

Montefiore
THE UNIVERSITY HOSPITAL

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Principles of Abdominal Wall Reconstruction

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Disclosures

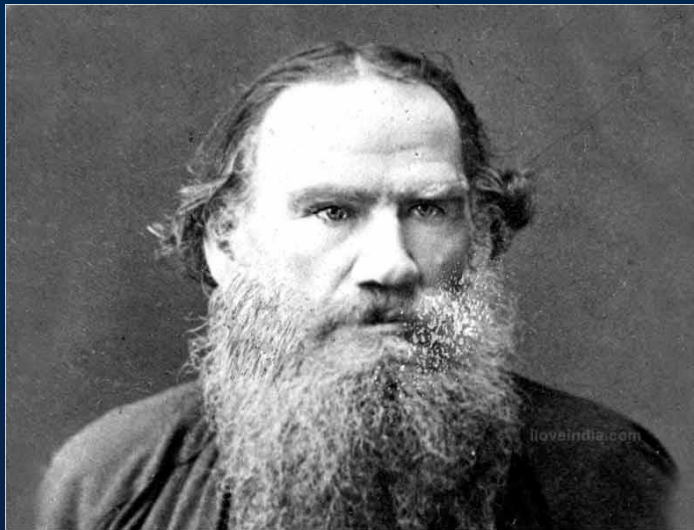
- Founder, SigmaSurgical, llc
- Consultant, Stryker Corp.
- SAB, Novadaq, Inc.

What are the controversies?

- Synthetic or biologic?
- Over-lay, under-lay, in-lay, retro-rectus, intraperitoneal?
- Staged or single-stage?
- Bridged or not?
- SoC, TAR, Flaps?
- Should we do them at all?

Patient Population

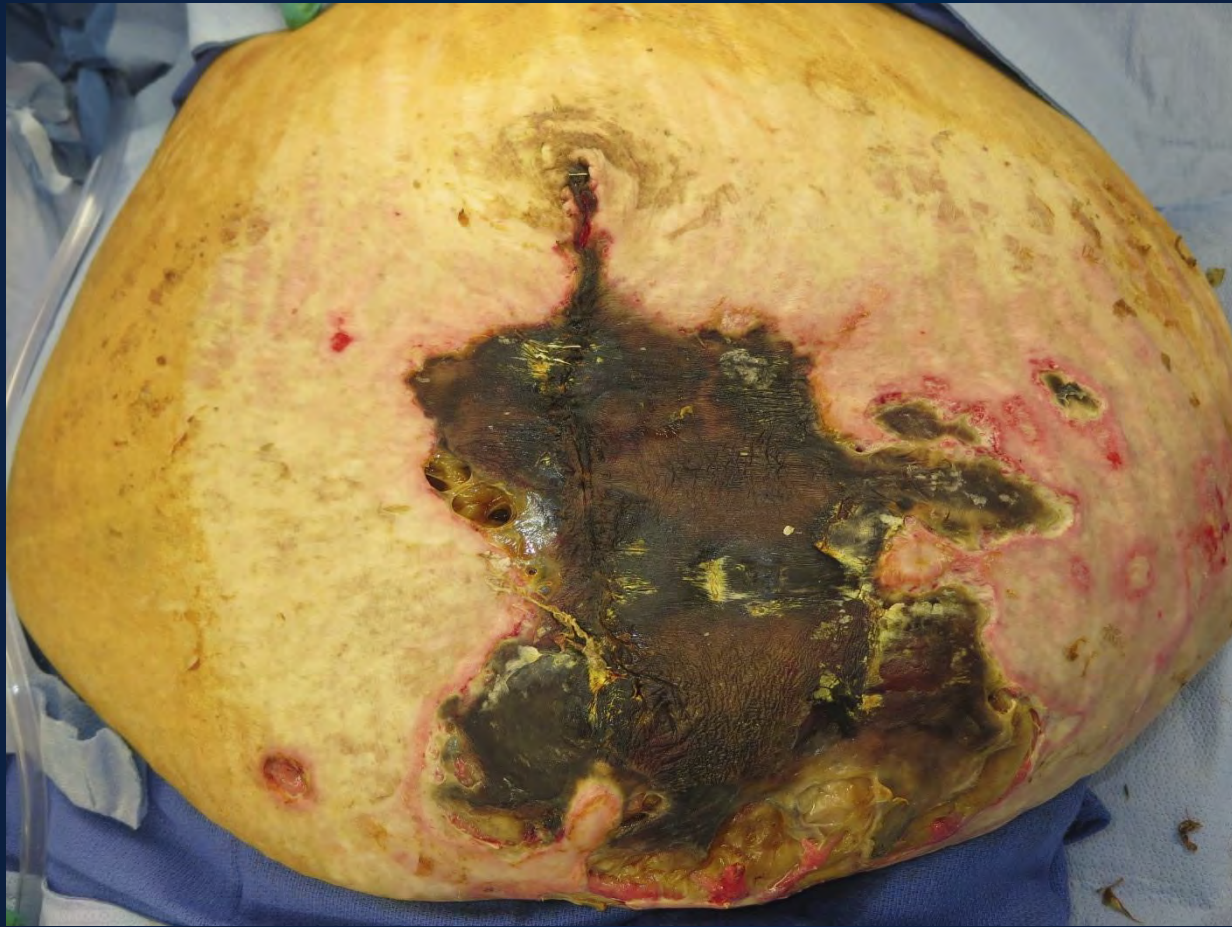
- “All happy families are alike. Each unhappy family is unhappy in its own fashion.”
- All normal abdominal walls are pretty much the same. Each ventral hernia is unhappy in its own fashion.





