

XXVIII IFSO World Congress

9-12 September 2025 | Santiago, Chile



NEW STAPLING
TECHNOLOGY 4x2
STAPLERS . IS IT WORTH IT?

IFSO 2025 Santiago
Combined Therapies, The Dawn of a New Era

Cristóbal Davanzo MD, Chile

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Disclosure Slide

<input type="checkbox"/>	No, nothing to disclose
<input checked="" type="checkbox"/>	Yes, please specify:

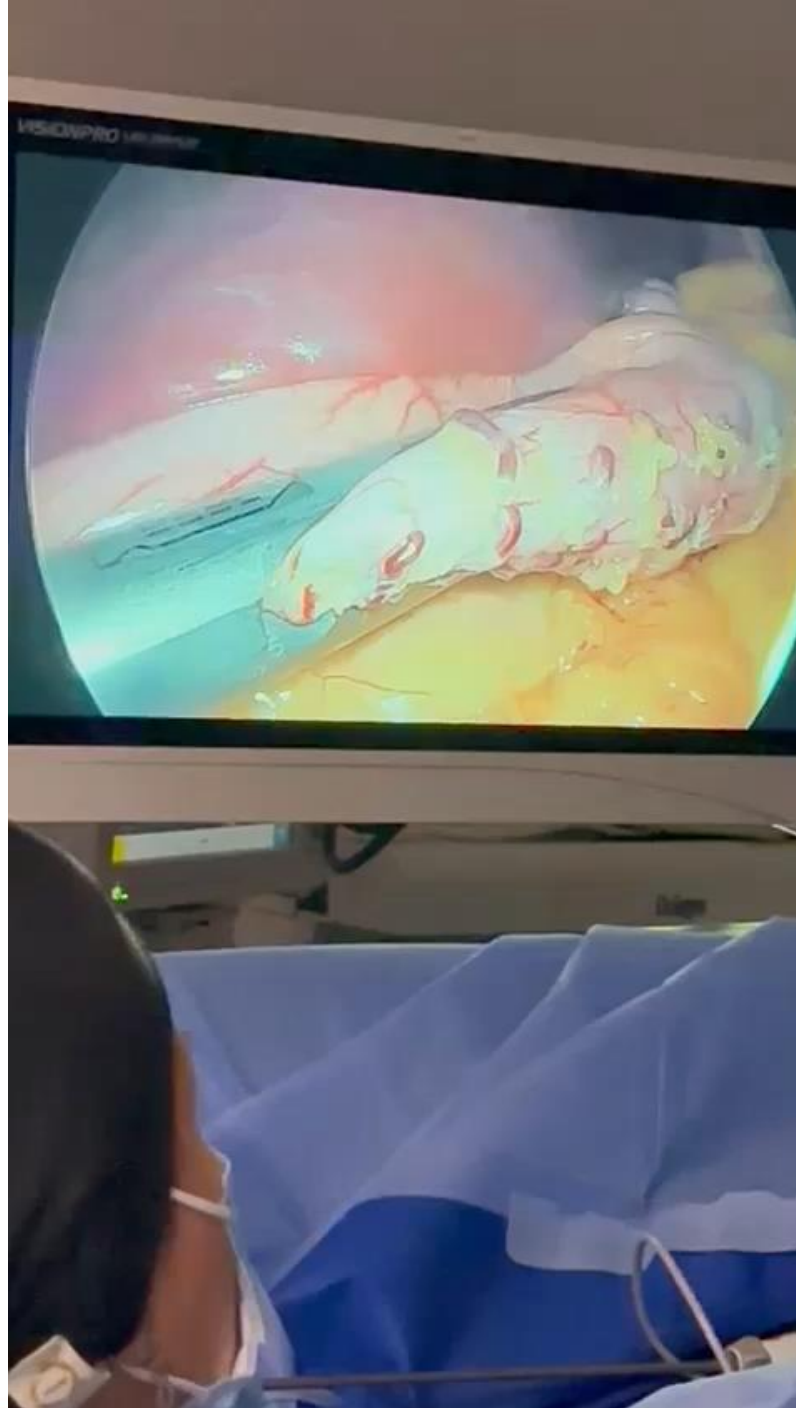
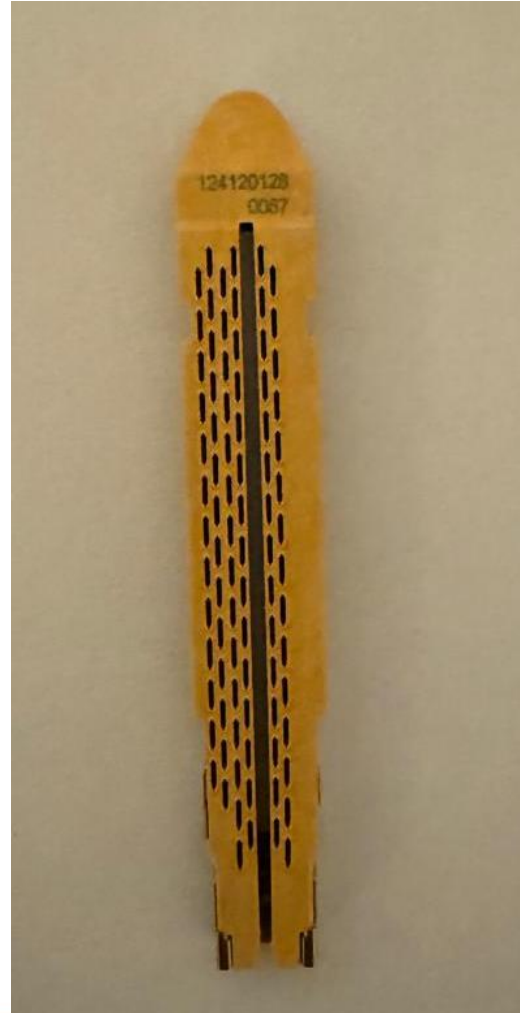
<i>Company Name</i>	<i>Honoraria/ Expenses</i>	<i>Consulting/ Advisory Board</i>	<i>Funded Research</i>	<i>Royalties/ Patent</i>	<i>Stock Options</i>	<i>Ownership / Equity Position</i>	<i>Employee</i>	<i>Other (please specify)</i>
David Medical		X		X				



