



**XXVI IFSO WORLD CONGRESS**  
OF BARIATRIC & METABOLIC SURGERY

**NAPOLI, ITALY | Mostra d'Oltremare**  
30 AUGUST - 1 SEPTEMBER, 2023

Congress President: Prof. Luigi Angrisani

## ABDOMINAL HERNIA: NEW ASMBS/IFSO GUIDELINES

**Emergency approach**

Fabio Cesare Campanile (Italy)

# VHR / bariatric surgery

- Not all patients are candidate for bariatric surgery
- Not all candidates have access to or willingness to or have considered to receive bariatric surgery
- Long waiting lists
- Long time to achieve weight loss

# VHR and obesity

- Incidence
- Dimensions and complexity
- Morbidity
- Recurrence rate
- Risk of incarceration



# Risk of incarceration

ORIGINAL ARTICLE

## The Risk of Incarceration During Nonoperative Management of Incisional Hernias

*A Population-based Analysis of 30,998 Patients*

*Esmael R. Dadashzadeh, MD, MS,\*†‡ Lauren V. Huckaby, MD,\*† Robert Handzel, MD, MS,\*†‡ M. Shanaz Hossain, MD,\* Gloria D. Sanin, MD,\* Vincent P. Anto, MD,\* Patrick Bou-Samra, MD,\* J. B. Moses, MD,\* Stephen Cai, MD,§ Heather M. Phelos, MPH,\*†‡ Richard L. Simmons, MD,\* Matthew R. Rosengart, MD, MPH,\*† and Dirk J. van der Windt, MD, PhD\*†‡✉*

**TABLE 2.** Comparison of Successful Nonoperative Management Group (Successful Nonoperative Management) and Incarceration Group

	Successful Nonoperative Management (N = 20,227)	Incarceration Group (N = 540)	P
Median body mass index (BMI), kg/m <sup>2</sup> (IQR)	30 (26, 36)	36 (31, 43)	
Smoking status, no. (%)			<0.001
Never	7350 (36.3)	188 (34.8)	<0.01
Current	5450 (26.9)	160 (29.63)	
Former	5604 (27.7)	163 (30.2)	
Unspecified	1823 (9)	29 (5.4)	

# Risk of incarceration

World J Surg (2019) 43:1906–1913  
<https://doi.org/10.1007/s00268-019-04989-x>



ORIGINAL SCIENTIFIC REPORT

## **Risk Factors for Incarceration in Patients with Primary Abdominal Wall and Incisional Hernias: A Prospective Study in 4472 Patients**

Dimitri Sneiders<sup>1,6</sup> · Yagmur Yurtkap<sup>1</sup> · Leonard F. Kroese<sup>2</sup> · Gert-Jan Kleinrensink<sup>3</sup> · Johan F. Lange<sup>1,4</sup> · Jean-François Gillion<sup>5</sup> · The Hernia-Club Members

OR 1.06 per one BMI increase (primary hernia)  
OR 1,06 per one BMI increase (incisional hernia)  
OR 1,03 multivariate logistic regression per one BMI increase

# VHR and obesity

.Incidence

.Dimensions and complexity

.Morbidity

.Recurrence rate

.Risk of incarceration



# Options

- .Suture Vs. Mesh
- .Laparoscopic Vs. Open
- .Different techniques
- .Robotic

# Suture Vs. Mesh

Obesity Surgery (2021) 31:5251–5259  
<https://doi.org/10.1007/s11695-021-05720-3>



ORIGINAL CONTRIBUTIONS



## Ventral Hernia Repair and Obesity: Results from a Nationwide Register Study in France According to the Timeframes of Hernia Repair and Bariatric Surgery

David Moszkowicz<sup>1,2</sup> · Madalina Jacota<sup>3</sup> · Lionelle Nkam<sup>3</sup> · Davide Giovinnazzo<sup>2</sup> · Lamiae Grimaldi<sup>3</sup> · Andrea Lazzati<sup>4</sup>

Suture repair = 32%



# Suture Vs. Mesh

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**Table 1** Patients' baseline characteristics

	VHR-first <i>n</i> = 2039	Concomitant <i>n</i> = 3388	BS-first <i>n</i> = 6260	<i>p</i> value
VHR technique				
Mesh	1283 (62.9)	470 (13.9)	3504 (56)	<0.001
Suture	756 (37.1)	2918 (86.1)	2756 (44.0)	