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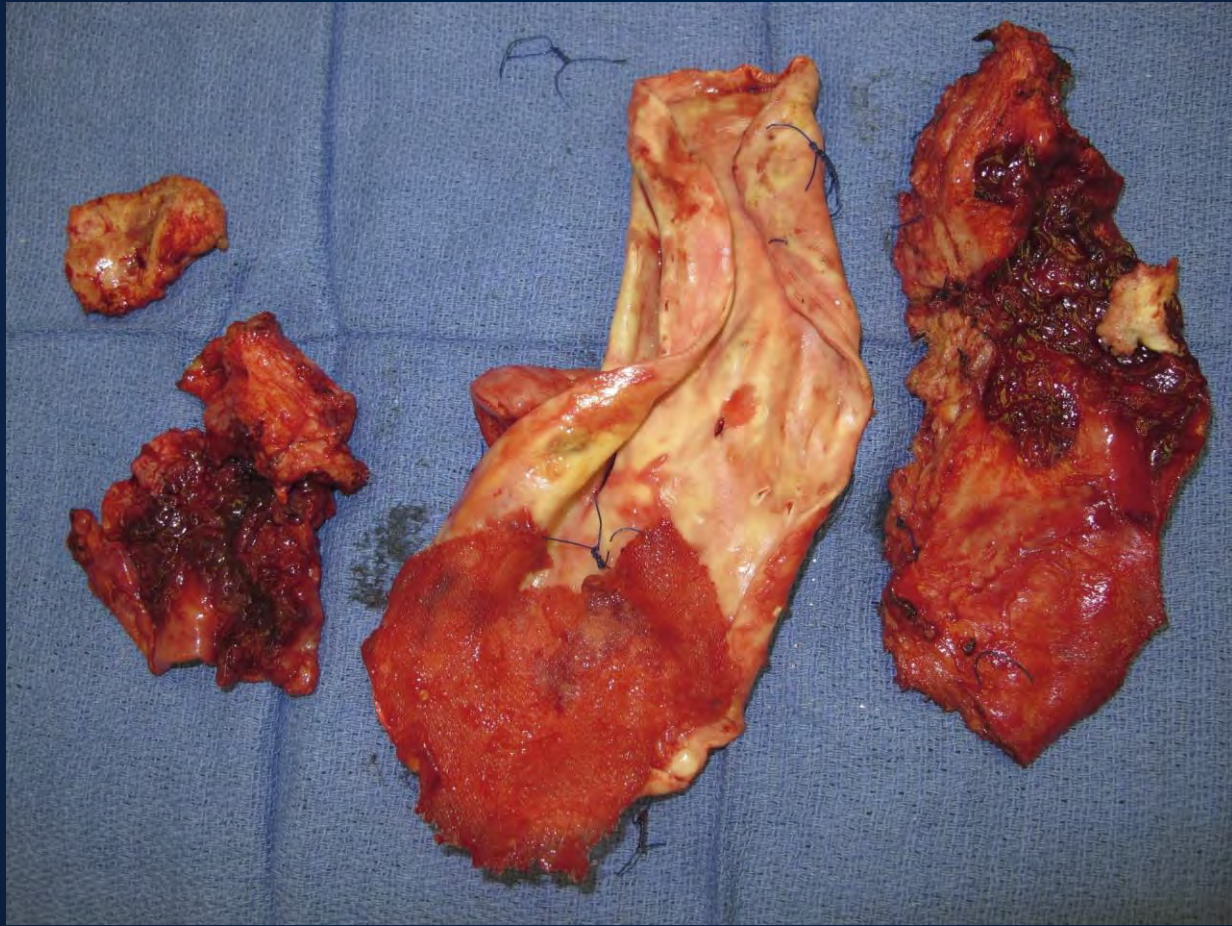