Endrive Zero

- First asymmetrical 4 x 2 stapler
- Created to reduce leakage

Zero?



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Advantages / Disadvantages



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- 15mm mandatory trocar
- Effect of wider suture line (bleeding/perfusion)
- Retrieval of the resected stomach
- Closure of the 15mm trocar site
- Less (or no) suture line leakage
- Aesthetic result

Trocar placement

15mm umbilical trocar

12mm and 2 5mm lateral trocars



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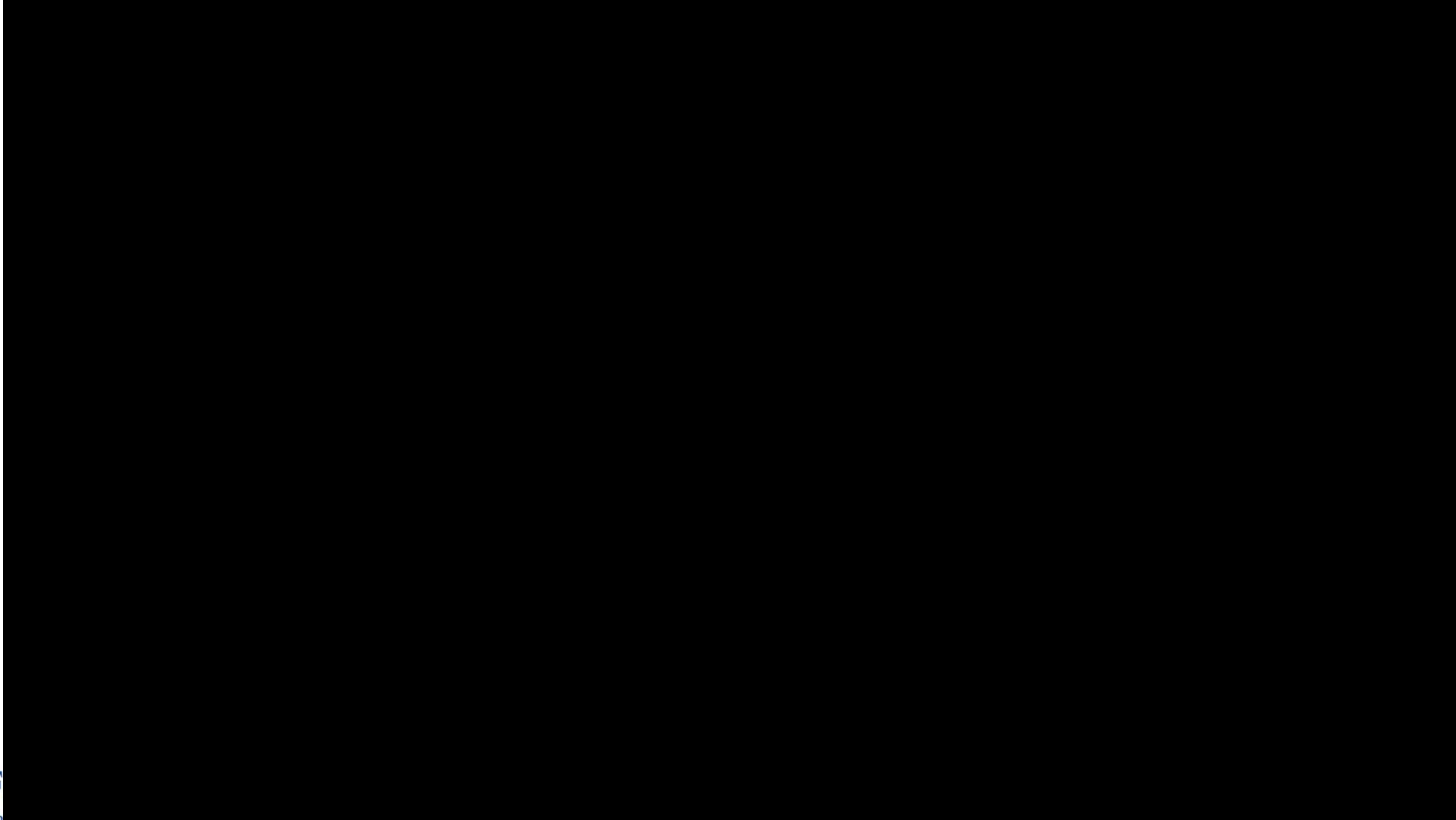
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Less suture line bleeding