# Suture Vs. Mesh

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## Morbidity

ORIGINAL CONTRIBUTIONS



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**Table 4** Multivariate analysis for 30-day major complications

Covariate	VHR-first adjOR (95% CI)	Concomitant adjOR (95% CI)	BS-first adjOR (95% CI)
VHR technique	Reference	Reference	Reference
Mesh	Reference	Reference	Reference
Suture	1.28 (0.96–1.7, p=0.093)	0.82 (0.71–0.94, p=0.004)	0.82 (0.71–0.94, p=0.004)

# Suture Vs. Mesh

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## Recurrence

**Table 2** Multivariate Cox analysis for recurrence

Covariate	VHR-first HR (95% CI)	Concomitant HR (95% CI)	BS-first HR (95% CI)
VHR technique	Mesh Suture	Reference Reference	Reference Reference
		1.51 (1.27–1.8, $p < 0.001$ ) -	1.43 (1.23–1.66, $p < 0.001$ )

# Laparoscopic Vs. Open


Updates in Surgery

<https://doi.org/10.1007/s13304-023-01534-3>

ORIGINAL ARTICLE



## Laparoscopic treatment of ventral hernias: the Italian national guidelines

Fabio Cesare Campanile<sup>1</sup> · Mauro Podda<sup>2</sup> · Francesca Pecchini<sup>3</sup> · Marco Inama<sup>4</sup> · Sarah Molfino<sup>5</sup> · Marco Augusto Bonino<sup>6</sup> · Monica Ortenzi<sup>7</sup>  · Gianfranco Silecchia<sup>8</sup> · Ferdinando Agresta<sup>9</sup> · Michela Cinquini<sup>10</sup> on behalf of the Italian Laparoscopic Ventral Hernia Guideline Group

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# Laparoscopic Vs. Open

## Strangulated/incarcerated

Open: 29.7%  
Lap: 48.9%

Hernia  
<https://doi.org/10.1007/s10029-019-01944-6>

ORIGINAL ARTICLE



## Impact of body mass index on minimally invasive ventral hernia repair: an ACS-NSQIP analysis

L. Owei<sup>1</sup> · R. A. Swendiman<sup>2</sup> · S. Torres-Landa<sup>3</sup> · D. T. Dempsey<sup>4</sup> · K. R. Dumon<sup>4</sup>

Received: 16 January 2019 / Accepted: 27 March 2019  
© Springer-Verlag France SAS, part of Springer Nature 2019

- Morbidity: 1.358/35.584 (**4.2%**) vs 7.542/56.809 (**12.61%**); **RR = 0.28**; 95% CI:0.27-0.30
- Local morbidity: 696 (**1.96%**) vs. 5109 (**8.54%**); **RR = 0.22**, 95%CI: 0.20-0.23
- Systemic morbidity: 1023 (**2.87%**) vs. 2675 (**6,14%**); **RR= 0.61**, 95% CI: 0.57 – 0.65

# Laparoscopic Vs. Open



Research

Original Investigation

## Laparoscopic vs Open Ventral Hernia Repair in the Era of Obesity

Justin Lee, MD; Allan Mabardy, MD; Reza Kermani, MD; Marvin Lopez, MD; Nicole Pecqueux, MD;  
Anthony McCluney, MD

obstruction/ gangrenous  
bowel

46.8%

## National Inpatient Sample database

.Morbidity: 5408/39485 (6.3%) vs. 515/8176 (13.7%) ; RR = 0.46, 95%CI 0.42-0.50)

# Laparoscopic Vs. Open

Surgical Endoscopy  
<https://doi.org/10.1007/s00464-018-6573-6>



**Emergency laparoscopic and open repair of incarcerated ventral hernias: a multi-institutional comparative analysis with coarsened exact matching**

Arash Azin<sup>1</sup> · Dhruvin Hirpara<sup>1</sup> · Timothy Jackson<sup>1,2</sup> · Allan Okrainec<sup>1,2</sup> · Ahmad Elnahas<sup>1,2</sup> · Sami A. Chadi<sup>1,2</sup> · Fayez A. Quereshy<sup>1,2,3</sup>

