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TRIESTE 17-18 OTTOBRE 2025

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Prof. Nicolò de Manzini

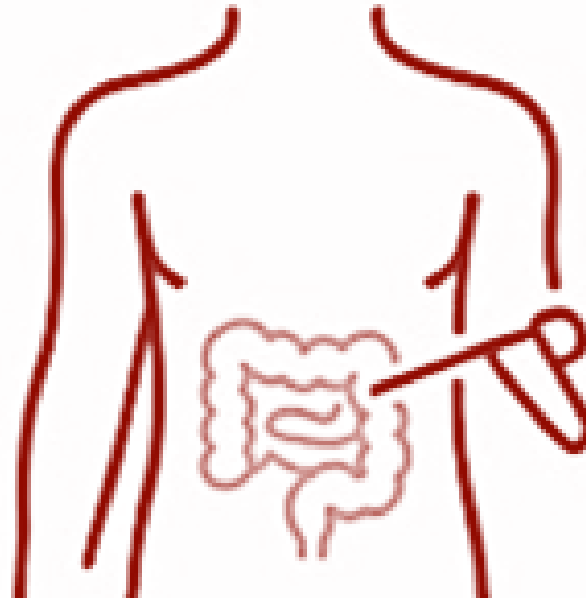
Dott. Alan Biloslavo



SICUT

Società Italiana di Chirurgia
d'Urgenza e del Trauma

53° CONGRESSO NAZIONALE SICUT 2025



The role of LAParoscopy
in blunt abdominal
Trauma:
LAPTOP study

SOD Chirurgia d'Urgenza



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DISCLOSURES

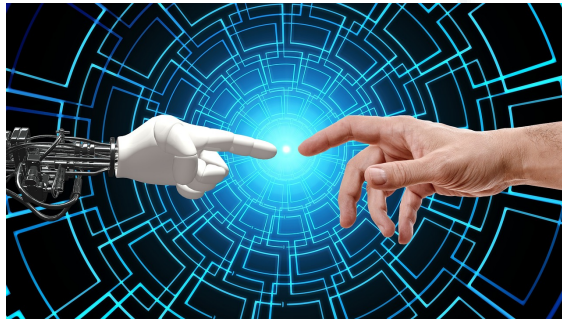
- No financial conflicts of interest.
- The study is still under approval by the Ethics Committee.
- Like all novel approaches and ideas, these, too are contestable.
- We stand on each other's shoulders, not in each other's way.

AREA OF RESEARCH: Trauma Surgery

KEYWORDS: Laparoscopy, Trauma Surgery, Blunt Trauma


The role of LAParoscopy in blunt abdominal Trauma: protocol for a multicentre, Observational, Prospective study

Traditionally, **laparotomy** has been the **standard approach** for **trauma patients**, while laparoscopy has been viewed with caution, especially in scenarios involving **critically ill individuals**, **severe injuries** (injury severity score [ISS] > 15), **unstable hemodynamics**, or **advanced age**.



Importantly, while the role of **laparoscopy** is now relatively well accepted in the management of penetrating abdominal trauma, its application **in blunt trauma remains far more controversial and poorly documented**.

The role of LAParoscopy in blunt abdominal Trauma: protocol for a multicentre, Observational, Prospective study



Contents lists available at [ScienceDirect](#)

Surgery

journal homepage: www.elsevier.com/locate/surg

Revisiting surgical decisions: The choice between laparotomy and laparoscopy for traumatic small bowel injuries

Han-Hsi Chiu, MD, Shih-Ching Kang, MD*, Chih-Yuan Fu, MD



World Journal of Gastroenterology

Submit a Manuscript: <http://www.wjgnet.com/esps/>
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DOI: 10.3748/wjg.v22.i2.668

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TOPIC HIGHLIGHT

2016 Laparoscopic Surgery: Global view

Advances in laparoscopy for acute care surgery and trauma


Matteo Mandrioli, Kenji Inaba, Alice Piccinini, Andrea Biscardi, Massimo Sartelli, Ferdinando Agresta, Fausto Catena, Roberto Cirocchi, Elio Jovine, Gregorio Tugnoli, Salomone Di Saverio





frontiers
in Surgery

SYSTEMATIC REVIEW
published: 08 March 2022
doi: 10.3389/fsurg.2022.817134



Laparoscopy vs. Laparotomy for the Management of Abdominal Trauma: A Systematic Review and Meta-Analysis

Jianjun Wang¹, Liangwang Cheng¹, Jing Liu¹, Binyin Zhang², Weijun Wang¹, Wenxin Zhu¹, Yan Guo¹, Chuanfei Bao¹, Yunli Hu¹, Shanxin Qi¹, Kai Wang¹ and Shuguang Zhao^{1*}

European Journal of Trauma and Emergency Surgery (2024) 50:2517–2525
<https://doi.org/10.1007/s00068-024-02642-4>

ORIGINAL ARTICLE

Role of laparoscopic surgery in managing hemodynamically stable abdominal trauma patients: a single level I trauma center, propensity score matching study

Doo-Hun Kim^{1,2}  · Maru Kim¹  · Dae-Sang Lee¹  · Tae Hwa Hong¹  · Hoonsung Park¹  · Hangjoo Cho¹ 

LAPTOP study - Perini D et al.