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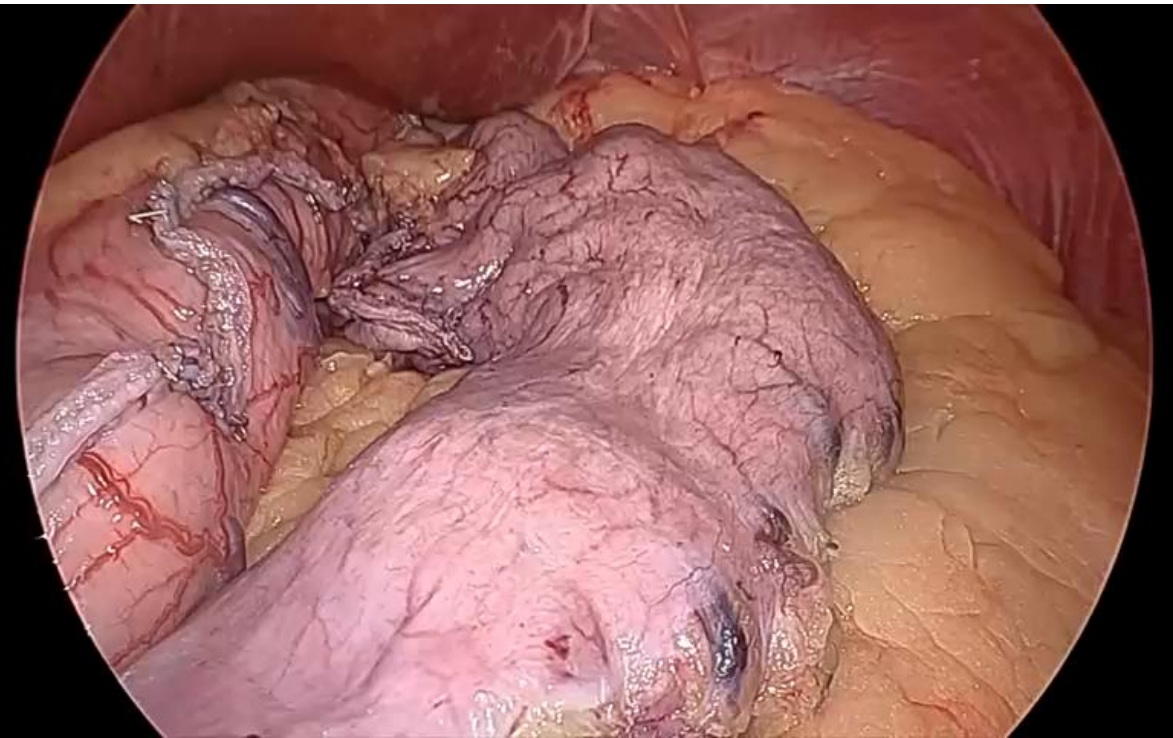
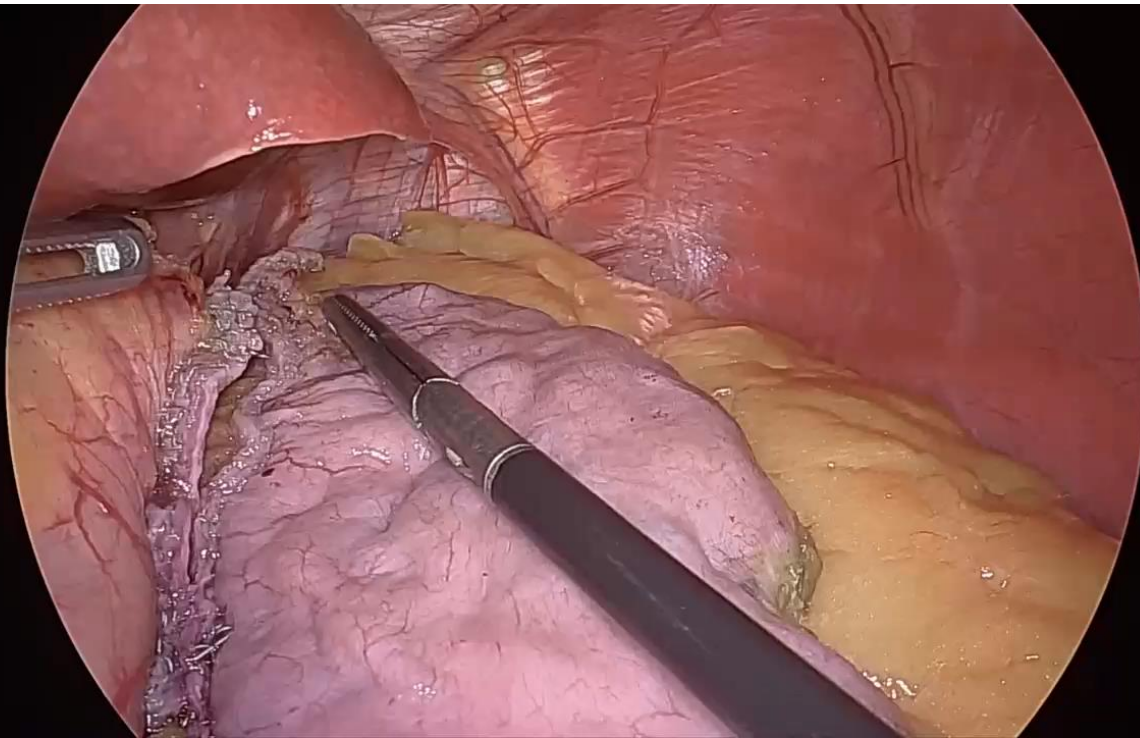
Less blood but...

