

# Inguinal Hernia Repair

# Key Simulated Steps and Operative Principles

- Placement of mesh(mobile object) to inguinal ligament (immobile object) in deep space

Intraop step	Simulated step
Dissection through abdominal wall muscles	Dissection through pig intercostal muscle until down to periosteum of the pig rib
Mesh placement by suturing mesh to the inguinal ligament	Mesh placement by suturing mobile object (window screen) to immobile object (periosteum of the pig rib)

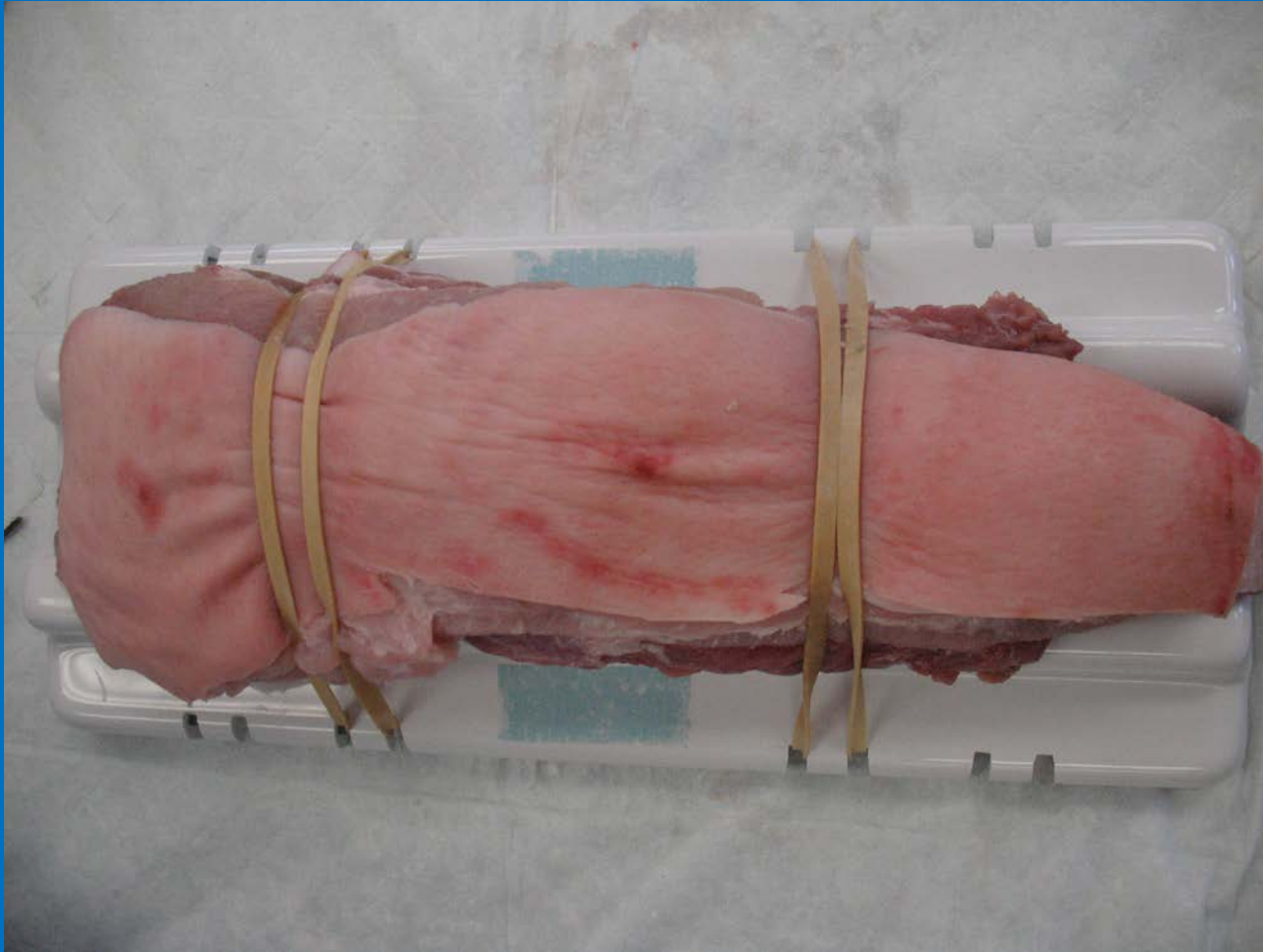
# Goals and Objectives

- Handle Weitlander correctly to achieve proper exposure
- Work with the assistant to precisely dissect through subcutaneous tissue and muscles using Bovie cautery
- Suture and tie surgical knots in deep space
- Suture mobile object to an immobile object beginning and ending with same stitch