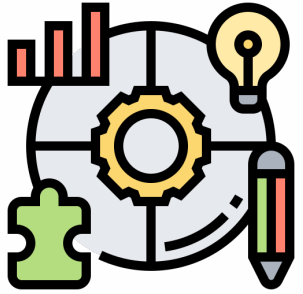
The role of LAParoscopy in blunt abdominal Trauma: protocol for a multicentre, Observational, Prospective study



The **primary objective** is to evaluate the **safety and feasibility of laparoscopy** by assessing intraoperative and postoperative outcomes.

A **secondary objective** is to assess whether **high-risk conditions** - those with severe injuries (ISS > 15), and hemodynamically unstable patients - **truly limit the use of laparoscopic techniques** in trauma surgery.

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Study design

LAPTOP is a **prospective, observational, multicenter** study analyzing trauma patients undergoing laparoscopic surgery. Injuries will be classified using the **AAST scale**, and **trauma severity** described according to WSES guidelines.

Patient age, hemodynamic stability, and ISS will be collected for risk-adjusted analyses.

Study population

Adult patients (≥ 18 years) undergoing **urgent or emergency laparoscopic surgery for blunt abdominal trauma**, including cases converted to open.

Exclusions: patients < 18 years, pregnant women, primarily laparotomic or elective procedures.

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Study setting and sample size

All centers performing emergency laparoscopic surgery are eligible.

Data will be collected over a minimum **one-year study period**. Based on literature-reported complication rates (3.47% laparoscopy vs 12.83% laparotomy)¹, **the target enrollment is 468 patients**.

Sample size determination was performed using a validated online calculator (<https://clincalc.com/stats/samplesize.aspx>) and is **designed to detect a statistically significant reduction in postoperative complication rates ($\alpha = 0.05$) with a 95% confidence interval**.

¹ Wang J, Cheng L, Liu J, et al. Laparoscopy vs. Laparotomy for the Management of Abdominal Trauma: A Systematic Review and Meta-Analysis. Front Surg.Frontiers Media S.A. 2022;9. doi:10.3389/fsurg.2022.817134

EXPECTED RESULTS

LAPTOP study is expected to demonstrate that laparoscopy is a **safe and feasible option for blunt trauma**, with **outcomes comparable or superior** to open surgery.

Subgroup analyses will help define its **applicability and limitations in high-risk scenarios**.

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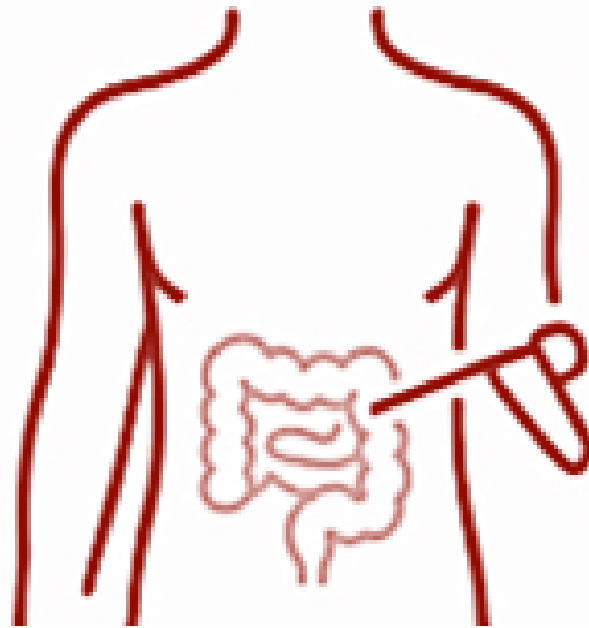
Although **laparoscopy** is increasingly accepted in penetrating abdominal trauma, its **role in blunt trauma is still controversial and poorly documented**. This protocol seeks to **address this gap** and potentially guide **future clinical practice and guidelines**.



perinid@aou-careggi.toscana.it
davina.perini@gmail.com



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The role of LAParoscopy in blunt abdominal Trauma: **LAPTOP study**

Surgical inspiration comes from a variety of sources —
I will always be grateful to *mine*.