SATURDAY NIGHT FEVER: MANAGEMENT OF POSTOPERATIVE PERITONITIS AFTER SLEEVE IN AN UNSTABLE PATIENT USING A NOVEL ROBOTIC ASSISTANT

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BACKGROUND

Emergency surgeries often involve significant challenges from all aspects.

- Human factors : patient status, high stakes, stress
- Technical aspects : complex laparoscopic procedures
- Organizational challenges: staff shortages, inexperienced team, night hours

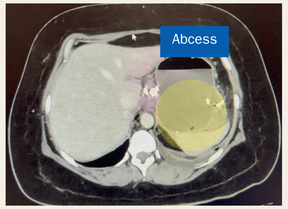
This case report details the successful use of a novel robotic platform (Maestro, Moon Surgical, Paris, France) in a high-risk emergency surgery, demonstrating its effectiveness in enhancing surgical performance under suboptimal conditions.

CASE DESCRIPTION

A 46-year-old female patient (BMI 42) underwent a primary laparoscopic sleeve gastrectomy in a day surgery setting. She was readmitted 8 days later with tachycardia and abdominal pain.

- CT scan revealed a gastric leak with a 6x8 cm abscess
- Patient's condition was critical and deteriorated quickly leading to severe sepsis, respiratory distress and tachypnea



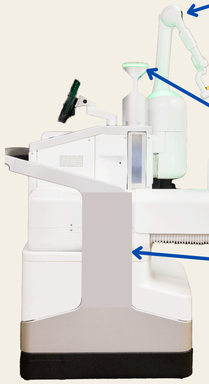




CASE MANAGEMENT

Maestro assisted in the laparoscopic management, maintaining consistent visualization and exposure while allowing the surgical assistant to focus on high-priority tasks, such as suction and surgical instrumentation.

The Maestro System



2 hypersensitive robotic arms
provides stable vision and precise retraction, rapidly adaptable for multi-quadrant surgery

Instrument graspers
supports off-the-shelf instruments 5mm or 10mm in diameter

2 x 3D cameras
collect RGB-D data about the surrounding environment

Edge-computing GPU
performs high speed real-time computer vision analysis

RESULTS

The Maestro Platform provided **stable visualization and effective retraction**, enabling the surgeon to successfully drain this huge abscess no intraoperative complications within 15 minutes, under 8mmHg pressure

CONCLUSION

This case illustrates the critical role that the Maestro robotic platform can play in **managing complex surgical emergencies.** In an environment with limited staff expertise and high patient instability, the system's ability to ensure steady visualization and **free up surgical personnel for essential tasks proved invaluable.**