# Required Materials

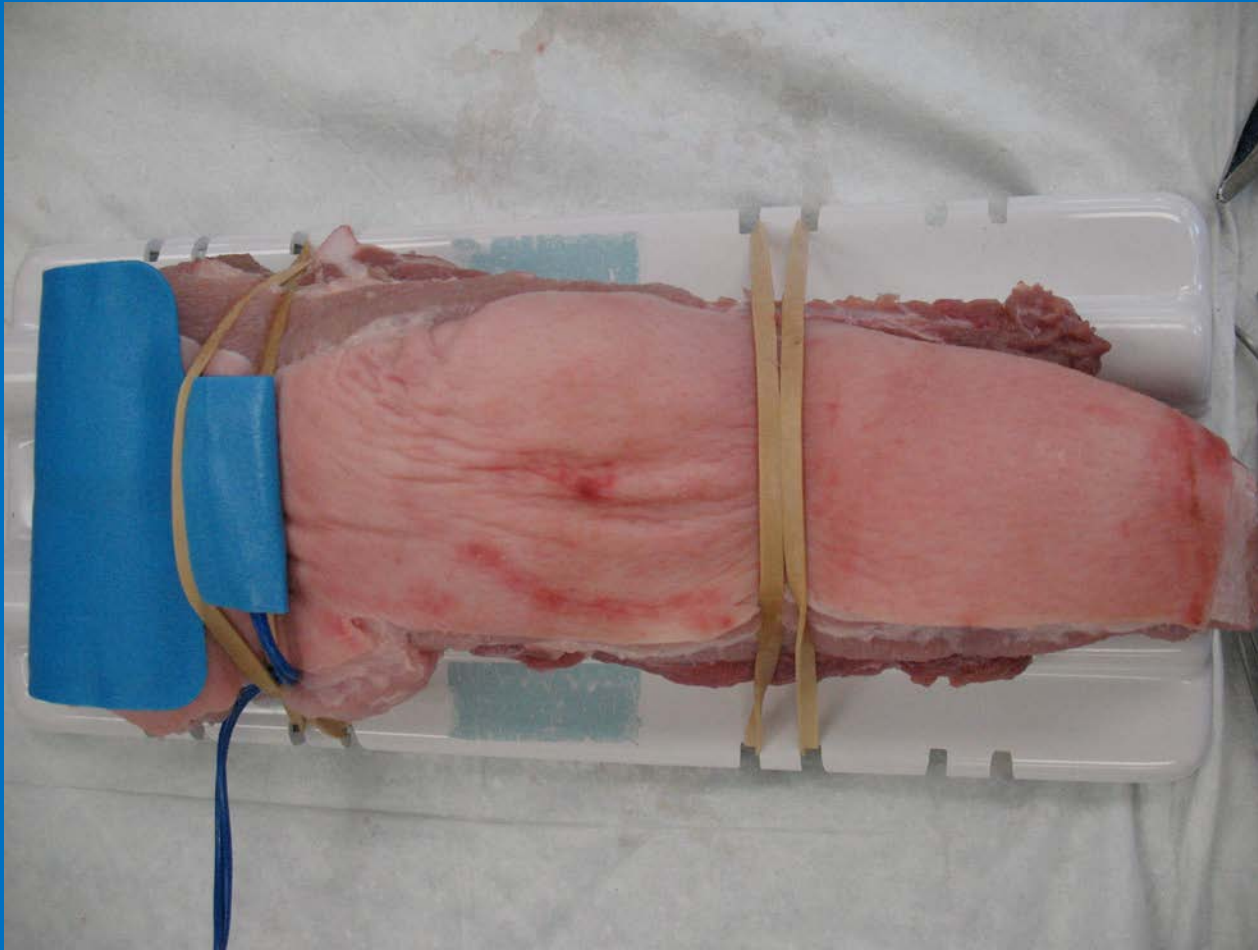
- Poke side with 2 ribs
- Pork tray
- Rubber bands
- Electrocautery and pad
- Window screen (as mesh)
- Scalpel
- Weitlander
- Army-Navy retractor
- Debaquey forceps
- Addison forceps
- Needle drivers
- Suture scissors
- Kelley clamps
- Metzbaum scissors
- 3-0 Vicryl (polyglycolic acid suture)
- 3-0 nylon