What happens with suture line perfusion?



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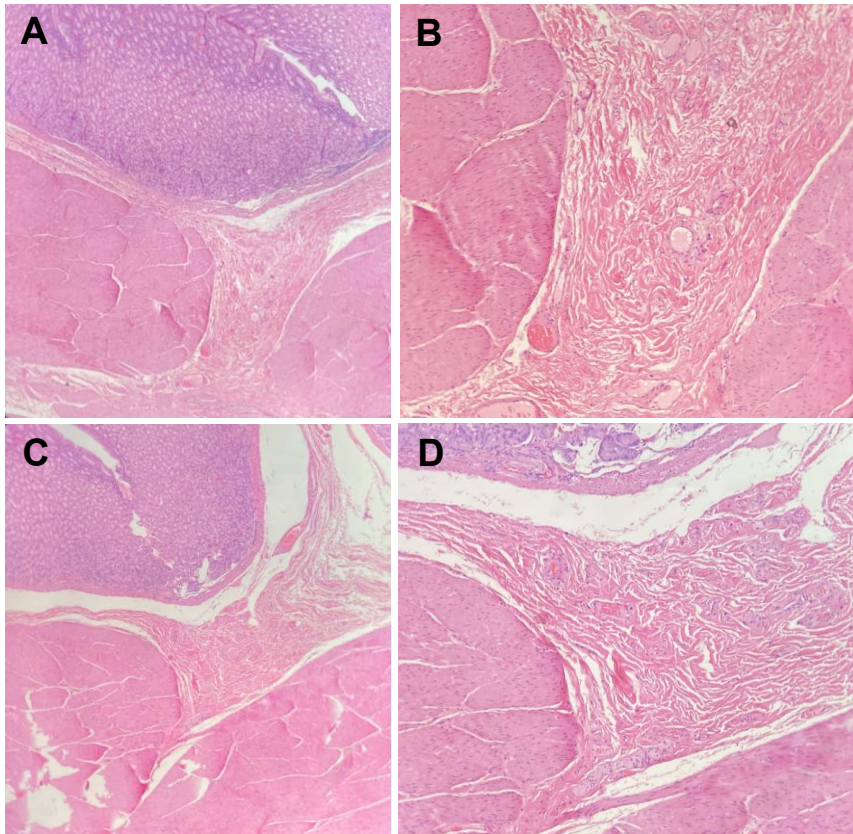


On the microscope (old v/s new)



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A y B (H-E, 40 y 100x): Línea de sutura mecánica antigua. C y D (H-E, 40 y 100x): Línea de sutura mecánica nueva. Círculo marca túnica muscular discontinua en relación con línea de sutura y presencia de tejido fibroso asociado a escasos vasos sanguíneos capilares.

So the staple line (with 3 or 4 lines of staples) is and stays to be scar tissue with no significant capillary blood vessels.

