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TORONTO2026

The Future of Obesity Management:
From Weight Loss to Health Gain



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Disclosure Slide

Nothing to Disclose



Internal Hernia After Laparoscopic Roux-en-Y Gastric Bypass

- A systematic review was conducted in accordance with PRISMA guidelines. PUBMED, Scopus, and Web of Science.
- This systematic review includes 42 studies (2010–2026) involving more than 120,000 patients who met the inclusion criteria, covering the efficacy of mesenteric defect closure and the diagnostic accuracy of CT.
- Internal hernia (IH) is a significant long-term complication after LRYGB, with reported incidence of 0.6-9.7%.
- Three potential mesenteric defects: Petersen space, jejunojejunal mesenteric defect, transverse mesocolic defect.
- Rapid weight loss leads to mesenteric fat depletion, widened defects, and increased IH risk.
- Key clinical question: Does routine mesenteric defect closure reduce IH, and how accurate is CT for diagnosis?

Fuentes: Vink et al. (2025); Stenberg et al. (2016); de la Cruz-Muñoz et al. (2011). Base de revisión: 42 estudios (2010–2026).



Mesenteric Defect Closure: Key Evidence

Study	Design	N	Closure Group IH %	Non-Closure Group IH %	Key Finding
Stenberg 2016 (COSMESO)	RCT	2,500	0.6%	4.3%	p<0.001; closure reduces IH
Aigner 2023	Retro. cohort	4,102	0.8%	2.9%	Closure reduces IH (p<0.001)
de la Cruz-Munoz 2011	Retro. cohort	2,079	0.05%	1.7%	JJ closure alone reduces IH 30x
Brolin 2013	Retro. cohort	872	1.4%	2.6%	Complete closure > incomplete
Georgiadis 2024	Retro. cohort	3,130	1.2%	3.9%	Closure: 70% IH reduction

- All high-quality studies support routine mesenteric defect closure during LRYGB to reduce IH incidence.
- Stenberg 2016 (RCT, n=2,500) provides Level I evidence: closure reduces IH from 4.3% to 0.6% (RR 0.14).

Fuentes: Stenberg et al. (2016); de la Cruz-Muñoz et al. (2011); Brolin & Kella (2013).



CT Diagnostic Accuracy for Internal Hernia

Study	N	Sensitivity	Specificity	PPV	NPV	Key Finding
Hocking 2023 (OPERATE)	375	84%*	84%*	-	-	Prospective structured CT
Al-Mansour 2024	1,475	83.8%	87.1%	53.4%	96.8%	High NPV; useful to rule out IH
Switzer 2023	154	96%**	87%**	-	-	Swirl + SBO decision tree
Ihringer 2023	102	100%	90.5%	91%	91.3%	64-slice MDCT; high accuracy
Garg 2023	117	85%	94.8%	-	-	SMV strang. (OR 18.3) most spec.
Altieri 2023	2,606	81.3%	95.8%	81.3%	95.8%	Structured report. improves accuracy

* Combined structured approach sensitivity/specificity

** Decision tree: Swirl sign + SBO -> Sens 96%, Spec 87%

Highest sensitivity: mesenteric edema (85%); Highest specificity: SMV strangulation (94.8%)

- Structured CT reporting (10+ signs) significantly improves specificity and PPV vs. conventional reporting.
- A negative CT does NOT rule out IH when clinical suspicion is high - diagnostic laparoscopy should be considered.

Fuentes: Ederveen et al. (2018); Ederveen et al. (2020); Vink et al. (2025); van Hogezaand et al. (2025); Altieri et al. (2015).



Abdominoplasty After RYGB: A Potential Trigger for Internal Hernia?

BACKGROUND

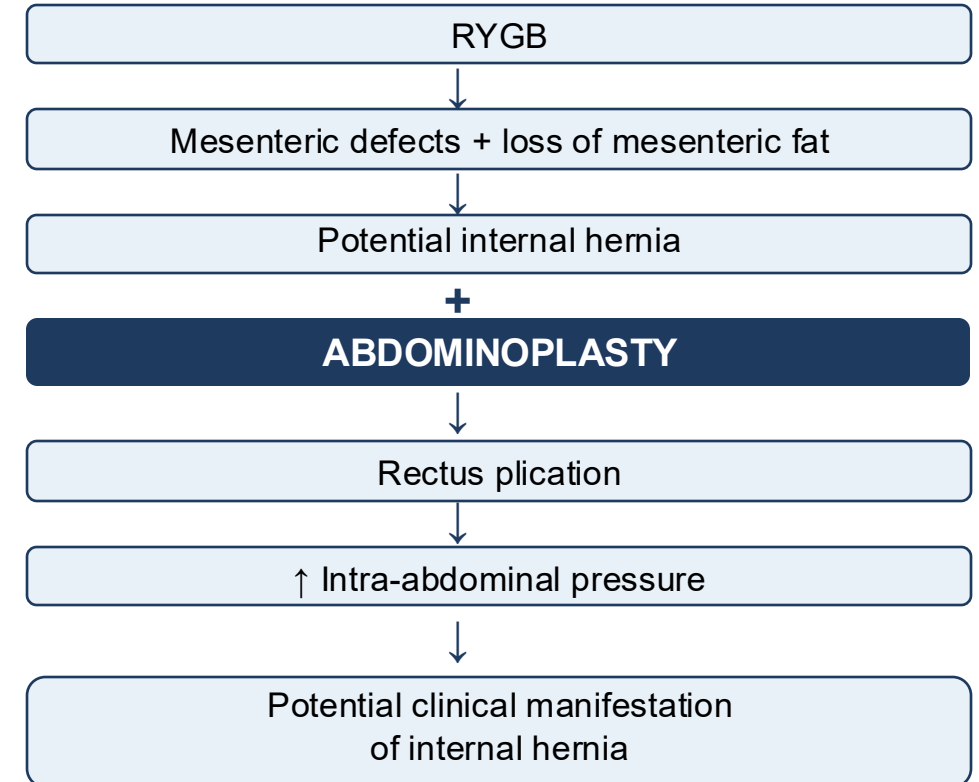
- Patients after Roux-en-Y gastric bypass remain at risk for internal hernia due to mesenteric defects and increased bowel mobility after massive weight loss.
- Abdominoplasty with rectus muscle plication may increase intra-abdominal pressure and potentially trigger the clinical manifestation of a previously silent internal hernia.

