squeeze ball

Technical Product Specifications

EvoEndo Model LE Single-Use Gastroscope Specifications

OPTICAL SYSTEM	
Field of view	120° diagonal, 87.5° horizontal
Depth of field	>2.5 mm
Illumination method	LED
INSERTION PORTION	
Endoscope tip	210° up, 90° down, 180° left, 180° right
Insertion tube diameter	3.5 mm (0.14")
Distal end diameter	3.5 mm (0.14")
Maximum diameter of insertion portion	3.5 mm (0.14")
Working length	Model LE 85 = 85 cm (33.5") Model LE 110 = 110 cm (43.3")
CHANNEL	
Average inner diameter	2.0 mm (0.078")
Minimum instrument channel width	2.0 mm (0.078")
Air connector	Connects to 1/4" – 3/8" supply lines
Water connector	Connects to bottle with 1.25" top
Suction connector	Connects to standard 6 mm suction device
OPERATING ENVIRONMENT	
Intended for use under standard ambient environmental conditions consistent with those found in ambulatory care environments.	
STORAGE	
Store the sterile device in a cool, dry place, protected from direct sunlight, moisture, and excessive heat. Ensure the primary packaging remains intact to preserve sterility.	
STERILIZATION	
Method of sterilization	EtO

¹ EvoEndo Patient Experience Kit is not part of the cleared EvoEndo System
² Phone required and not included.

EvoEndo Implementation Value

Introducing EvoEndo Single-Use Gastrosopes to your program means more than just acquiring a product; it signifies a partnership dedicated to your success. The EvoEndo team will guide you at every stage, delivering unparalleled expertise, essential tools, and invaluable resources to establish and grow a sedation-free transnasal endoscopy (TNE) program.

Clinical Support & Training

- In-service training on TNE and the EvoEndo System
- Head model and demo equipment for practice
- Detailed instructions, workbooks, videos, and checklists
- Guidance on preparing patients and families
- On-site support for first cases
- Scoring system for tracking success
- Visiting Physician Program for peer training and support
- Network of KOLs and TNE providers
- User group for collaboration and support
- Educational webinars

Business Planning

- Reimbursement and chargemaster resources
- Preparation materials for your Value Analysis Committee
- Models for estimating economic value
- Program start-up checklist and templates
- Library of evidence-based literature and scientific abstracts

Implementation Planning

- Materials for preparing your site and equipment
- Best practices for TNE methods and staffing
- Procedure workflow suggestions, tips, and tricks

Program Launch & Expansion

- Patient education website, materials, and videos
- Recruiting tools and templates
- Digital marketing templates and best practices



*The EvoEndo team was **incredible in brainstorming ways for our group to provide even more high-value care to our patients.** They worked diligently with our administration to implement an accessible cart for mobile use of the EvoEndo system.*

***This has been revolutionary,** allowing us to provide care in the emergency department, ICU, and on the inpatient wards more easily.”*

— Paul Tran, MD
Pediatric Gastroenterologist

EvoEndo System Benefits

PATIENT BENEFITS

Safety

- No needles, no anesthesia.
- No risk of infection from cross-contamination.

Convenience

- Less time waiting for an available appointment.
- Quicker recovery.
- Less fasting time, less time in clinic, less disruption.
- Procedure typically takes only 5–10 minutes.
- Reduces burden on caregivers.
- More frequent scoping is possible.

Patient-Centric

- Distraction techniques improve the patient experience.
- Family or caregiver can accompany patient during the procedure.
- Healthcare professional can discuss visual findings immediately.

HEALTHCARE PROFESSIONAL BENEFITS

Efficiency

- More procedures in less time.
- No waiting for scope reprocessing and repairs.
- Easy to operate, small footprint, highly portable.

Improved Outcomes

- Faster time to diagnosis.
- Better access and fewer barriers to care for patients.
- Well-tolerated by majority of patients with a 98% success rate.*
- Increased patient compliance.

Risk Mitigation

- Reduces complication potential related to anesthesia.
- Eliminates cross-contamination risk from scope reprocessing.