Data

- High recurrence rate-
 - 5 year reoperation rate
 - 24% after first repair
 - 35% after second repair
 - 39% after third repair

Ventral Hernia Working Group

- Grade 1- Healthy, No Contamination
- Grade 2- One or more co-morbidities, No Contamination
- Grade 3- Contamination
- Grade 4- Septic, infected synthetic mesh, dehiscence

Recommendations of the VHWG

- Grade 1- Synthetic mesh
- Grade 2- Bioprosthetic mesh
- Grade 3- Bioprosthetic mesh
- Grade 4- Delayed repair

Mesh

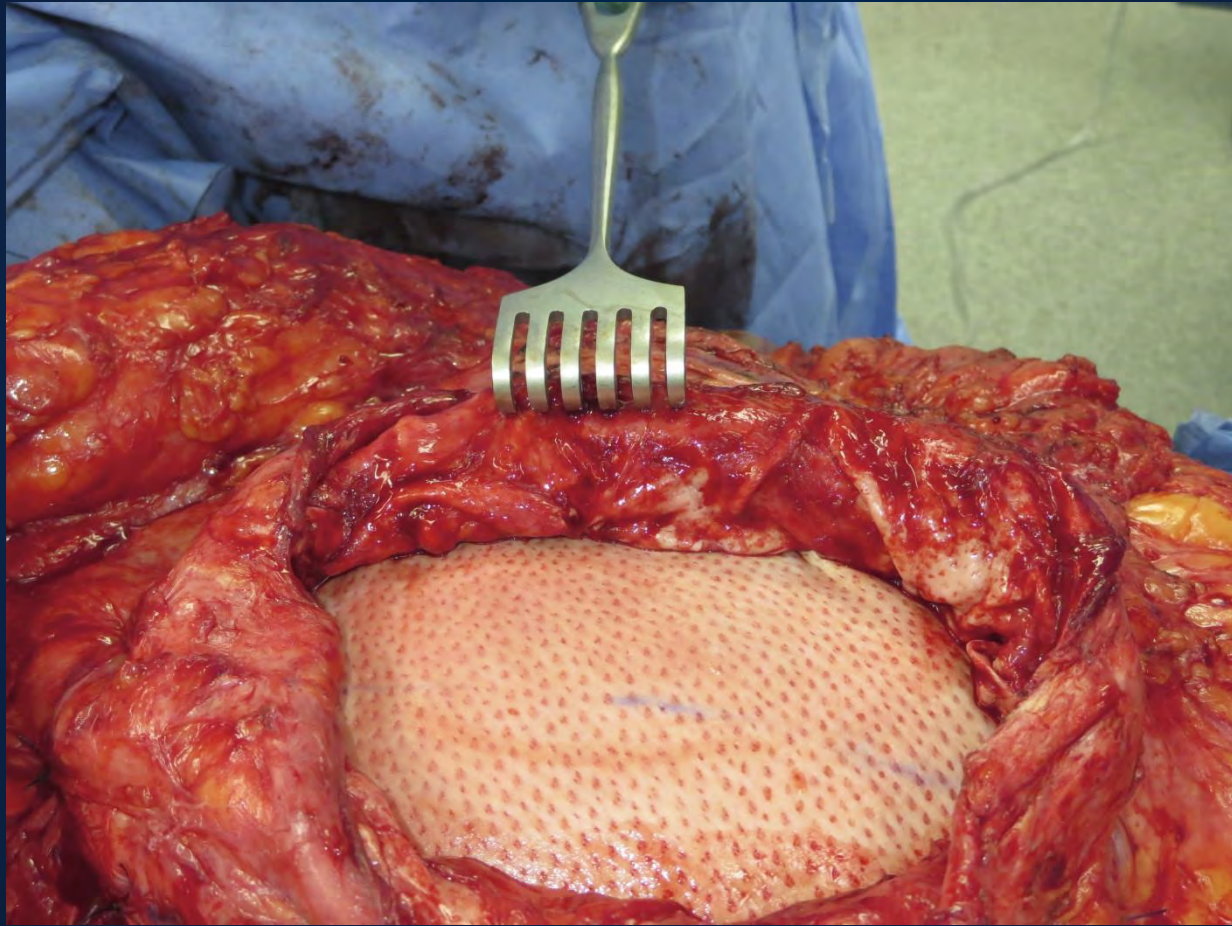
- Synthetic
 - Strong
 - Cheap
 - Inert
 - Infection
 - Adhesions
- Bioprosthetic
 - Expensive
 - May integrate
 - Decreased adhesions
 - Recurrence