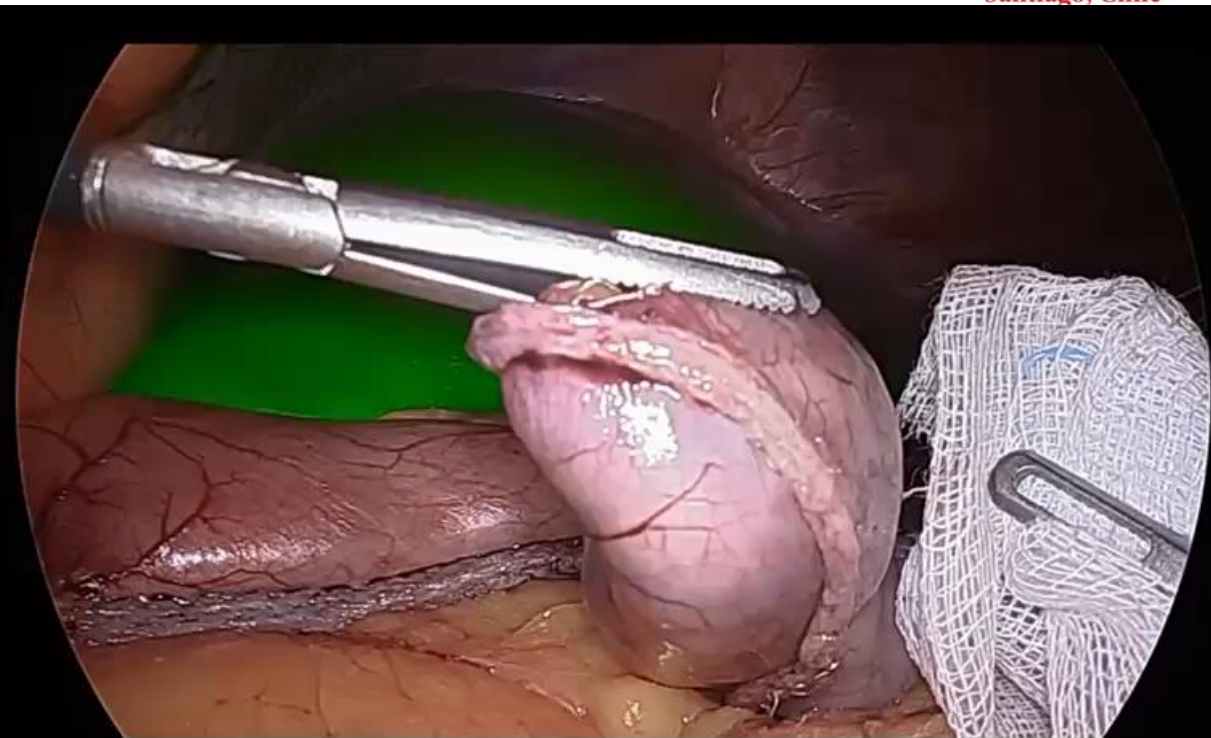
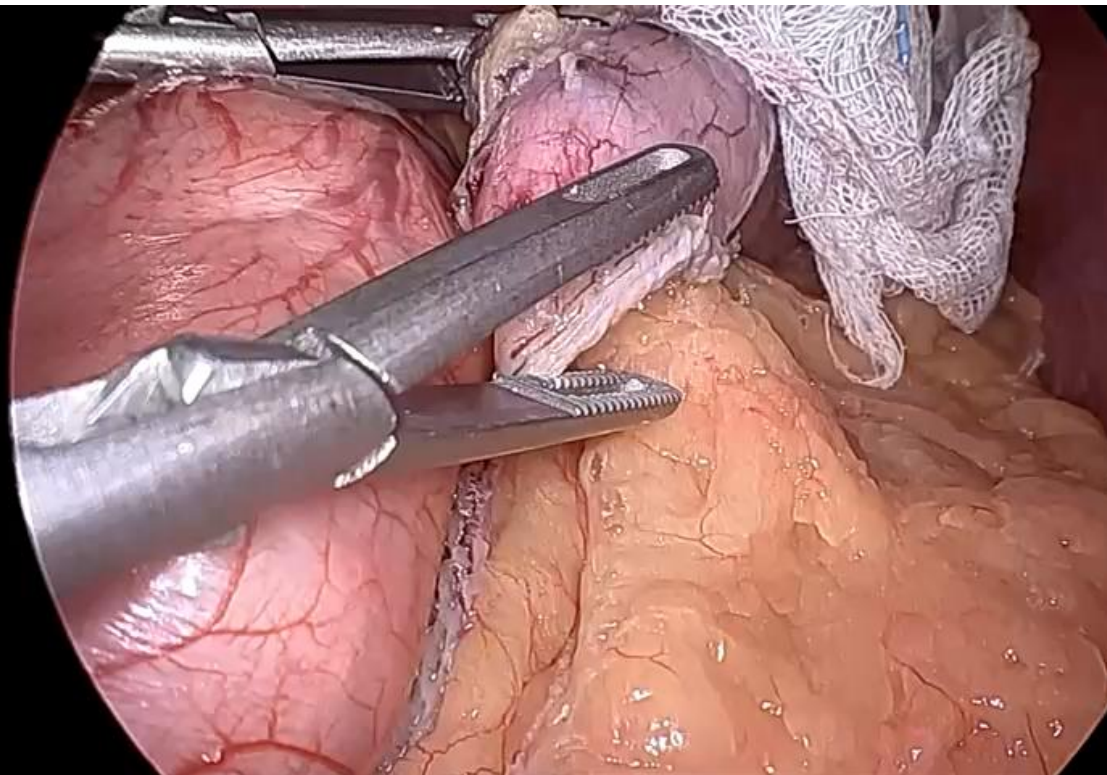




