THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

Department of Surgery

Robotic Flank Hernia Repair: My Algorithm

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Disclosures

- Intuitive Surgical
- Vicarious Surgical
- Informed

Outline

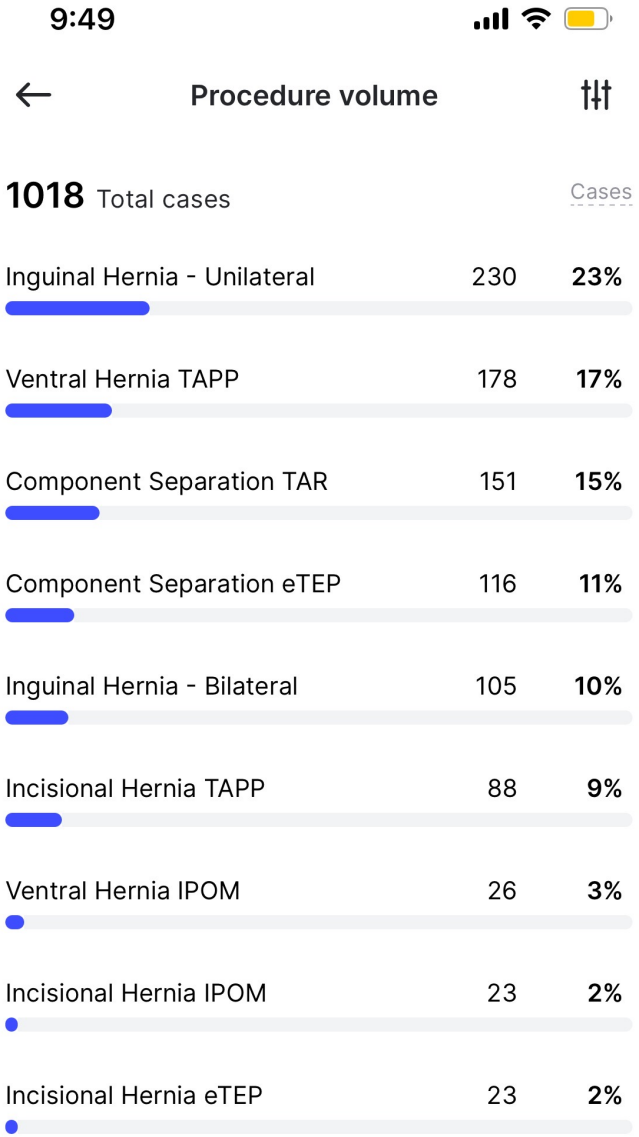
- Preoperative preparation and considerations

- Intraoperative technique
  - Pearls
  - Pitfalls

Who Am I?

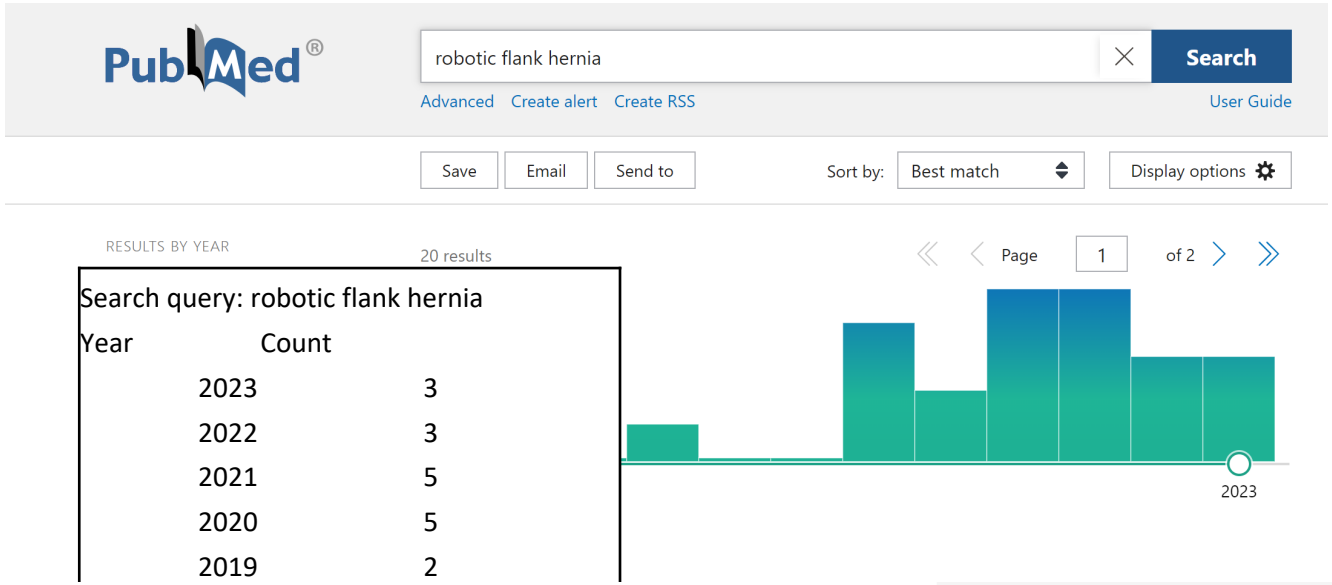
- MIS Fellowship, OHSU (2017)
  - Laparoscopic foregut
- Adopted robot abwall post-fellowship
  - 1000+ robotic hernia operations