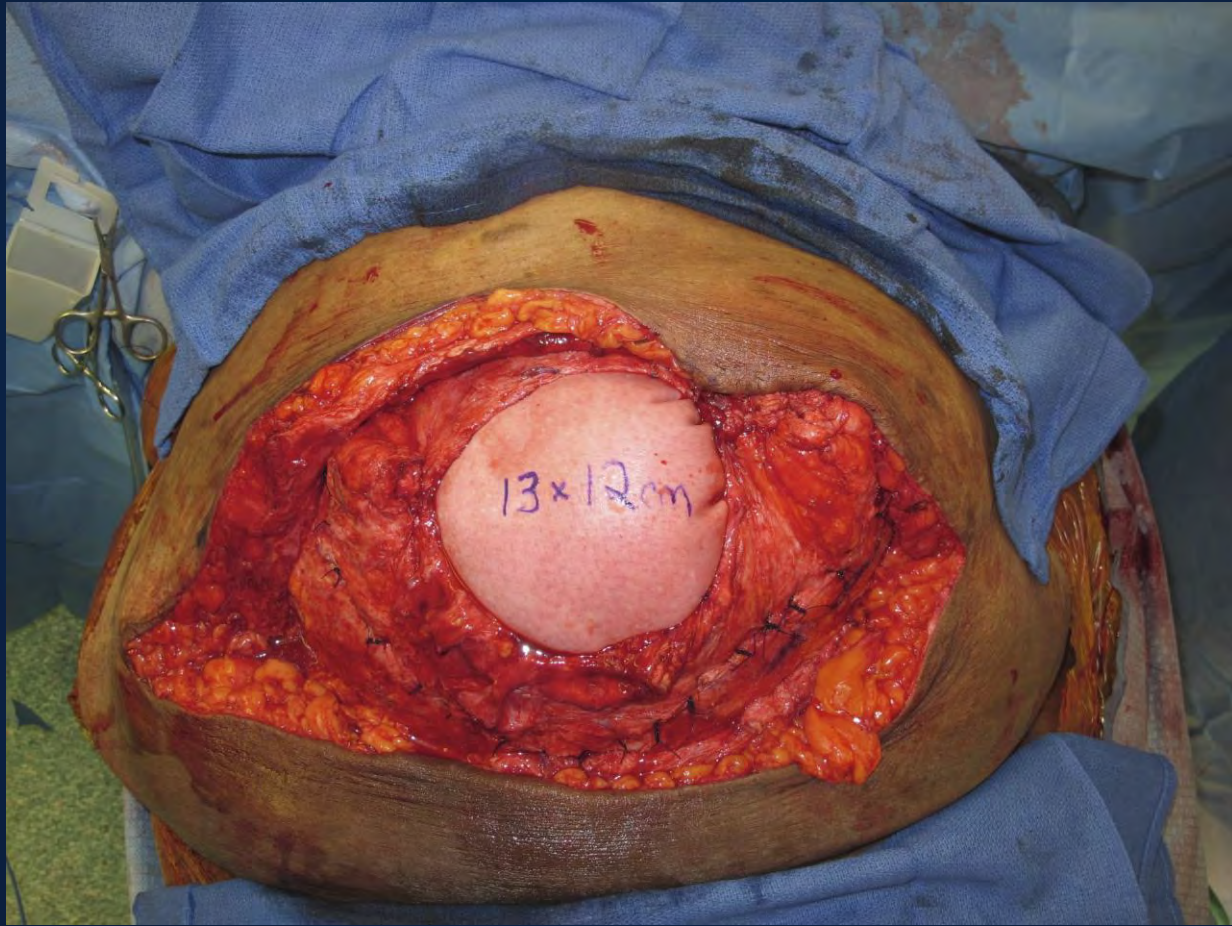


