

# XXVIII IFSO World Congress

9-12 September 2025 | Santiago, Chile



## Impact of AI-Augmented Video Management Systems on Sleeve Gastrectomy Operating Times

Dr. Sayali Kulkarni M.D.  
Dr. Toghrul Talishinskiy M.D.

# IFSO 2025 Santiago

Combined Therapies, The Dawn of a New Era

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# Disclosure Slide

**Dr. Talishinskiy Consultant for MedTronic**



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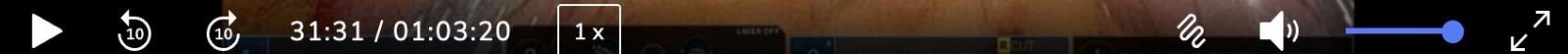
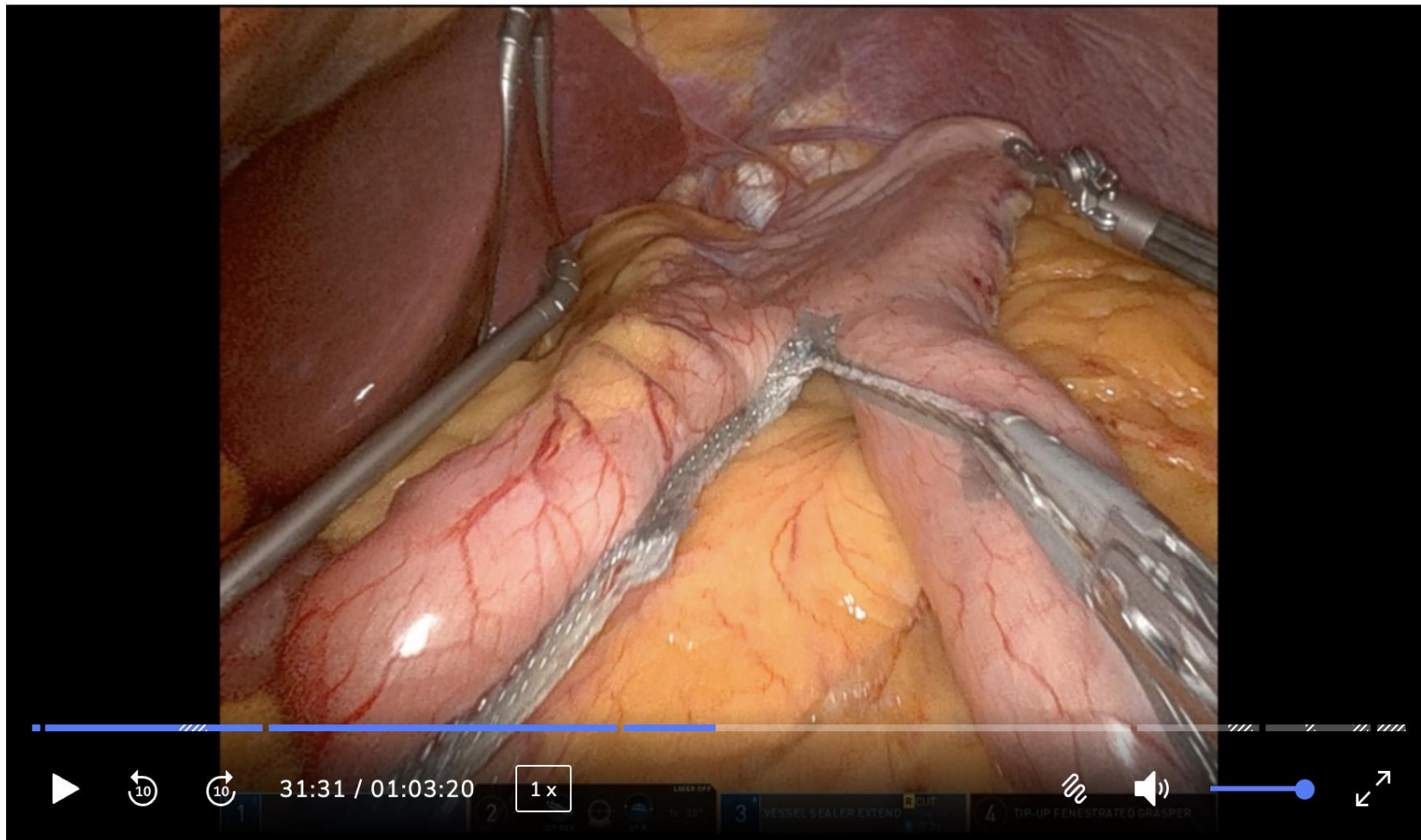
# Background

- Advancements in video recording systems with artificial intelligence (AI) are transforming surgical practice.
  - Provide assessment of intraoperative performance patterns and workflow.
- One such video recording system is Touch Surgery.