HEALTHCARE SYSTEM BENEFITS

Improved Economics

- Additional revenue stream through increased procedural throughput.
- Reduces total cost of ownership.
- Stabilizes operational budget expenditures.

Better Resource Management

- Frees up expensive, OR-based treatment areas for higher-margin procedures.
- Reduces procedural backlogs.
- Improves patient no-show rates by decreasing wait times.
- Eliminates staff downtime for reprocessing or repair of reusable scopes.
- Less staff required to support the same volume of procedures.

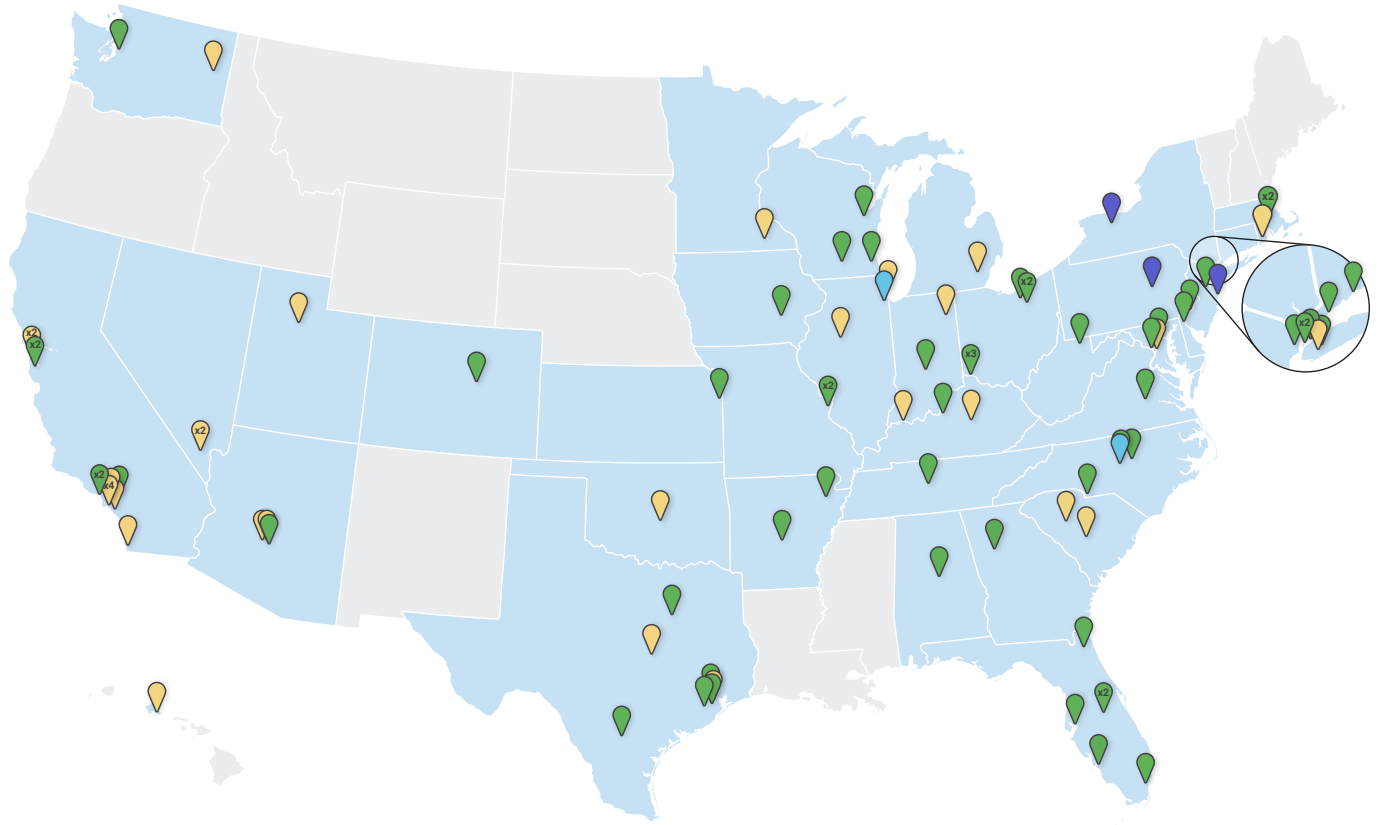
Scalability

- Low capital and minimal start-up costs enable rapid program expansion.
- System portability can transform underutilized spaces to revenue generating procedure sites.