## Mean BMI

Open: 35.74  
Lap: 35.68

## ACS-NSQIP 2012–2016 dataset

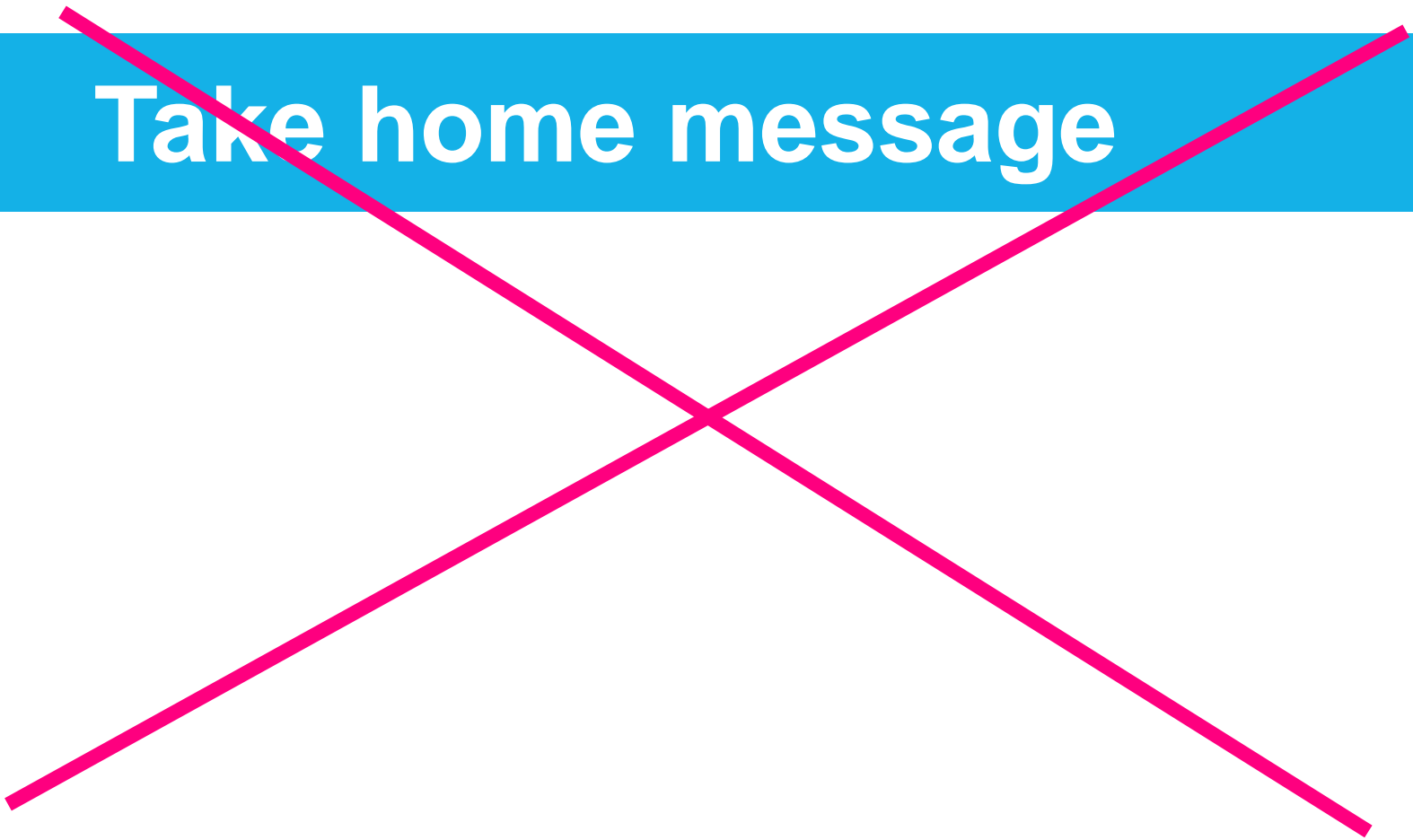
•Wound morbidity: OR 0.35, 95% CI 0.22–0.57,  $p < 0.001$   
•Non-wound morbidity: OR 0.73, 95% CI 0.51–1.06,  $p = 0.094$



# Take home message



# Take home message



# Think about questions

- Is a complex ventral hernia repair (component separation, preperitoneal...) appropriate for an incarcerated ventral hernia in a person with obesity who has not yet achieved a significant weight loss? Or are we going to burn our bridges?
- Could we adopt a higher recurrence strategy as a bridge to a future definitive ventral hernia repair? Or should we go for the technique with lower recurrence rate at that moment?
- Could suture repair have a role?



*Thank  
you!*