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**Workflow** Comments (0) Analytics Trends

- + Phase
- + Step
- + Note

00:18 Port Insertion

09:29 [More Info](#)

Deviation

10:38 Gastric Dissection

**26:59 Gastric Sleeve Creation**

50:40 Specimen Removal

56:34 Closure

01:01:43 Operation Finished

# Background

- Multiple RCTs conducted to analyze the efficacy of utilizing a video recording system in improving surgical performance.
- Showed:
  - Ability to assess case performance and compare to previous case performances
  - Improvement in surgical efficiency and economy of movement
  - Improvement in operative time



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# Background



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- **AIM:**
  - Evaluate the impact of AI-powered intraoperative analysis on operative efficiency.
  - 
  - Assess the effect of AI technology on operative times during robotic sleeve gastrectomy.

# Methods

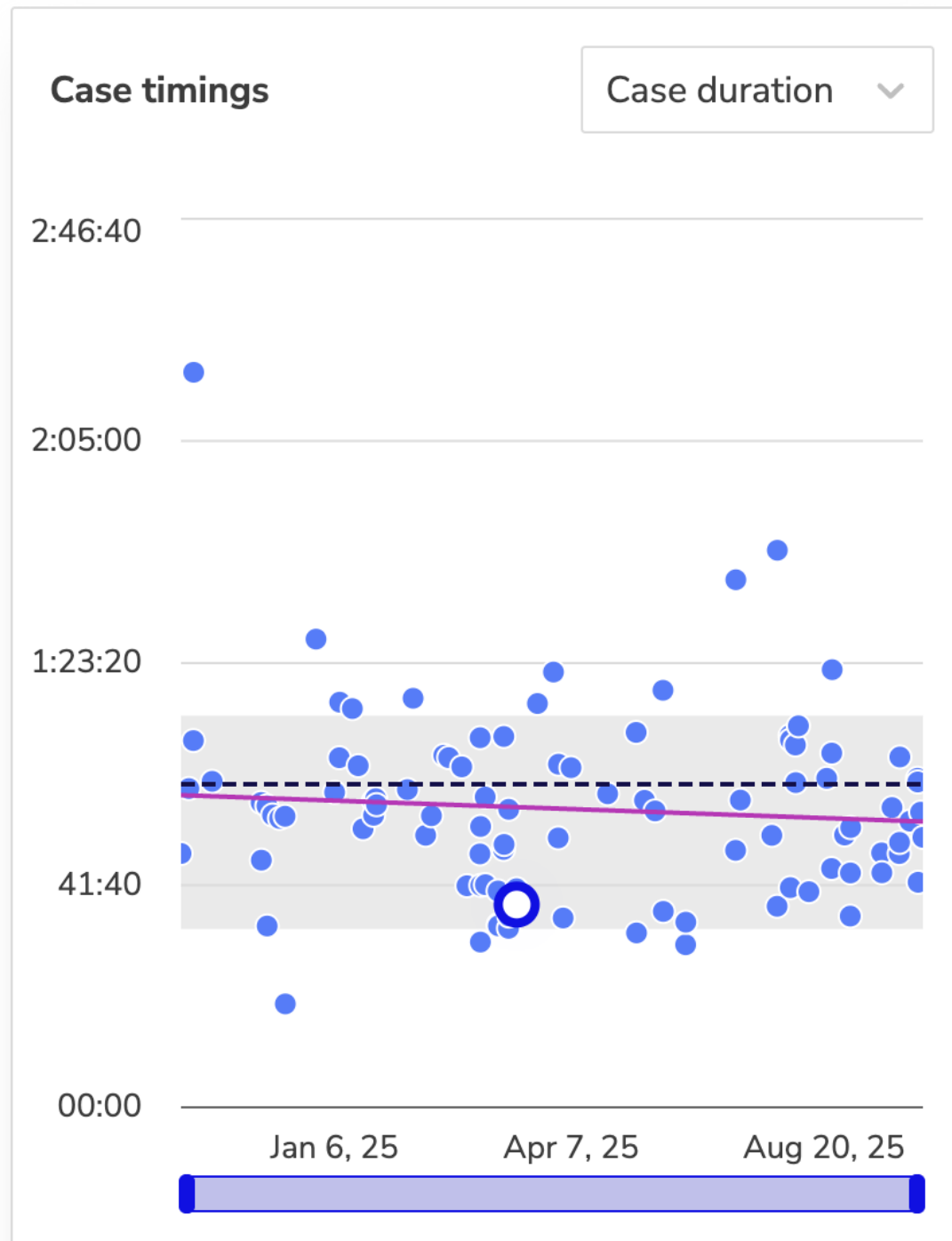
- A retrospective review was conducted of robotic sleeve gastrectomy procedures performed at our institution from November 2024 - August 2025
  - 97 cases
- Each case was analyzed by attending and fellow using the Touch Surgery application
- Primary outcomes:
  - Total operative time
  - Time required to complete key operative steps
  - Changes in efficiency over time