Adoption of Sedation-Free TNE with the EvoEndo System

Now in Hospitals Nationwide

EvoEndo is in more than 60 hospitals, with new locations coming soon!



● EvoEndo Provider – Pediatric
 ● EvoEndo Provider – Adult
 ● EvoEndo Provider – ALL
 ● Future EvoEndo Provider

98%
Success Rate
TNE with
EvoEndo

2,800+
TNE Cases
performed with
EvoEndo

350+
Published
Articles
on TNE


As of 04/06/26. See evoendo.com/stats for most recent.

Evidence-Based Practice Summary

Sedation-free upper gastrointestinal endoscopy, also known as unsedated endoscopy, has been available and reported in the United States and around the world since 1994.^{1,2} Originally developed by an adult physician, ultra-thin endoscopes were developed to enable transnasal insertion during the sedation-free procedure.^{1,2} Evaluation of the upper GI tract could include the esophagus, stomach, and/or small intestine.¹⁻⁴ The transnasal approach, called TNE, was noted to be more comfortable than transoral insertion without sedation.^{4,5} Compared to the EvoEndo Model LE Gastroscope, the diameter of most competing endoscopes is usually equal to or greater than 5 mm (approximately 0.2 in) and sacrifices various features to accommodate the smaller size.^{2,3,5,6} Multiple studies using these techniques and the devices, document the increased economic benefit to the healthcare system, while also improving safety, reliability, and ease of learning.^{1,2,4-12} However, despite these reports, adoption has been chiefly limited to otolaryngologists in the United States and gastroenterologists internationally for various reasons.¹³⁻¹⁵ The manuscripts, with case series sometimes greater than 1,000 patients, highlighted the use of TNE for the evaluation of reflux, Barrett's esophagus, esophageal varices, enteral tube placement, esophageal strictures, GI screening, and first-line diagnosis in elderly or high-risk patients.^{2-4,6,16-18} Several pieces of literature about the technique can be found on the EvoEndo website and other educational resources.

Sedation-free endoscopy in pediatrics has grown tremendously in the United States since 2016. This has been primarily around the care of patients with eosinophilic esophagitis (EoE).^{6,9-12,16,19-23} Studies have documented reliable biopsies, increased patient safety, improved efficiency, cost/charge savings, high success rate, and high patient satisfaction.^{3,6,9-12,24,25} Previous pediatric studies used flexible endoscopic devices not cleared for Upper GI endoscopy and missing features of gastroscopes.^{14,20,23,26,27} In February 2022, EvoEndo released a fully featured ultra-slim gastroscope to perform transnasal and transoral evaluation of the upper GI tract. Its initial use publication with a variety of experienced physicians documented a success rate of over 94%.^{3,28,29} Since 2022, over 2500 endoscopies have been performed across more than 60 medical centers with more than 150 providers, and the EvoEndo Single-Use Endoscopy System has had a success rate of greater than 97.5%.^{3,28,29} Most physician use has been to evaluate therapeutic response in EoE in either a sitting or lateral position, but others have used the device to evaluate, varices, duodenitis, gastritis, non-EoE esophagitis, infantile feeding/reflux concerns, H. Pylori, abdominal pain, vomiting, reflux, or dysphagia.^{3,28-31} As an ultra-slim gastroscope, it has also been used in a sedated environment for therapeutic purposes such as enteral tube placement, injection therapy, and stricture evaluation/dilation. By 2025, EvoEndo's technology has been studied, discussed, or featured in 11 peer reviewed publications. Additionally, 29 research abstracts highlighting EvoEndo's training programs, device use in various disease states, and its use in various healthcare sites of service will have been presented at scientific meetings. (See Abstract Listing on EvoEndo's Web Site)^{6,23-25} EvoEndo's device has been transformative for more than 60 medical centers nationwide.