Robot should add simplicity to a challenging MIS operation



The Data

- Not much really
- Feasibility study in 2018



Feasibility of Robotic-Assisted Transabdominal Preperitoneal Ventral Hernia Repair

Georgios Orthopoulos and Omar Yusef Kudsi

Published Online: 1 Apr 2018 | https://doi.org/10.1089/lap.2017.0595

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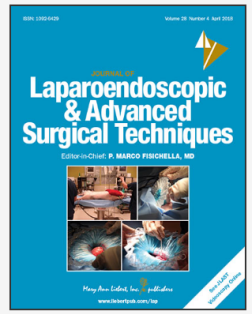
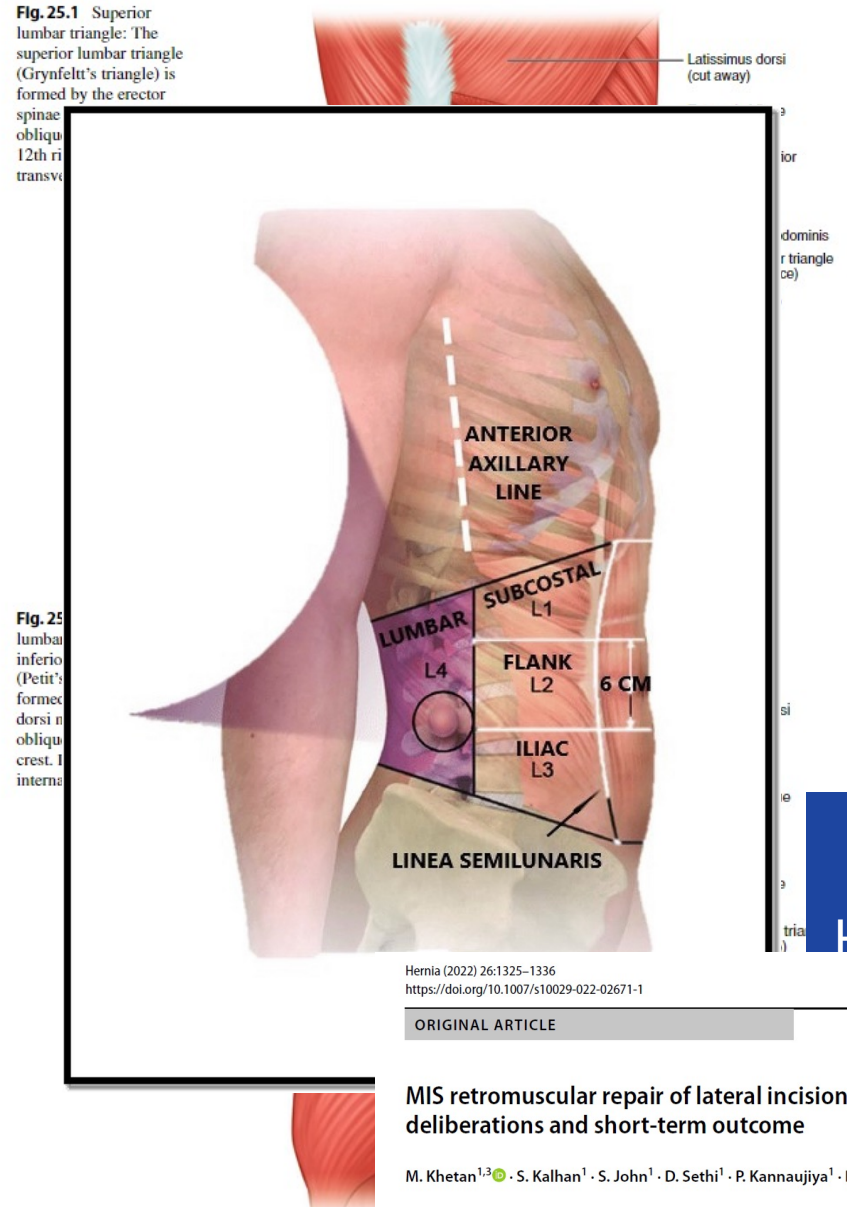