# Setup Step 1



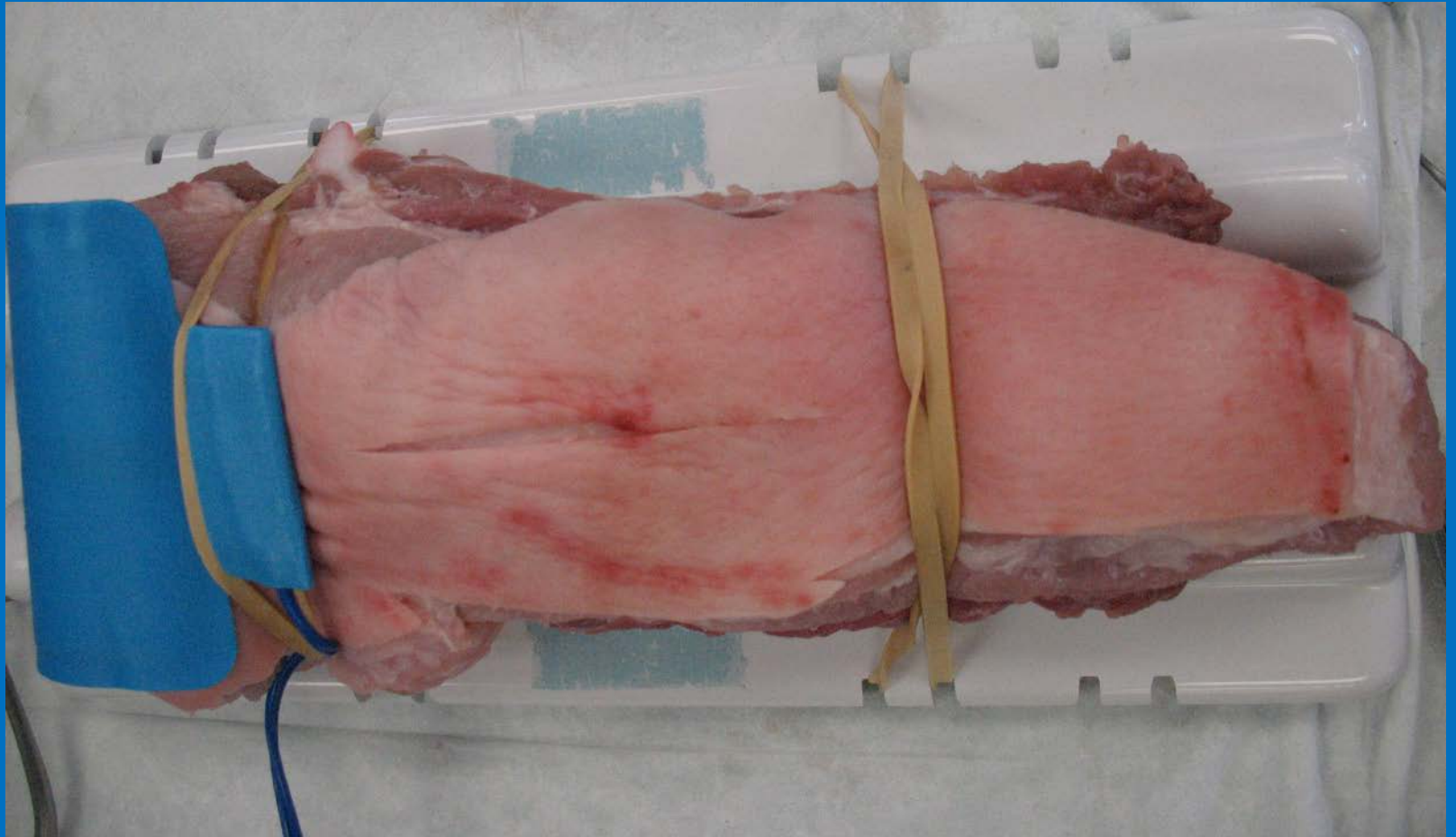
Obtain pork side with 2 ribs and use rubber bands to secure ribs to the pork tray