References

1. Shaker R. Unsedated trans-nasal pharyngoesophagogastroduodenoscopy (T-EGD): technique. *Gastrointest Endosc* 1994;40:346-8.
2. Saeian K, Townsend WF, Rochling FA, et al. Unsedated transnasal EGD: an alternative approach to conventional esophagogastroduodenoscopy for documenting *Helicobacter pylori* eradication. *Gastrointest Endosc* 1999;49:297-301.
3. Smadi Y, Thomas J, Bittar K, et al. Office-based sedation-free transnasal esophagogastroduodenoscopy with biopsies using single-use gastroscopes: A pediatric single-center experience. *JPGN Rep* 2024;5:29-34.
4. Dumortier J, Napoleon B, Hedelius F, et al. Unsedated transnasal EGD in daily practice: results with 1100 consecutive patients. *Gastrointest Endosc* 2003;57:198-204.
5. Parker C, Alexandridis E, Plevris J, et al. Transnasal endoscopy: no gagging no panic! *Frontline Gastroenterol* 2016;7:246-256.
6. Tran P, Lee R, Mencin A, et al. The mouth or the nose: the past, present, and future of ultra-slim gastroscopy of the upper gastrointestinal tract in pediatrics. *Front Pediatr* 2025;13:1630157.
7. Committee AT, Rodriguez SA, Banerjee S, et al. Ultrathin endoscopes. *Gastrointest Endosc* 2010;71:893-8.
8. Maffei M, Dumortier J, Dumonceau JM. Self-training in unsedated transnasal EGD by endoscopists competent in standard peroral EGD: prospective assessment of the learning curve. *Gastrointest Endosc* 2008;67:410-8.
9. Nguyen N, Lavery WJ, Capocelli KE, et al. Transnasal Endoscopy in Unsedated Children With Eosinophilic Esophagitis Using Virtual Reality Video Goggles. *Clin Gastroenterol Hepatol* 2019;17:2455-2462.
10. Nguyen N, Pan Z, Smith C, et al. Transnasal endoscopy ease score "TNEase score" to evaluate patient tolerance of unsedated transnasal endoscopy. *J Pediatr Gastroenterol Nutr* 2024;78:381-385.
11. Dollin YT, Mark JA, Andrews R, et al. Adverse events are lower in unsedated transnasal esophagoscopy versus sedated esophagogastroduodenoscopy. *J Pediatr Gastroenterol Nutr* 2025;81:140-145.
12. Joseph M, Steinberg J, Mark JA, et al. Economic Benefit of Implementation of Pediatric Transnasal Endoscopy in Eosinophilic Esophagitis. *Clin Gastroenterol Hepatol* 2025;23:1662-1664 e2.
13. Kwa L, Bodnar A, Scher M, et al. National trends in the utilization of office-based transnasal esophagoscopy. *Am J Otolaryngol* 2025;46:104746.
14. Nguyen N, Mark J, Furuta GT. Emerging Role of Transnasal Endoscopy in Children and Adults. *Clin Gastroenterol Hepatol* 2022;20:501-504.
15. Tanuma T, Morita Y, Doyama H. Current status of transnasal endoscopy worldwide using ultrathin videoscope for upper gastrointestinal tract. *Dig Endosc* 2016;28 Suppl 1:25-31.
16. Joseph M, Corrado MM, Odiase E, et al. Sedation-free transnasal esophagoscopy to evaluate and monitor esophageal diseases in children with esophageal atresia-tracheoesophageal fistula. *JPGN Rep* 2024;5:166-169.
17. Cho S, Arya N, Swan K, et al. Unsedated transnasal endoscopy: a Canadian experience in daily practice. *Can J Gastroenterol* 2008;22:243-6.
18. Castro Filho EC, Perazzo H, Guimaraes RAP, et al. Reliability and safety of transnasal compared to conventional endoscopy for detecting oesophageal varices in cirrhotic patients. *Liver Int* 2018;38:1418-1426.
19. Mahoney LB, Lightdale JR, Rubinstein E, et al. Assessing competence in unsedated transnasal endoscopy: Development of the TransNasal Endoscopy Skills Assessment Tool. *J Pediatr Gastroenterol Nutr* 2026;82:858-866.
20. Friedlander JA, Leinwand K, Bhardwaj V, et al. A guide on transnasal endoscopy: setting up a pediatric unsedated endoscopy program. *Front Pediatr* 2023;11:1267148.
21. Venkatesh RD, Leinwand K, Nguyen N. Pediatric Unsedated Transnasal Endoscopy. *Gastrointest Endosc Clin N Am* 2023;33:309-321.
22. Eid S, Bauer M, Nguyen N. The Role of Transnasal Endoscopy in Diet Management of Eosinophilic Esophagitis. *ACG Case Rep J* 2024;11:e01563.
23. Friedlander JA, Fleischer DM, Black JO, et al. Unsedated transnasal esophagoscopy with virtual reality distraction enables earlier monitoring of dietary therapy in eosinophilic esophagitis. *J Allergy Clin Immunol Pract* 2021;9:3494-3496.
24. Shaul E, Kennedy KV, Spergel ZC, et al. Endoscopic and histologic utility of transnasal endoscopy in pediatric eosinophilic esophagitis. *J Pediatr Gastroenterol Nutr* 2024;78:1155-1160.
25. Lopez-Nunez O, Bernieh A, Kliever KL, et al. Transnasal Endoscopy Acquires Esophageal Biopsies Adequate for Comprehensive Pathology Evaluation in Patients With Eosinophilic Esophagitis. *Pediatr Dev Pathol* 2024;27:327-334.
26. Khalaf RT, Mehta P, Lovell MA, et al. Esophagitis Dissecans Superficialis Diagnosed by Unsedated Transnasal Esophagoscopy. *J Pediatr Gastroenterol Nutr* 2019;69:e54.
27. Friedlander JA, DeBoer EM, Soden JS, et al. Unsedated transnasal esophagoscopy for monitoring therapy in pediatric eosinophilic esophagitis. *Gastrointest Endosc* 2016;83:299-306 e1.
28. Thavamani A, Ryan MJ, Leinwand K, et al. Safety and efficacy of a novel ultrathin gastroscopy for unsedated transnasal endoscopy in children and adults for evaluation of upper GI disorders. *IGIE* 2024;3:15-19.
29. Khan A, O'Connell, I, Shreffler, W, Friedlander JA, Yuan, Q. A Case Series of Rapid Resolution of Pediatric Eosinophilic Esophagitis with Dupilumab Treatment as Demonstrated by Sedation-Free Transnasal Esophagoscopy (TN-Eso). *Archives of Gastroenterology Research* 2025;6:35-39.
30. Friedlander JA, Smith C, Nguyen N, et al. Proof of concept functional endoscopic esophageal evaluation of swallowing (FEEES) using unsedated transnasal endoscopy (TNE). *J Pediatr Gastroenterol Nutr* 2024;78:749-751.
31. Lee R, Oparaugo Y, Mackensen M, et al. Left lateral decubitus position during sedation-free transnasal endoscopy: A pilot study. *JPGN Rep* 2025;6:215-218.