Information

Challenges with Flank Hernia

- Anatomically complex?
  - Continuation of midline/lateral tissues planes of which most AWR surgeons are familiar
  - Few are true Grynfelt/Petit hernias
- Generally acquired (trauma, incisional)
  - Obfuscated planes, scar tissue
  - Lack of reliable fascial planes
- Presence of named neurologic structures



Yuri W. Novitsky
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Hernia Surgery

Hernia (2022) 26:1325–1336
https://doi.org/10.1007/s10029-022-02671-1

ORIGINAL ARTICLE

MIS retromuscular repair of lateral incisional hernia: technological deliberations and short-term outcome

M. Khetan[1,3] · S. Kalhan[1] · S. John[1] · D. Sethi[1] · P. Kannaujiya[1] · B. Ramana[2]

Received: 16 April 2022 / Accepted: 30 August 2022 / Published online: 10 September 2022

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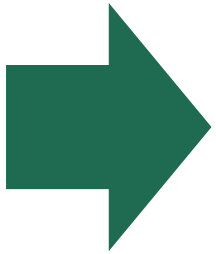
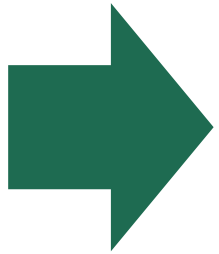
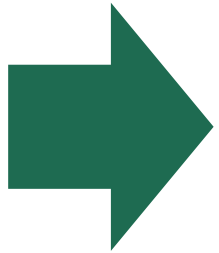


- Higher Recurrence Rate
- Higher Morbidity





- Wider mesh overlap
- Fixation?
- Counseling patients of reasonable outcomes

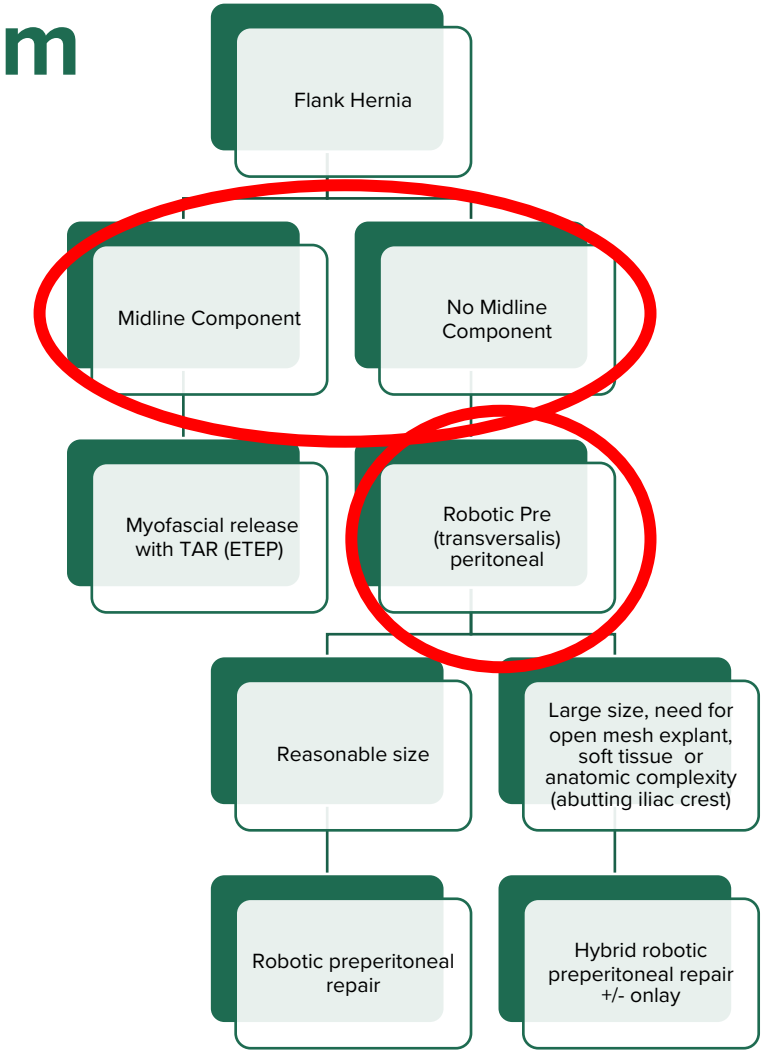
Preoperative Optimization

- Smoking Cessation (6-8 weeks)
- Diabetes Control (A1c<8)
- Prehabilitation to improve functional status
- Weight Loss
  - …to whatever subjective BMI you feel is appropriate
    - Body fat distribution
    - Complexity of hernia