## Setup Step 2



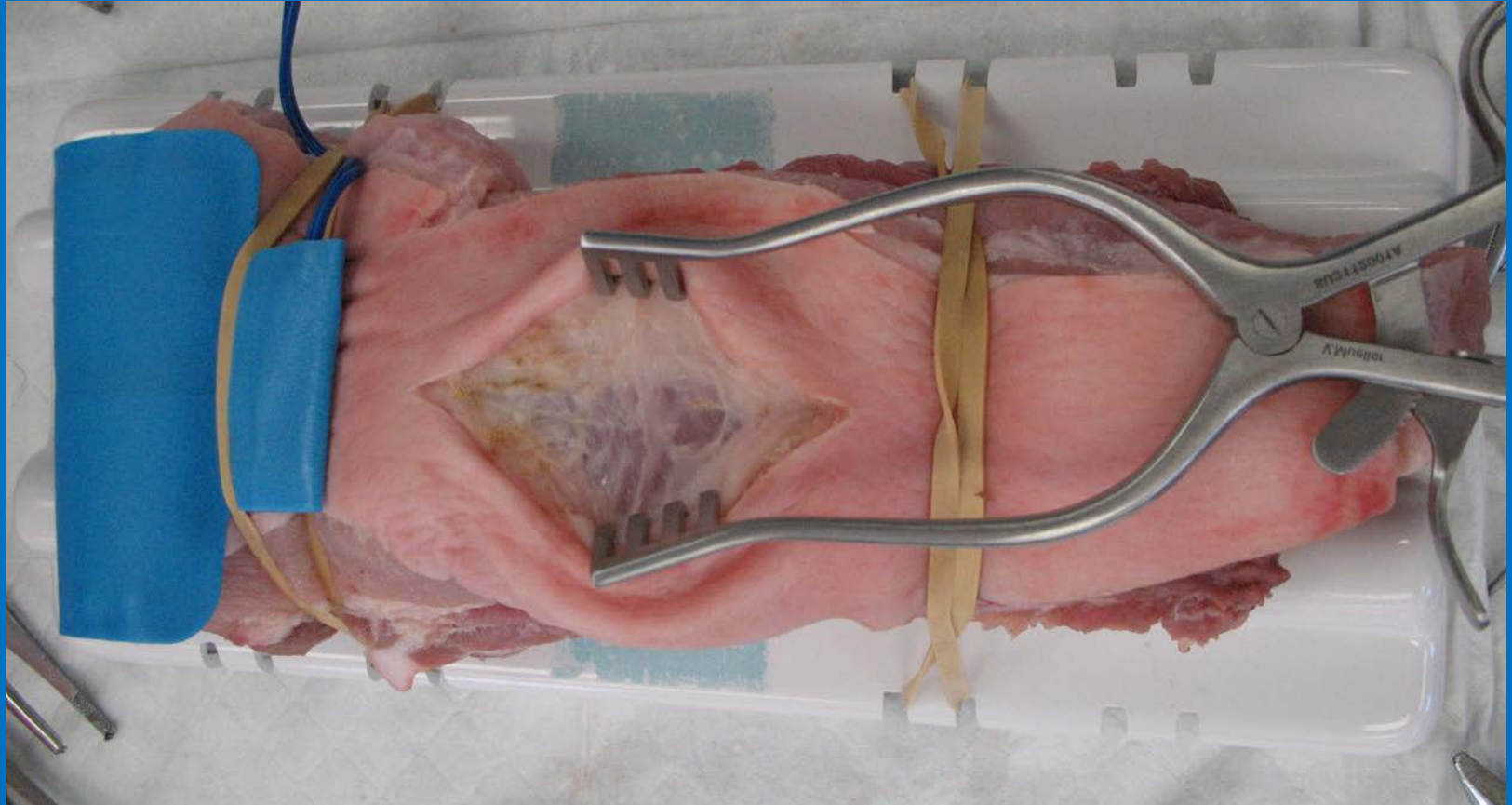
Use rubber bands to also secure Electrocautery pad to the pork side