Research Featuring EvoEndo

Clinical Data — Papers Published in Peer Reviewed Journals

1. Safety and Efficacy of a Novel Ultrathin Gastroscope for Unsedated Transnasal Endoscopy in Children and Adults for Evaluation of Upper Gastrointestinal Disorders

A. Thavamani, M. J. Ryan, K. Leinwand, R. Ramraj, S. Schroeder, P. A. Menard-Katcher, et al. (2024). "Safety and efficacy of a novel ultrathin gastroscope for unsedated transnasal endoscopy in children and adults for evaluation of upper GI disorders." *iGIE* 3(1): 15-19. March 2024

[https://www.igiejournal.org/article/S2949-7086\(23\)00161-9/fulltext](https://www.igiejournal.org/article/S2949-7086(23)00161-9/fulltext)

2. Office-Based Sedation-Free Transnasal Esophagogastroduodenoscopy (TN-EGD) with Biopsies Using Single-Use Gastroscopes: A Pediatric Single-Center Experience

Smadi Y, Thomas J, Bittar K, Norton H, Friedlander JA, Bornstein J. Office-based sedation-free transnasal esophagogastroduodenoscopy with biopsies using single-use gastroscopes: A pediatric single-center experience. *JPGN Rep.* 2023 Dec 20;5(1):29-34.