My Outcomes

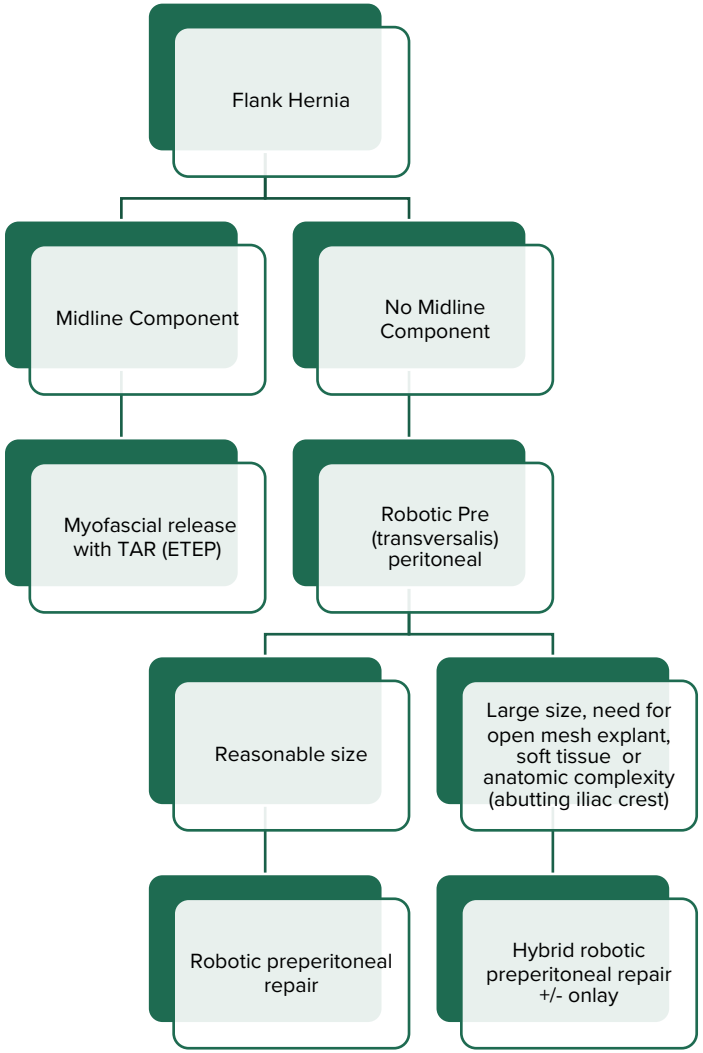
- N=24, 2019-2024
- 2 recurrences (8%)
  - Early technical failure
- 2 chronic pain (8%)
  - Cryoablation postop
  - Unchanged from preop (rib resection)
- 4 seroma (16%)
  - 1 requiring I and D

My Algorithm



My Algorithm

- Robot always?
  - Affords wide mesh overlap
  - Easier reduction of contents/lysis of adhesions
- Hybrid (add open incision):
  - Need for mesh explant
  - Soft tissue complexity
  - Anatomic complexity (iliac crest)
  - “Large” size
    - No specific size cutoff



Operative Setup

POSITIONING

- Lateral Decubitus
- Use rolled up sheets, NOT Bean Bag
- Arm on pillows, NOT Mayo
  - Lower profile
  - Avoids arm collisions
- “Practice” having the robot docked to assess collisions