# Procedure Step 1



Make an incision roughly 10 cm in length

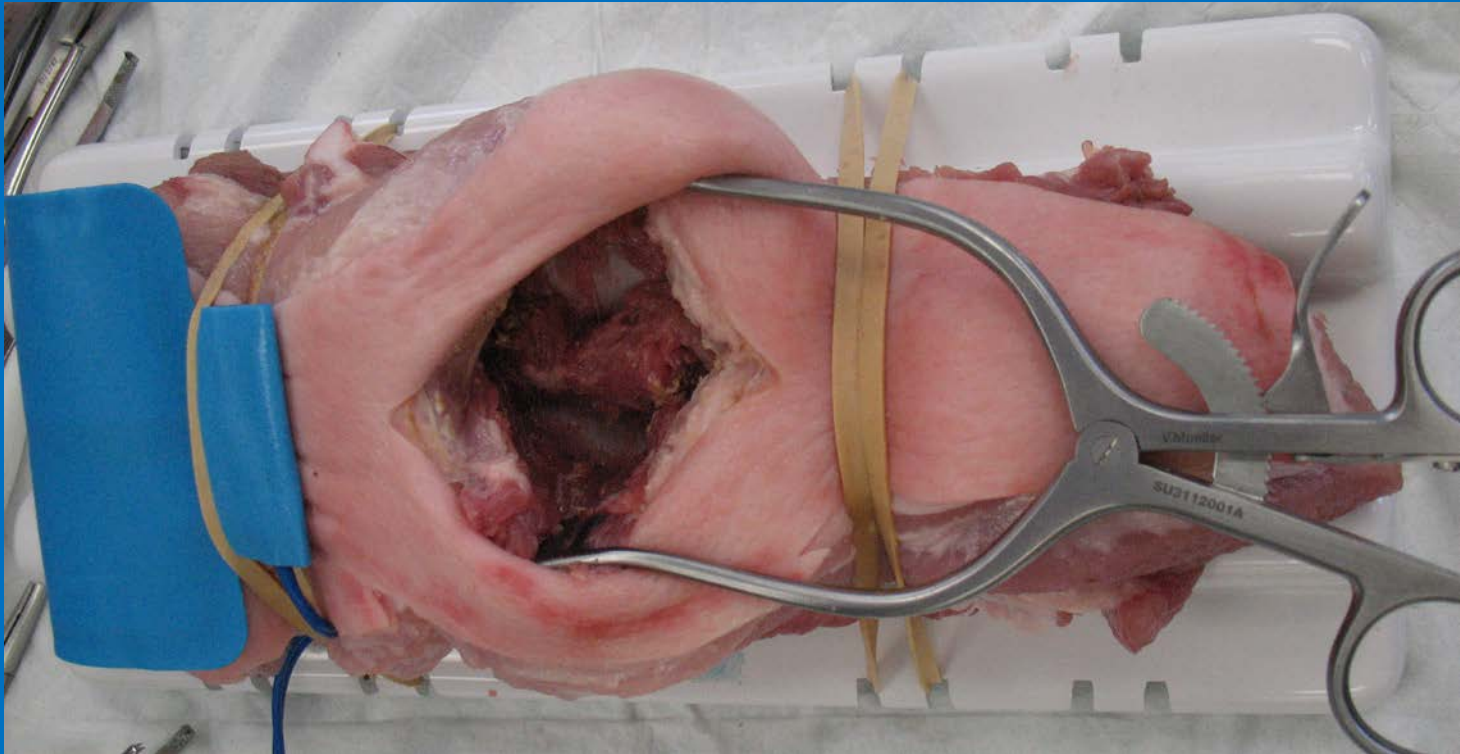
## Procedure Step 2



Dissect through subcutaneous tissue and muscle