<https://onlinelibrary.wiley.com/doi/10.1002/jpr3.12025>

<https://pubmed.ncbi.nlm.nih.gov/38545271/>

3. Proof of Concept Functional Endoscopic Esophageal Evaluation of Swallowing (FEEES) Using Unsedated Transnasal Endoscopy

Friedlander JA, Smith C, Nguyen N, Mark J, Prager JD, DeBoer E, Deterding R, Belkind-Gerson J. Proof of concept functional endoscopic esophageal evaluation of swallowing (FEEES) using unsedated transnasal endoscopy (TNE). *J Pediatr Gastroenterol Nutr.* 2024 Mar;78(3):749-751.

<https://pubmed.ncbi.nlm.nih.gov/38314907/>

4. A Guide on Transnasal Endoscopy: Setting Up a Pediatric Unsedated Endoscopy Program

Friedlander JA, Leinwand K, Bhardwaj V, Nguyen N. A guide on transnasal endoscopy: setting up a pediatric unsedated endoscopy program. *Front Pediatr.* 2024 Jan 16;11:1267148.

<https://pubmed.ncbi.nlm.nih.gov/38293661/>

5. Pediatric Unsedated Transnasal Endoscopy: Applications, Equipment, and Future Directions

Bose P and Pitman R (2025) Pediatric unsedated transnasal endoscopy: applications, equipment, and future directions. *Front. Pediatr.* 13:1585705.

<https://www.frontiersin.org/journals/pediatrics/articles/10.3389/fped.2025.1585705/full>

<https://pubmed.ncbi.nlm.nih.gov/40416438/>

6. A Case Series of Rapid Resolution of Pediatric Eosinophilic Esophagitis with Dupilumab Treatment as Demonstrated by Sedation-Free Transnasal Esophagoscopy (TN-Eso)

Khan A, O'Connell IN, Shreffler WG, Friedlander JA, Yuan Q. A Case Series of Rapid Resolution of Pediatric Eosinophilic Esophagitis with Dupilumab Treatment as Demonstrated by Sedation-Free Transnasal Esophagoscopy (TN-Eso). *Arch Gastroenterol Res.* 2025;6(1):35-39.

<https://www.scientificarchives.com/article/a-case-series-of-rapid-resolution-of-pediatric-eosinophilic-esophagitis-with-dupilumab-treatment-as-demonstrated-by-sedation-free-transnasal-esophagoscopy-tn-eso>

7. Left Lateral Decubitus Position During Sedation-Free Transnasal Endoscopy: A Pilot Study

Lee R, Oparaugo Y, Mackensen M, Vaidy K. Left lateral decubitus position during sedation-free transnasal endoscopy: a pilot study. *JPGN Rep.* 2025;6:215-218.

<https://onlinelibrary.wiley.com/doi/full/10.1002/jpr3.70047>

<https://pubmed.ncbi.nlm.nih.gov/40814580/>

8. The Mouth or the Nose: The Past, Present, and Future of Ultra-Slim Gastroscopy of the Upper Gastrointestinal Tract in Pediatrics

Tran P, Lee R, Mencin A, Ryan M, Friedlander JA and Manfredi MA (2025) The mouth or the nose: the past, present, and future of ultra-slim gastroscopy of the upper gastrointestinal tract in pediatrics. *Front. Pediatr.* 13:1630157.

https://www.frontiersin.org/journals/pediatrics/articles/10.3389/fped.2025.1630157/full?utm_source=F-NTF&utm_medium=EMLX&utm_campaign=PRD_FEOPS_20170000_ARTICLE
<https://pubmed.ncbi.nlm.nih.gov/40766914/>

9. Using Virtual Reality Distraction and Disassociation (VRDD) in Adult Gastrointestinal Endoscopy: A Pilot Study

Lee PS, Effard J, Maxwell IA, et al. Using Virtual Reality Distraction and Disassociation (VRDD) in Adult Gastrointestinal Endoscopy: A Pilot Study. *iGIE*. In Press

[https://www.igiejournal.org/article/S2949-7086\(26\)00026-9/fulltext](https://www.igiejournal.org/article/S2949-7086(26)00026-9/fulltext)

10. Novel Endoscopic Cryoprobe Extraction of Acute Food Bolus Impaction: A Case Report

Henderson M, Du N, Zimmerman LA, Yasuda, J, Chang D, Visner G, Ngo P. Novel endoscopic cryoprobe extraction of acute food bolus impaction: a case report. *iGIE* 2025;4:359-361.