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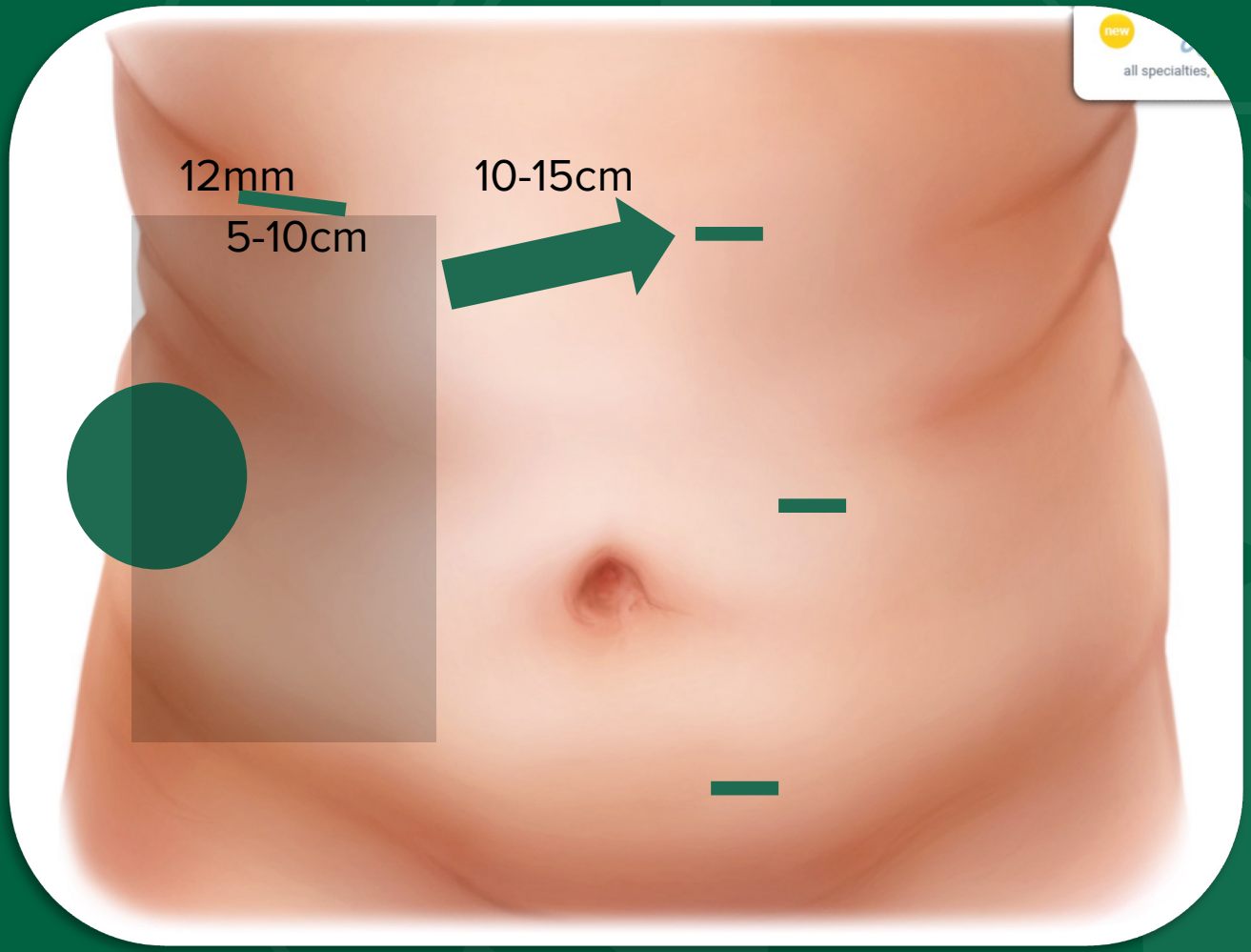