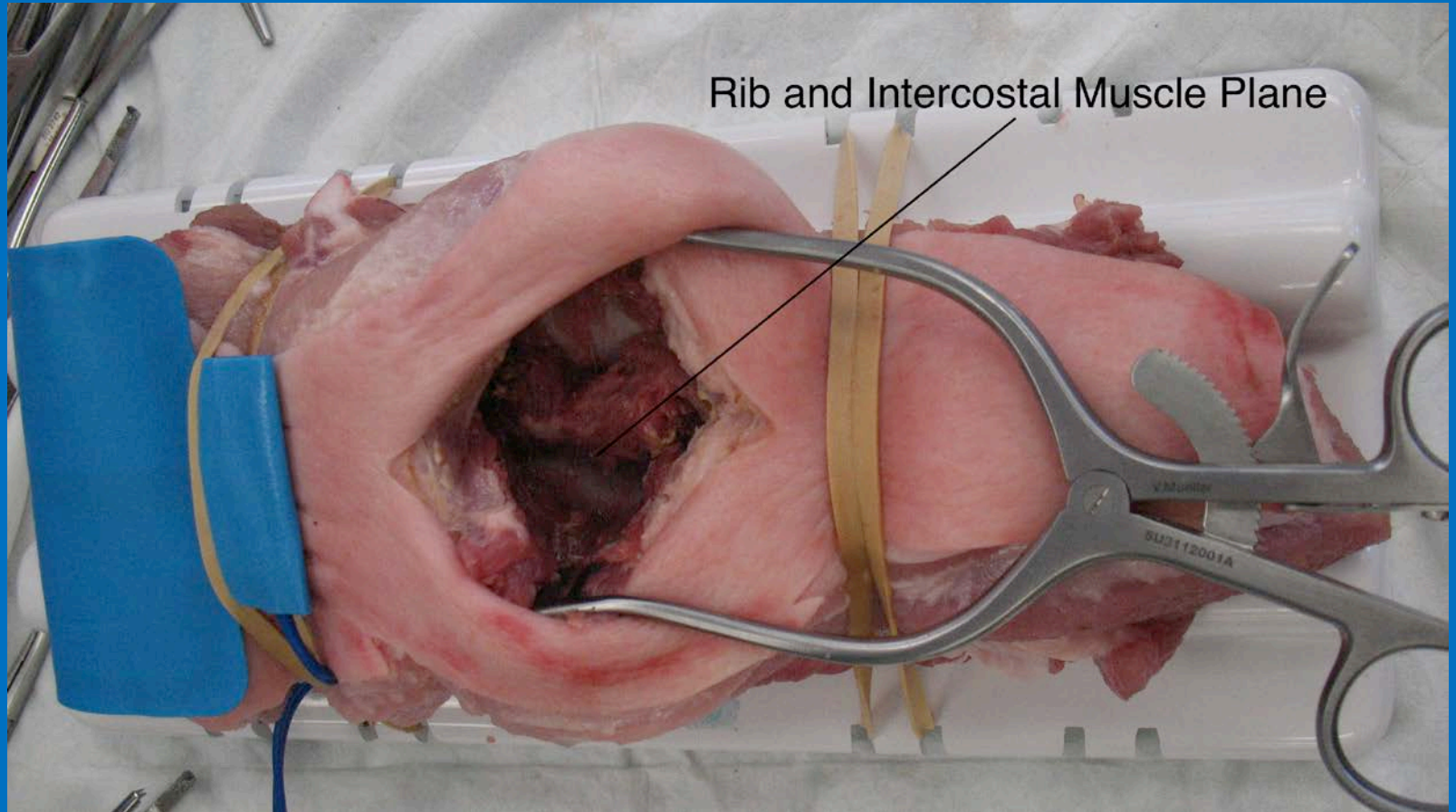


# Procedure Step 3



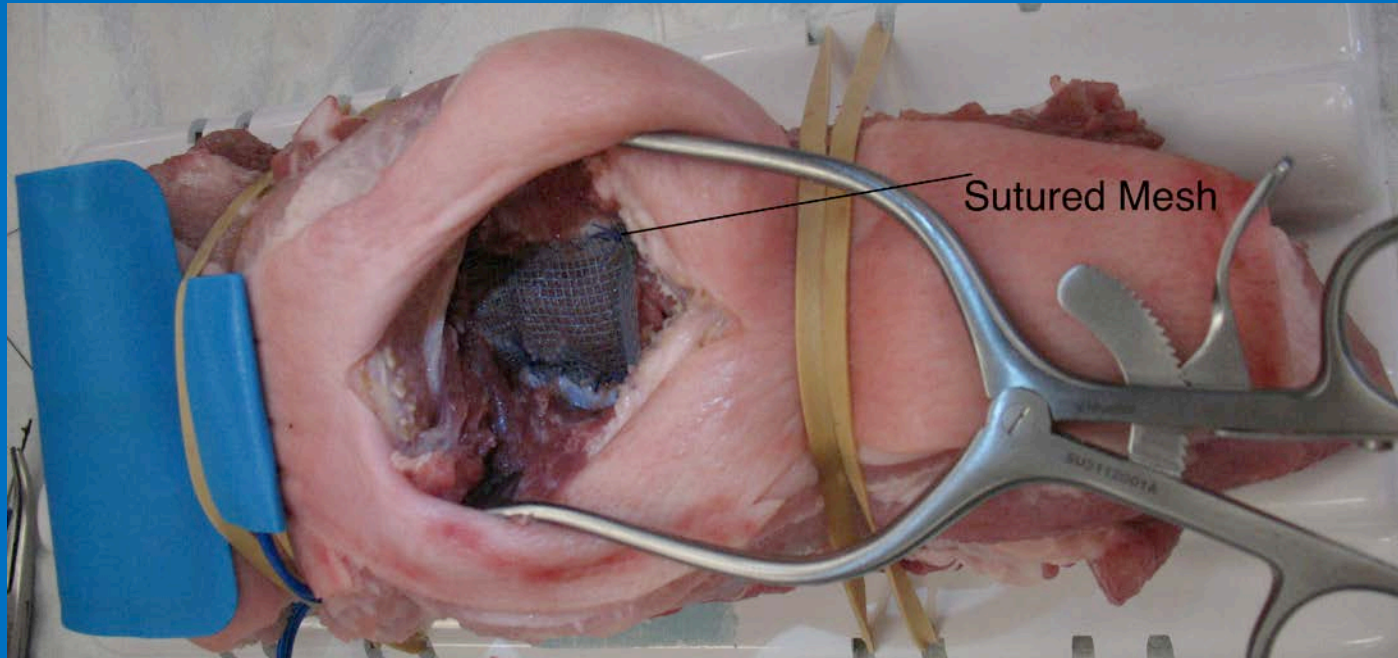
Use Weitlander for exposure and reposition as needed throughout the case