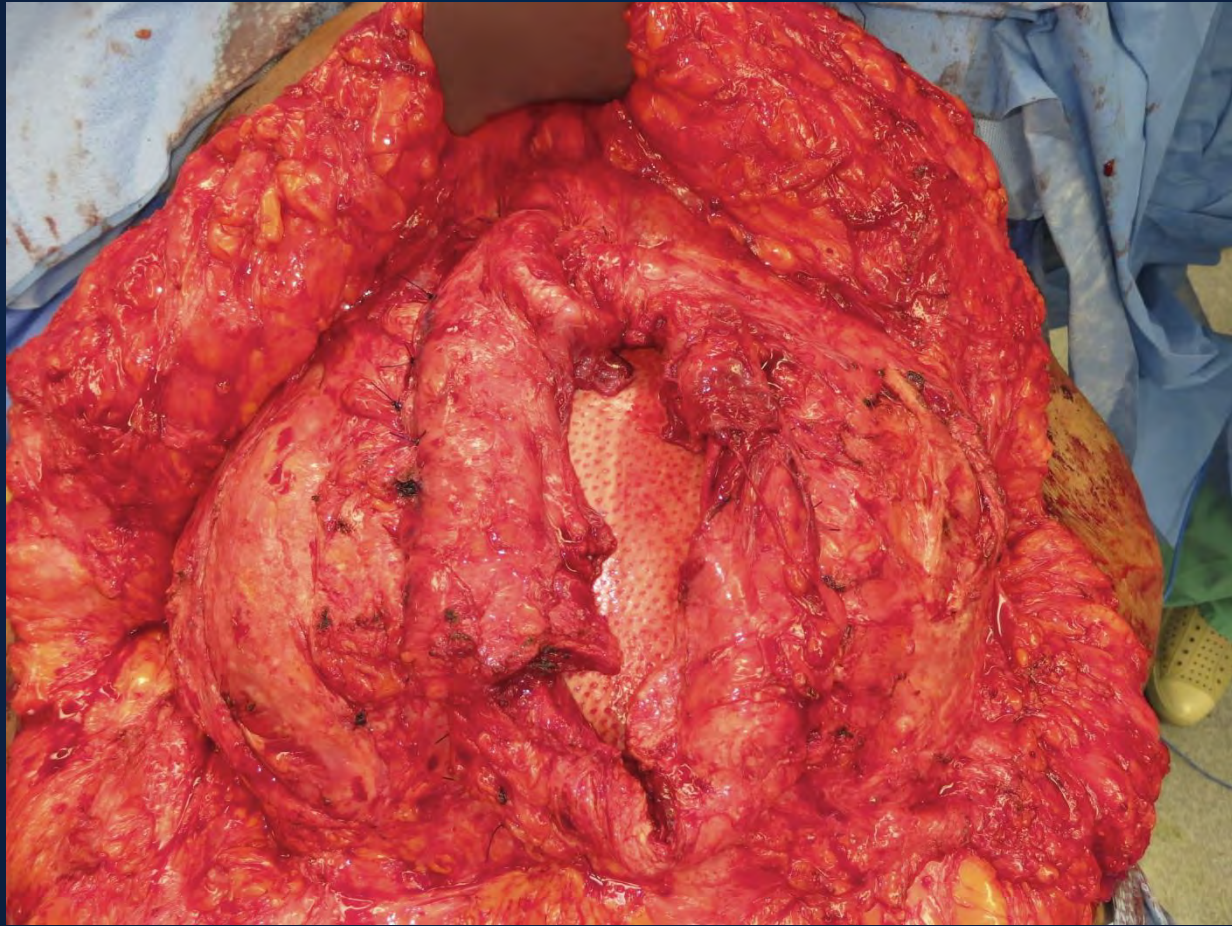