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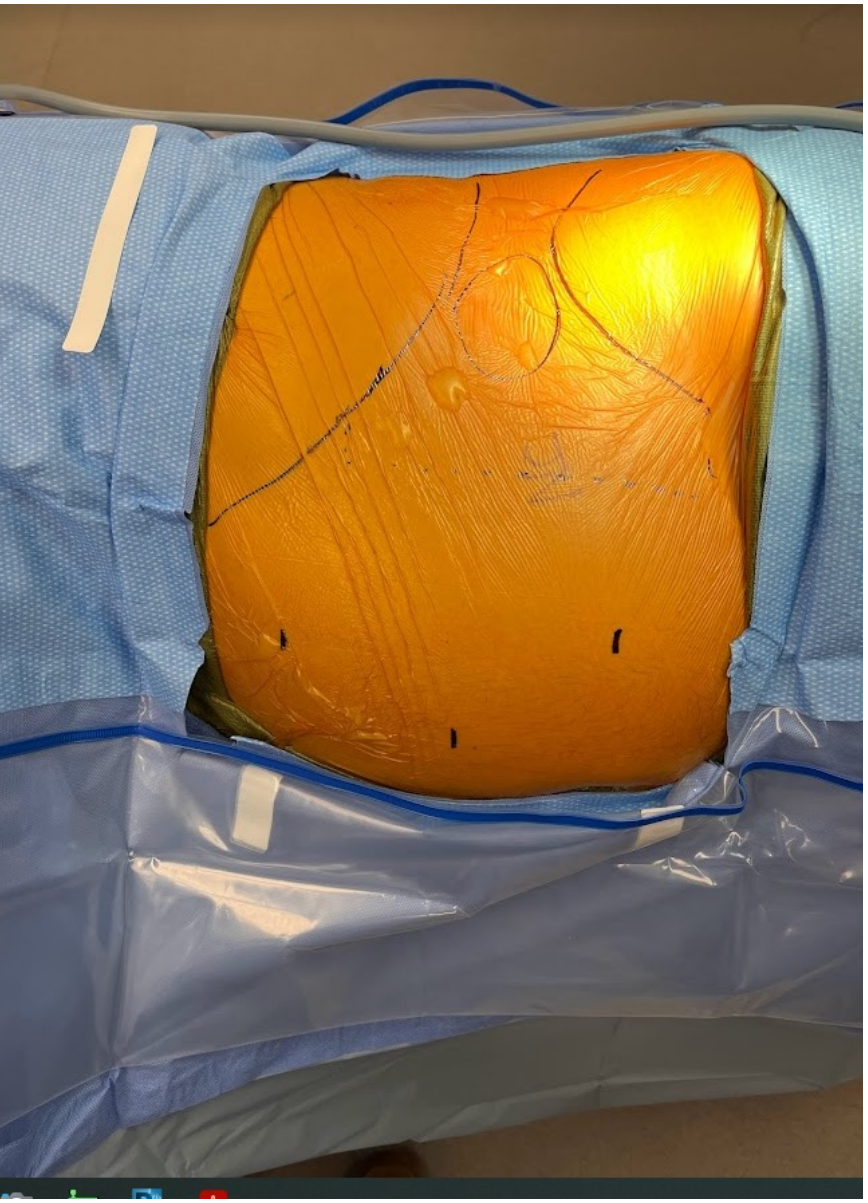
