Tips for eTEP - Things I Learned the Hard Way

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eTEP Access Umbilical Hernia Repair
- **Dr. Jorge Daes** - increased visualization and ergonomics during inguinal hernia repair

- **Dr. Igor Belyansky** - applied to all varieties of hernia

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**Major Concepts of the eTEP Procedure**
Major Concepts of the eTEP Procedure:
Develop a Space Within the Rectus Compartment
Major Concepts of the eTEP Procedure: Initiate the “Cross-over”
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Initiate the "Cross-over"
Major Concepts of the eTEP Procedure:

Incise the Contralateral Posterior Rectus Sheath
Major Concepts of the eTEP Procedure:
Develop Contralateral Retrorectus Space
Major Concepts of the eTEP Procedure: Suture Fascial and Peritoneal Defects
Major Concepts of the eTEP Procedure:
Place Mesh
• Flex bed at the hips
• Double strap or use “pink pad”
• Dock robot
  • Perpendicular to the bed for X and Si and small hernias
  • Foot of the bed for Xi and big hernias
• Use angled robotic scope

Steps with Highest Profanity-Index

Training options
- Trocar insertion
- Crossover

**Trocar Placement: how to do it wrong**

- Place trocar lateral to the semilunar line
- Place trocar *anterior* to anterior rectus fascia
<table>
<thead>
<tr>
<th>Place trocar into the abdomen (more likely on lower abdominal trocar)</th>
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<tbody>
<tr>
<td>Inappropriate trocar position for width of rectus</td>
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**Initial Trocar Tips**

- Don’t guess where the semilunar line is located
- Utilize an optical trocar
- Place initial trocar high in the abdomen
• If anatomy doesn’t seem right, it is not

Initial Trocar Tips (cont)
Additional Trocar Tips

- Bipolar is more reliable than monopolar.
- Flexed at the tips to make more room for lower quadrant trocar.
- Divide tissue toward ceiling less camera issues.
- Bluntly dissect retro-rectus space for second trocar but don't go crazy.
- Respect un-named vasculature.
- Branches of inferior epigastric.
- Make a nice landing zone for third trocar.
- Peri-umbilical vessels.
- Bariatric trocar for the lower quadrant
- Dilate trocar path if thick abdominal wall
- Supplemental intra-abdominal trocar if needed
- Local insertion

- Crossover

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Crossover: how to do it wrong

- Dock robot in a narrow rectus space
- Incise through the linea alba
Decide How to Handle the “Crossover”

- Incise through the peritoneum
Decide How to Handle the “Crossover”

- Rectus > 7 cm then robotically with 3 trocars
- Rectus < 7 cm
  - Laparoscopic with 2 trocars
  - Place third trocar in contralateral rectus space,
Crossover tips

- Map linea alba with pre-op ultrasound
- Utilize bedside assistants
- BE PARANOID
Reduce Hernia and Close Defects
Mesh Insertion

- Measure size of mesh needed prior to closing fascia
- Mark the center of the mesh (may use...
the mesh (may use suture)

- Roll mesh from both sides toward center

Is It Worth It?
Surgeon Selection

- Comfortable with MIS inguinal repair
- Be VERY comfortable with TAR anatomy
- Probably should have TAR experience
- Have a bail-out plan
Patient Selection

- Large Hernias
- Small hernia + thick subcutaneous fatty layer
- Small hernia + significant diastasis
Relative Contraindications to eTEP

• Surgical scars in overlying both rectus spaces
• Anti-platelet or anti-coagulant
• NO significant diastasis + small hernia + thin subcutaneous fatty layer
• Especially with low BMI patients
• Following data on high BMI patients

Pre-op Evaluation

• CT abd/pelvis prior to day of surgery
• Measure width of rectus muscle *(is it 7 cm?)*
• does hernia sac allow for safe trocar insertion

• U/S rectus and diastasis in preop area and mark