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Specimen retrieval by 15mm port



15mm port site closure



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A Step Forward in Stapling: Pilot Evaluation of a Novel Asymmetric Stapler in Sleeve

Gastrectomy

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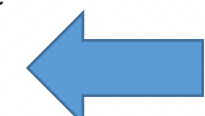
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Table 2. Outcomes of the 208 patients undergoing SG using the Endrive 4+2 stapler.

Outcomes	Value
Operative time (mean)	50 minutes
Intraoperative complications	None
Postoperative complications (30 days)	0%
Hospital stay (mean)	23.7 hours
VAS pain score at 24h (mean)	3.1 ± 1.2
Opioid use (morphine equivalent, mg)	3.75 mg
Surgeon satisfaction ('Good' or 'Very Good')	92%





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Table 3. Benchmarking the Hemostatic Performance of the Endrive 4+2 Stapler Against Standard Reinforcement Methods.

Technique	Reference Rate (Aiolfi et al.)	n (Aiolfi et al.)	Bleeding Rate (Present Study)	p-value	95% CI (Present Study)
No Reinforcement (NR)	3.72% (0.0-16.0)	1641	0% (0/208)	0.00038	0.00%–1.76%
Clips Reinforcement (CR)	4.00% (4.0-4.0)	50	0% (0/208)	0.00021	0.00%–1.76%
Suture Reinforcement (SR)	1.10% (0.0-8.0)	1507	0% (0/208)	0.10019	0.00%–1.76%
Glue Reinforcement (GR)	1.60% (0.0-6.12)	689	0% (0/208)	0.03491	0.00%–1.76%
Gore® Seamguard® (GoR)	1.87% (0.0-2.94)	107	0% (0/208)	0.01971	0.00%–1.76%

Bleeding compared to standard reinforcement methods



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Aesthetic result



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Is it worth it?