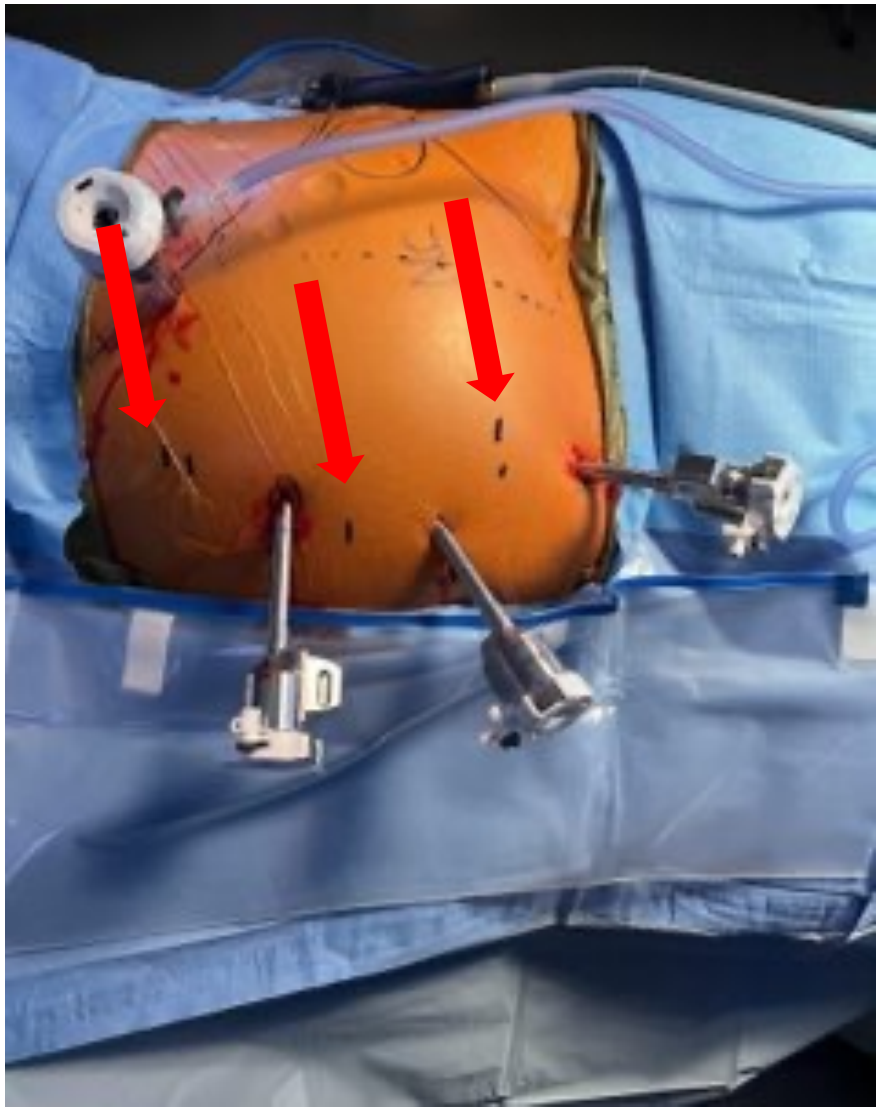
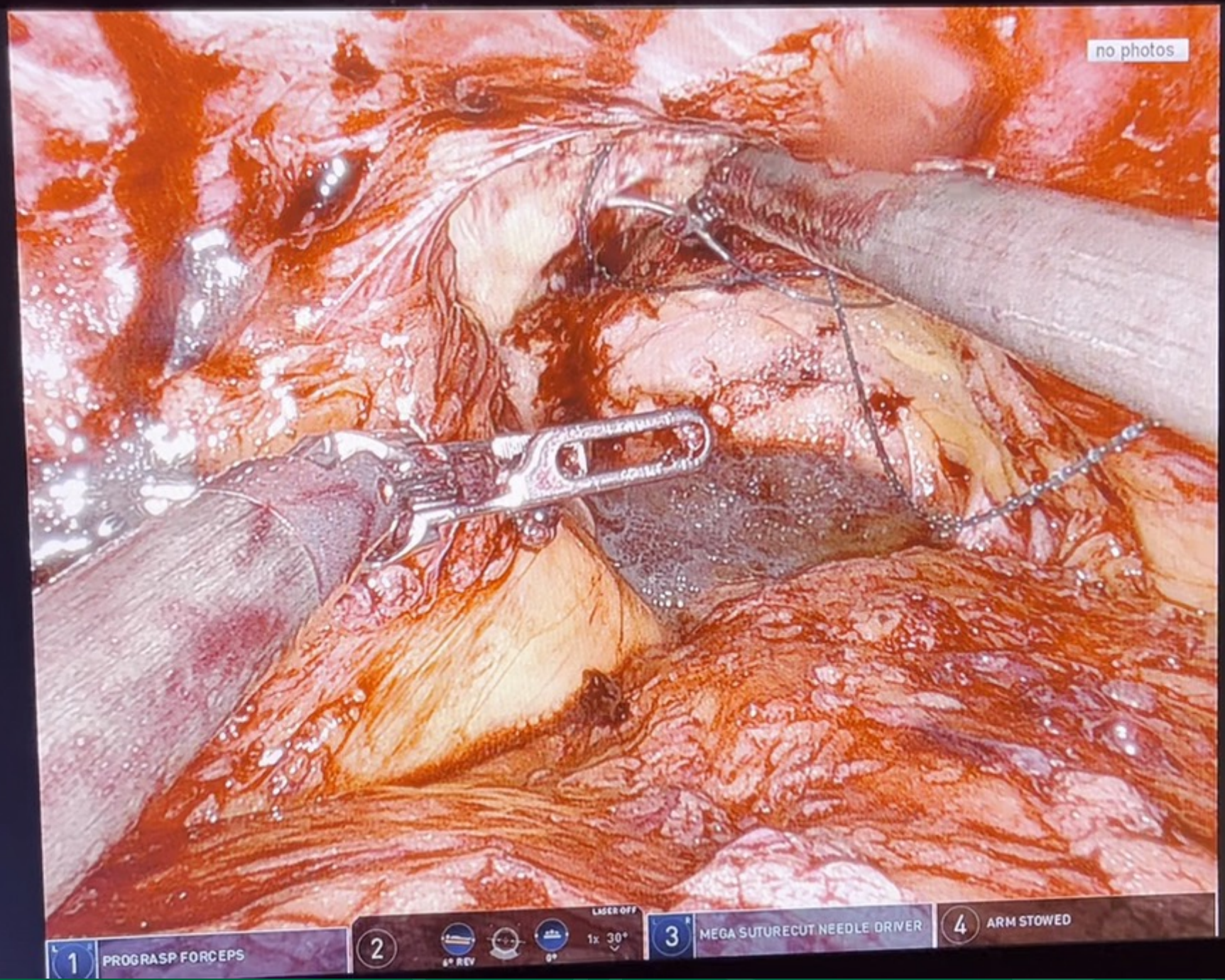