# Procedure Step 4



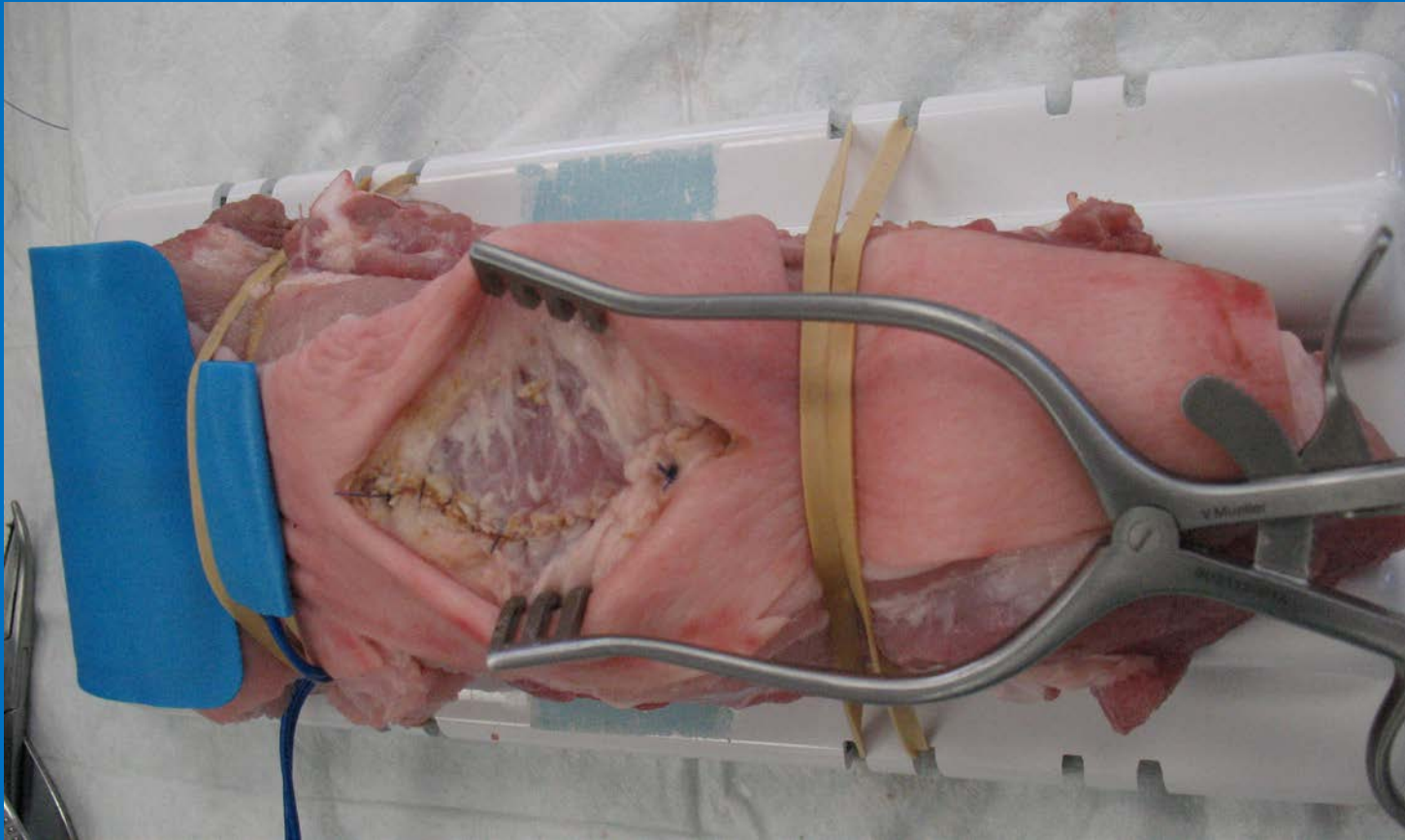
Dissect down to rib and intercostal muscle plane