RESEARCH QUESTION

“Can abdominoplasty trigger the clinical manifestation of an internal hernia after RYGB?”

KEY CLINICAL MESSAGE

“Previous RYGB + abdominal wall plication = maintain a high index of suspicion for internal hernia.”



Clinical hypothesis — prospective evidence is still needed.



Abdominoplasty After RYGB: A Potential Trigger for Internal Hernia?

RESEARCH QUESTION

“Can abdominoplasty trigger the clinical manifestation of an internal hernia after RYGB?”

PROTOCOL

- Retrospective, observational, analytical, longitudinal study
- Hospital Universitario “Dr. José Eleuterio González”, UANL
- Study period: 2015–2025
- Population: patients with previous RYGB who subsequently underwent abdominoplasty
- Identified eligible population: 17 patients
- Outcomes: internal hernia, intestinal obstruction, CT findings, reoperation, bowel resection, complications and mortality

ONGOING STUDY

17 patients

2015–2025

Hospital Universitario UANL

KEY CLINICAL MESSAGE

“Previous RYGB + abdominal wall plication = maintain a high index of suspicion for internal hernia.”

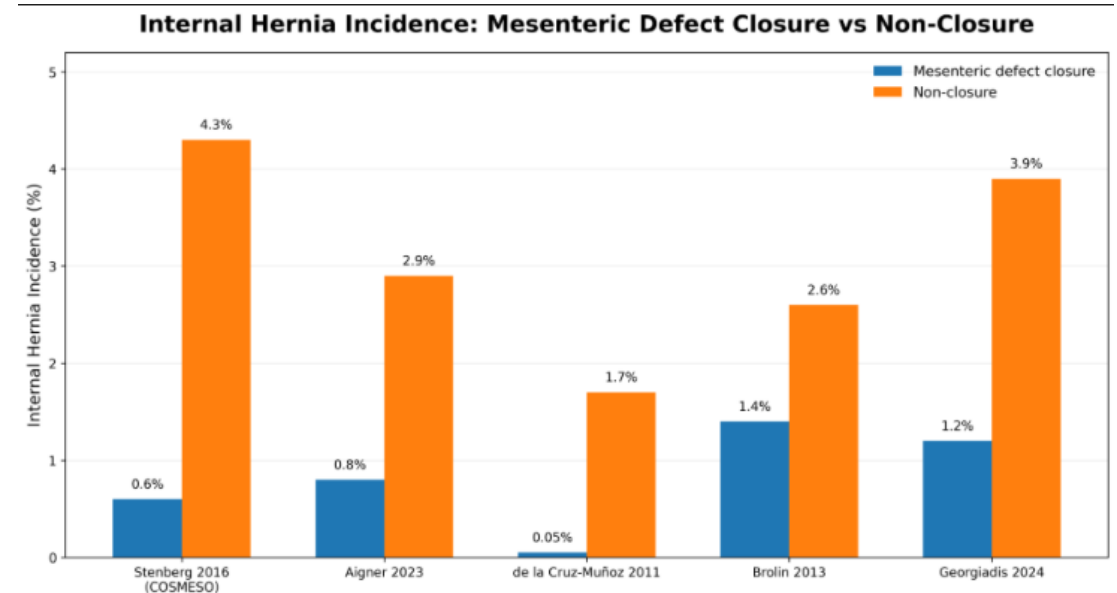
Clinical hypothesis — prospective evidence is still needed.



Conclusions & Recommendations

- 1. Routine closure of all mesenteric defects during LRYGB significantly reduces IH incidence (Level I evidence, Stenberg 2016).
- 2. Complete closure (Petersen + JJ) is superior to partial closure; non-absorbable running suture is recommended.
- 3. CT with structured reporting (swirl sign, SMV beaking, mesenteric edema) achieves >80% sensitivity and >90% specificity.
- 4. However, a negative CT cannot exclude IH in high clinical suspicion - maintain low threshold for diagnostic laparoscopy.
- 5. IH recurrence after repair occurs in up to 5.2%; long-term follow-up is essential.
- 6. 42 studies (2010-2026) consistently support defect closure and improved CT interpretation protocols.
- 7. Rygb + abdominoplasty risk factor to IH?

Disclosure: No significant relationships.



Fuentes: Stenberg et al. (2016); Vink et al. (2025); van Hogezaand et al. (2025); Zaigham et al. (2023).



Bibliografía APA — base de datos de la revisión (1/2)



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"Advancing Multimodal Obesity Care"

24-27 August 2027

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