[https://www.igiejournal.org/article/S2949-7086\(25\)00082-2/fulltext](https://www.igiejournal.org/article/S2949-7086(25)00082-2/fulltext)

Research — Scientific Abstracts Published or Presented at Scientific Meetings

2025

Digestive Diseases Week (DDW)

Posters:

Hanley K, Kucher W, Horne B, Farina D, Morton A, Komanduri, S. *Point of Care Transnasal Endoscopy (TNE) Performed by Advanced Practice Providers Using Single-Use Ultra Slim Gastroscopes in an Ambulatory Esophageal Clinic*

American Foregut Society (AFS) Annual Meeting

Oral/Poster:

Hanley K, Komanduri S. *Point of Care Assessment of Esophageal Disease: The Impact of APP Directed TNE in GI Clinic*

North American Society For Pediatric Gastroenterology, Hepatology, and Nutrition Annual Meeting (NASPGHAN)

Posters:

Sessions J, Joseph M, Stahl M, Liu E, Nguyen N, Mark J. *Unsedated Transnasal Esophagogastroduodenoscopy for Evaluation of Pediatric Celiac Disease, A Single Center Pilot Experience*

Hamilton L, Tran P. *Sedation-Free Transnasal Esophagoscopy to Evaluate Esophageal Varices in an 18-Year-Old Male with Fontan Associated Liver Disease (FALD)*

Koka A, Gautam N, Kuehn A, Tran P. *Bedside Sedation-Free Endoscopic Intrapyloric Botulinum Toxin Injection in an Adolescent: A Case Report*

Lee R, Oparaugo Y, Mackensen M, Vaidy K. *Left Lateral Decubitus Position During Sedation-Free Transnasal Endoscopy: A Pilot Study*

Smadi Y, Bornstein J, Mehta V, Bittar K. *First One Hundred Cases of Sedation-Free Endoscopy Using Single-Use Gastroscope. A Pediatric Single-Center Experience*

Vaidy K, Mackensen M, Lee R. *Transnasal Endoscopy, a Retrospective Study in a Large Pediatric Population at Children's Hospital of Wisconsin*

Wong J, O'Connell D. *Establishment of an Outpatient Transnasal Endoscopy Program at a Medium Sized Tertiary Care Center*

Lyles J, Newton K, Dickinson B, Chumpitazi B. *Sedation-Free Trans-Nasal Esophagoscopy is Sweet: Safe, Well-Tolerated, Effective, Efficient, and a Total Cost Saver*

Sarintra N, Pesek R, Tootle C, Ayers T, Khan H. *Feasibility and Outcomes of Transnasal Endoscopy in Children with High-Functioning Autism: A Single-Center Case Series*

Smadi Y, Al-Mulaabed S, Mehta V. *Feasibility of Sedation-Free Transnasal Endoscopy in the Diagnosis of Celiac Disease*

2024

DDW

Dowds P, Phelan P, Semeao E, Friedlander J, Ryan M. *Use of a Single-Use Sterile Ultra-Slim Gastroscope for Pediatric Unsedated Transnasal Endoscopy (uTNE)*

Farina D, Hanely K, Komanduri S. *Sedation-Free Transnasal Endoscopy (TNE) Using Single-Use Ultra-Slim Gastroscopes in an Ambulatory Esophageal Clinic*

McGill, S. Gainey C, Commins, S, Friedlander J. *Sedation-Free Transnasal Upper Endoscopy with Biopsies using Virtual Reality Distraction Can Evaluate the Upper Gastrointestinal Tract in Adult Research Subjects*