- No substantial change in technique required
- Easy resected stomach retrieval by 15mm port site
- Less suture line bleeding
- Good aesthetic result

- No leakage nor bleeding (to the date, over 250 cases)



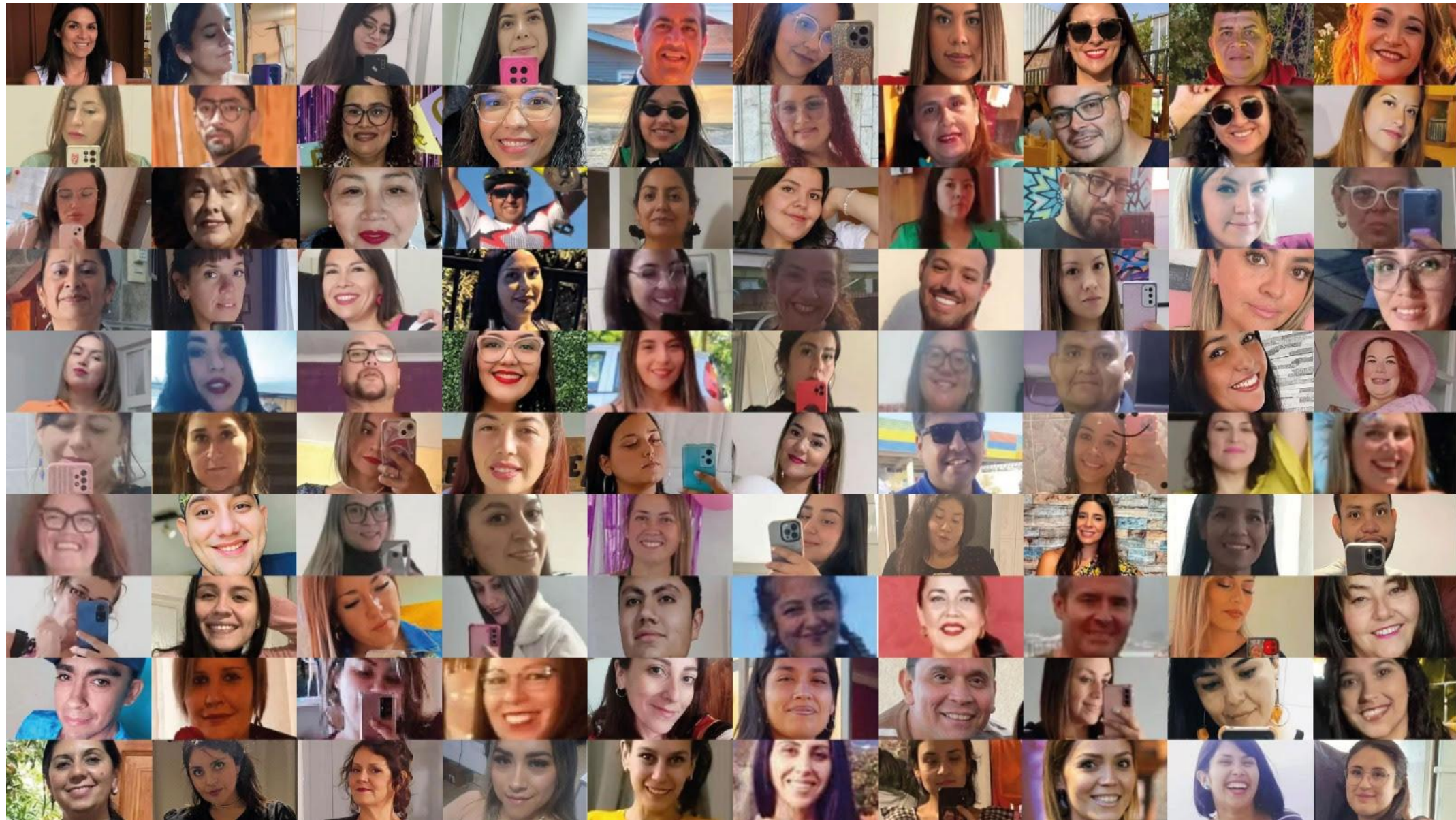
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Thank you!
and to my team and friends!



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