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# Case Duration



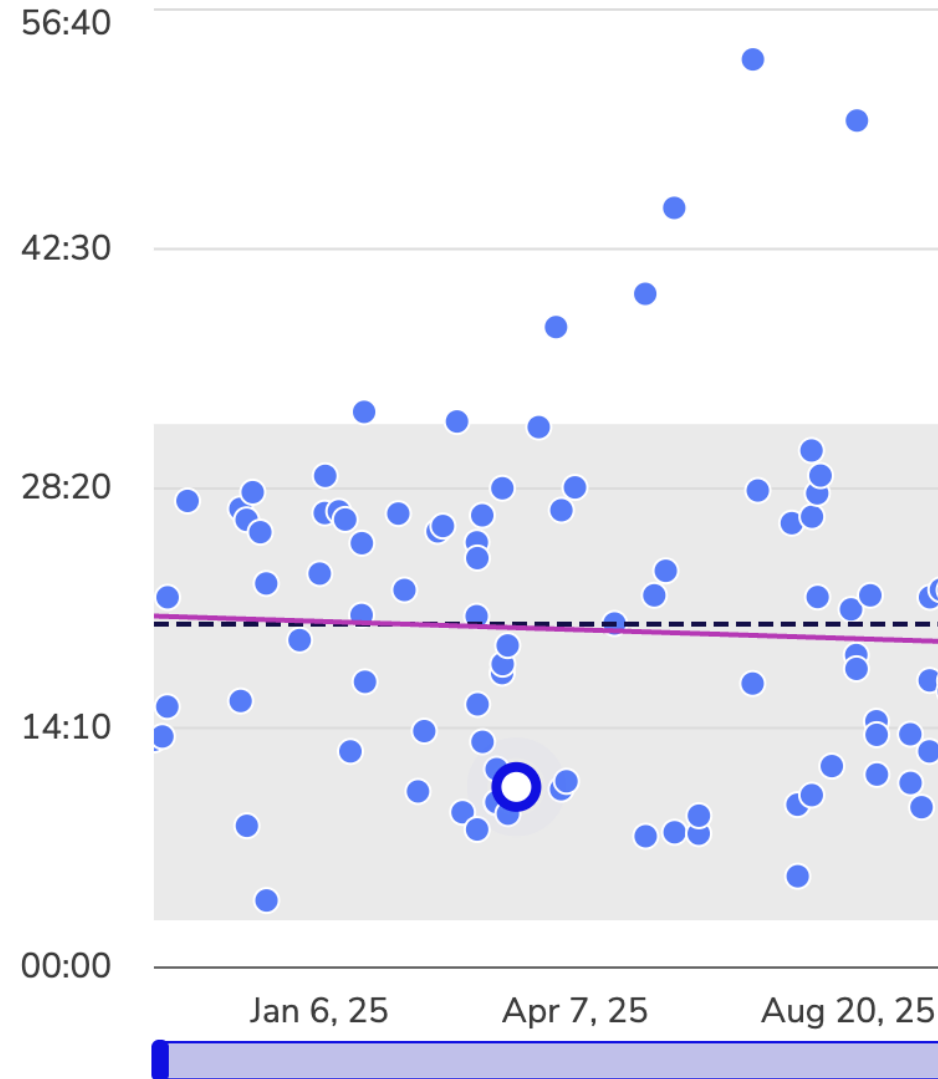
**Mean  
operative  
time:**

**65 minutes ->  
50 minutes**

# Gastric Dissection

Phase timings

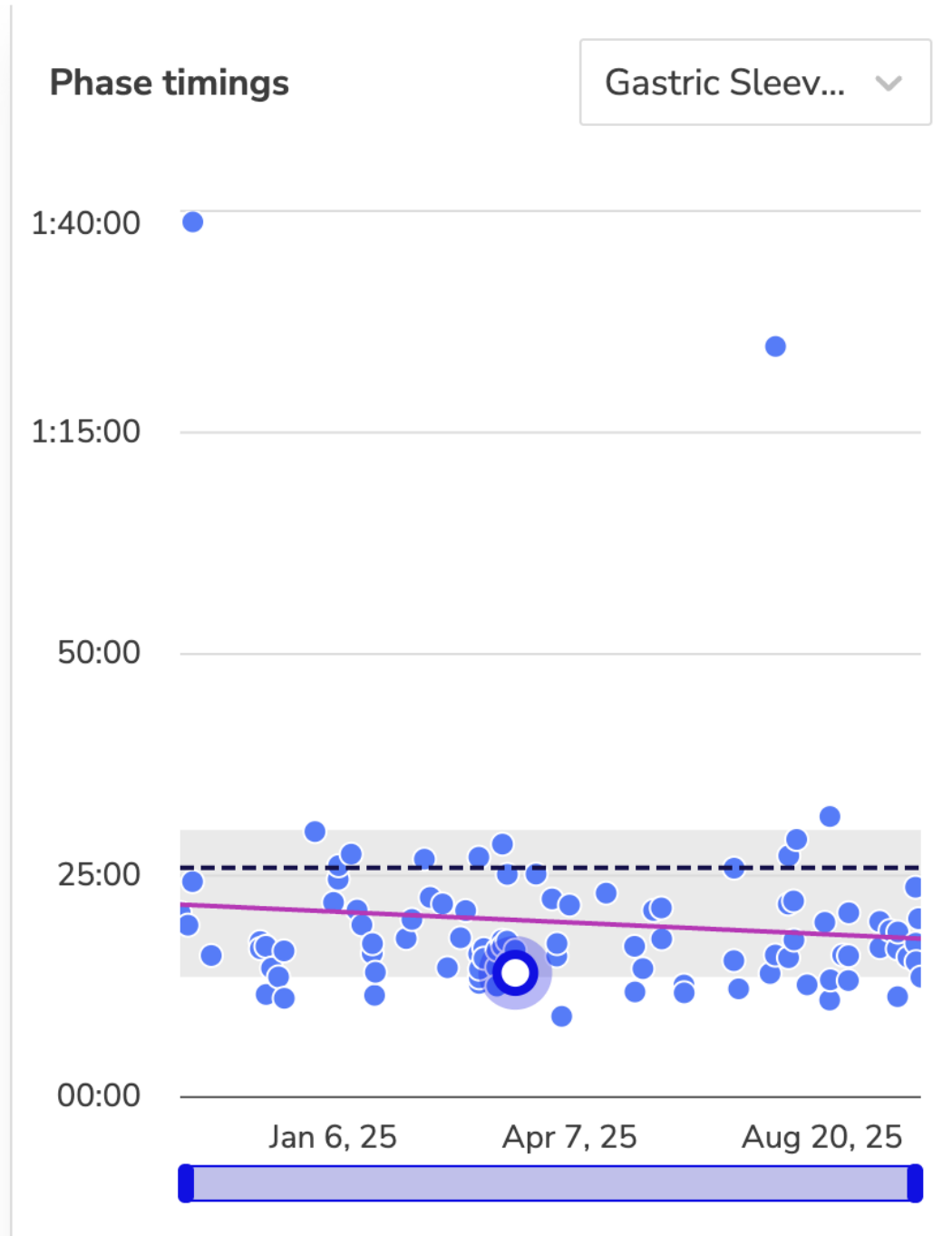
Gastric Disse... ▾



**Gastric Dissection Time:**

**20 minutes 51 seconds -> 19 minutes 3 seconds**

# Gastric Sleeve Creation



**Gastric Sleeve  
Creation:**

**26 minutes 7  
seconds -> 15  
minutes  
55 seconds**

# Results

- Decrease in mean operative time
- Key procedural step changes
  - Decreased Gastric Dissection Time
  - Decreased Gastric Sleeve Creation Time
- **Conclusion:** Implementation of the AI management system resulted in a statistically significant reduction in average operating time for robotic sleeve gastrectomies.



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