# Procedure Step 5



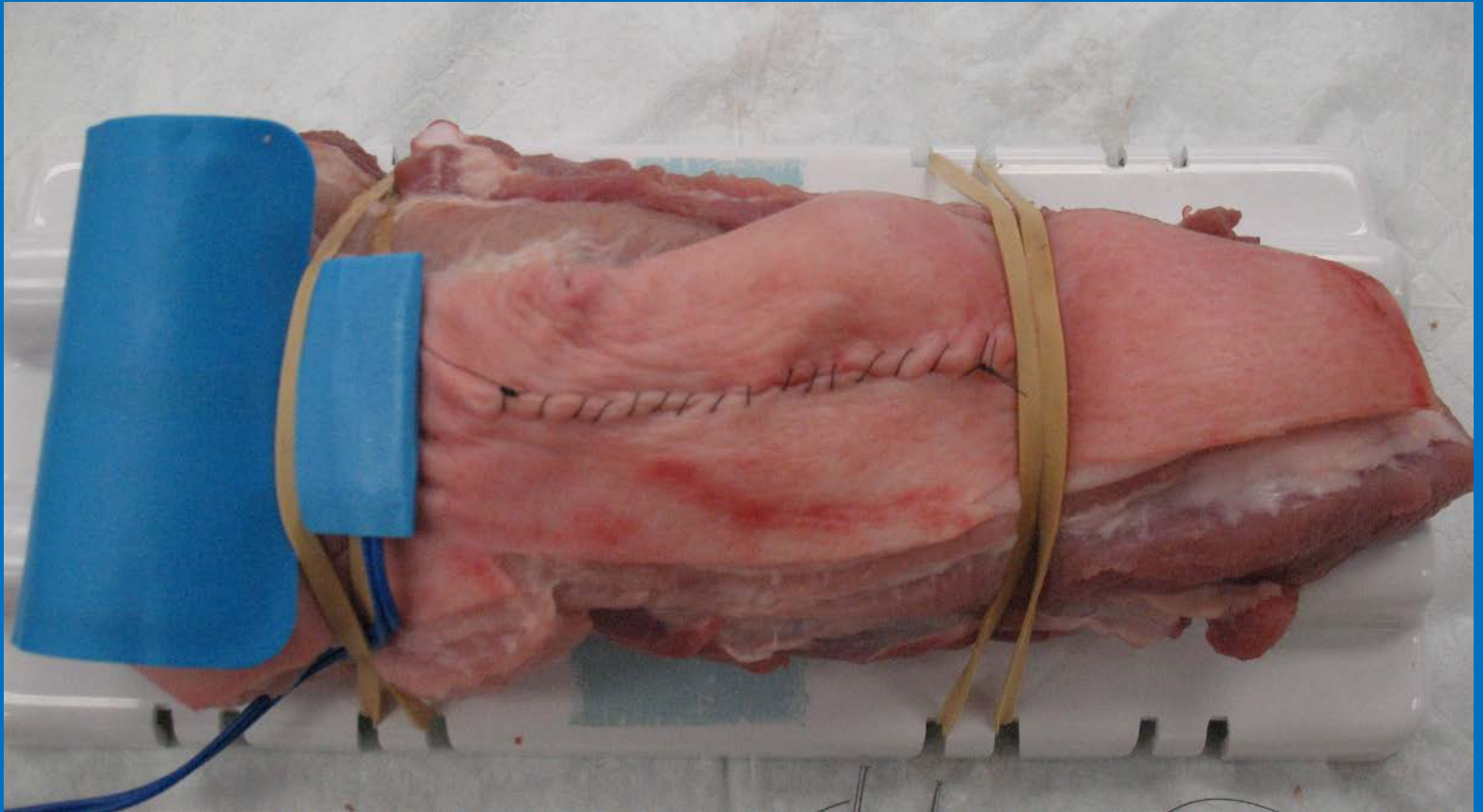
Suture mesh with running 3-0 Vicryl to both ribs so that the intercostal space is reinforced with mesh (can practice one with forehand and one with backhand)

# Procedure Step 6



Reapproximate fascia/muscle with running 3-0 absorbable sutures

# Procedure Step 7



Reapproximate skin with running 3-0 Nylon (can substitute with vertical mattress or subcuticular)

# Checklist

- With proper tension, make sharp skin incision without skiving
- Proper exposure and dissection technique (use of cautery, Kelley clamps, assistants and retractors)
- Expose the intercostal space adequately in preparation for mesh
- Suturing mobile subject (window screen) to something immobile (periosteum) in deep space with proper spacing out of sutures to avoid bunching up of the mesh
- Secure fascial closure with running suture
- Tight skin closure with running suture