Lee R, Vaidy, K, Telega, G, Lerner DG, Chugh, A. *First Year Experience with Disposable Transnasal Endoscopy at a Tertiary, Pediatric Academic Medical Center*

NASPGHAN ANNUAL MEETING

Posters:

Tran P, McOmber M, Schroeder, S. *Transnasal Endoscopy Facilitating Nasogastric Tube Insertion Following Button Battery Ingestion*

Greenhall E, Tran P. *Use of Single-Use Ultraslim Endoscope for Surveillance of Esophageal Varices*

Rotter J, Mencin A. *A Novel Use of a Disposable Transnasal Scope and Portable Tower for Transgastric Upper Endoscopy: A Case Series*

2023

DDW

Oral Presentation:

Thavamani A, Ryan MJ, Leinwand K, Ramraj R, Schoeder S, Menard-Katcher P, Bhardwaj V, Franciosi J, Friedlander J, Sabe R. *Use of a Novel Ultrathin Gastroscope for Unsedated Transnasal Endoscopy in Children and Adults for Evaluation of Gastrointestinal Tract Disorders*

Posters/Video:

Bhardwaj V, Hochstim C, Friedlander J, Yanni G. *In-Clinic Unsedated Transnasal Esophagoscopy (TNE) in High-Risk Pediatric Patients for Esophageal Variceal (EV) Evaluation*

Sabe R, Friedlander J. (Video Honorable Mention) *Unsedated Transnasal Esophagogastroduodenoscopy (EGD) with Virtual Reality Procedural Dissociation for Eosinophilic Gastrointestinal Disorders (EGID)*

Vaidy K, Lerner D. *Development of Transnasal Endoscopy (TNE) Program Using a Single-Use, Ultra-Slim Endoscope and Associated Training System*

European Society for Pediatric Gastroenterology, Hepatology, and Nutrition Annual Meeting (ESPGHAN)

Oral Presentation:

Thavamani A, Ryan MJ, Leinwand K, Ramraj R, Schoeder S, Menard-Katcher P, Bhardwaj V, Franciosi J, Friedlander J, Sabe R. *Use of a Novel Ultrathin Gastroscope for Unsedated Transnasal Endoscopy in Children and Adults for Evaluation of Gastrointestinal Tract Disorders*

NASPGHAN Annual Meeting

Oral Presentation:

Friedlander JA, Smith C, Nguyen N, Mark J, Prager JD, Deboer E, Deterding R, Belkind-Gerson J. *Proof of Concept Functional Endoscopic Esophageal Evaluation of Swallowing (FEEES) in a Patient with Eosinophilic Esophagitis (EoE) and Type 2 Achalasia Used Unsedated Transnasal Endoscopy (TNE)*

Posters:

Beinvogl B., Taffe M., Pizzi A.M., Rubinstein E. *Transnasal Endoscopy for Eosinophilic Esophagitis Using the Single-Use EvoEndo Endoscope*

Dowds P., Phelan M., Semeao E., Friedlander J., Ryan M. *Use of a Single-Sterile Use Gastroscope for Pediatric Unsedated Transnasal Endoscopy (UTNE)*

Vaidy K., Lerner D. *Development of Transnasal Endoscopy (TNE) Program Using a Single-Use, Ultra-Slim Endoscope and Associated Training System*

Smadi Y, Thomas J, Bittar K, Bornstein J. *Office-Based Unsedated Transnasal Esophagogastroduodenoscopy (TN-EGD) Using Single-Use Gastroscopes: A Pediatric Eosinophilic Esophagitis Single Center Experience*

2022

NASPGHAN Annual Meeting

Bhardwaj V, Hochstim C, Friedlander J, Yanni G. *In-Clinic Unsedated Transnasal Esophagoscopy (TNE) in High-Risk Pediatric Patients for Esophageal Variceal (EV) Evaluation*



evoendo.com



info@evoendo.com



303.223.7445



[evoendo](https://www.linkedin.com/company/evoendo)



[evoendoinc](https://www.facebook.com/evoendoinc)



[evoendo](https://twitter.com/evoendo)

888 East Belvidere Rd. Suite 212
Grayslake, IL 60030