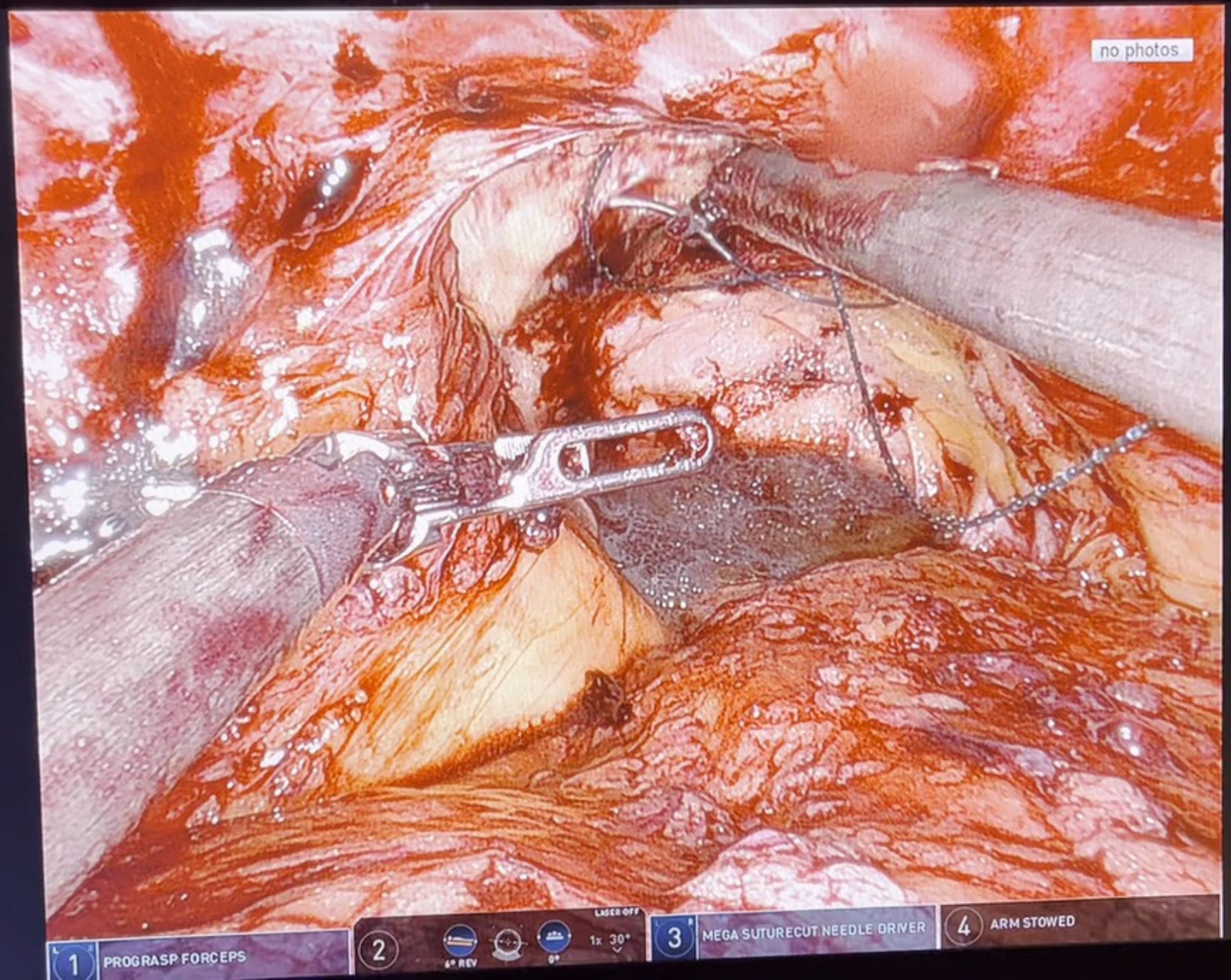
PORT PLACEMENT

- Operation will end before it starts if ports are not placed correctly
- Avoid bony prominences
- Need adequate distance to develop flap
- Also need to access retroperitoneum posteriorly




NOT PAIRED WITH TABLE
LASER OFF
1x 30°
1
2
3
4


no photos
1
PROGRASP FORCEPS
2
LASER OFF
1x
30°
3
MEGA SUTURECUT NEEDLE DRIVER
4
ARM STOWED


no photos
1
PROGRASP FORCEPS
2
LASER OFF
6° REV
0°
1x 30°
3
MEGA SUTURECUT NEEDLE DRIVER
4
ARM STOWED

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Conclusions:
Prepare yourself and the patient
Adhere to technical tricks for success

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Thank you!

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