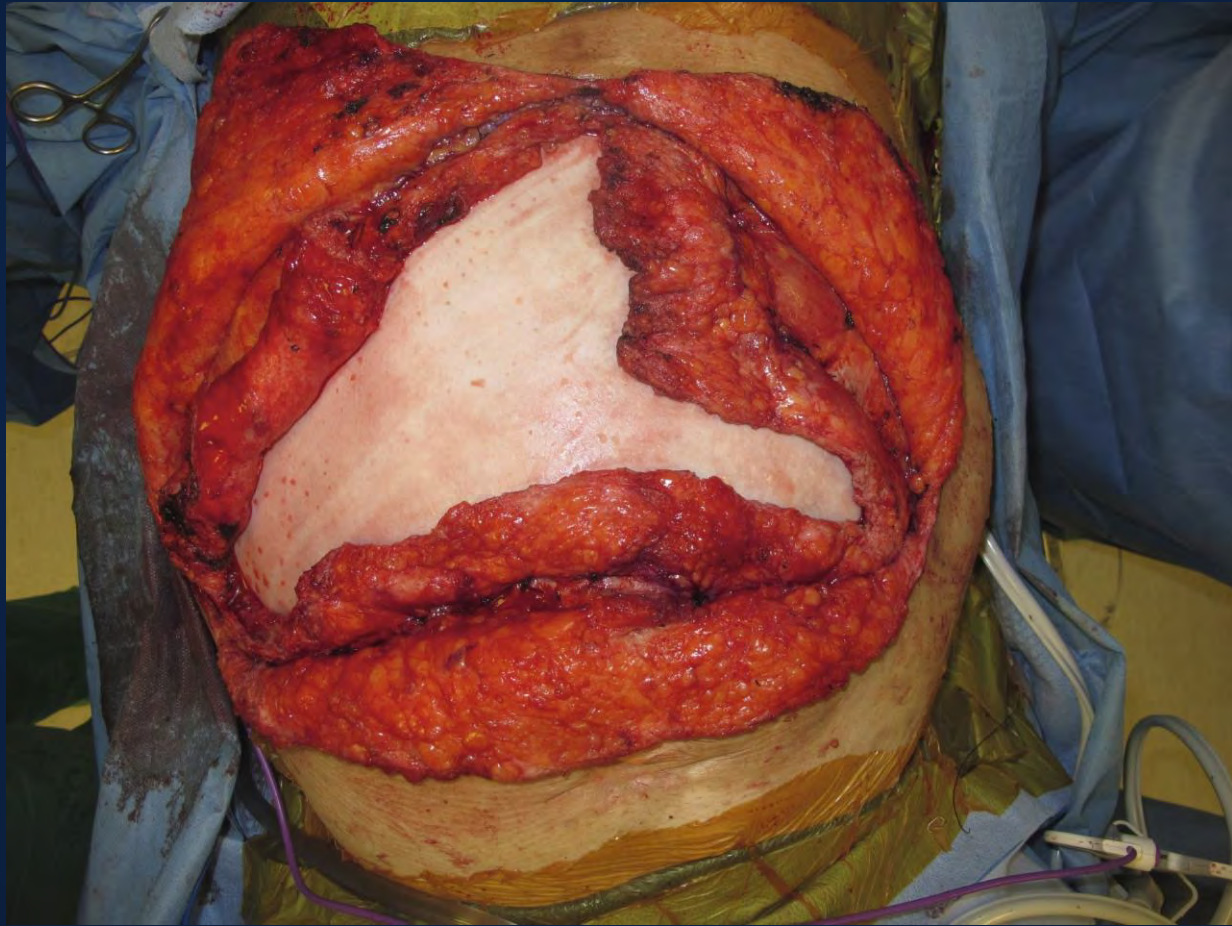














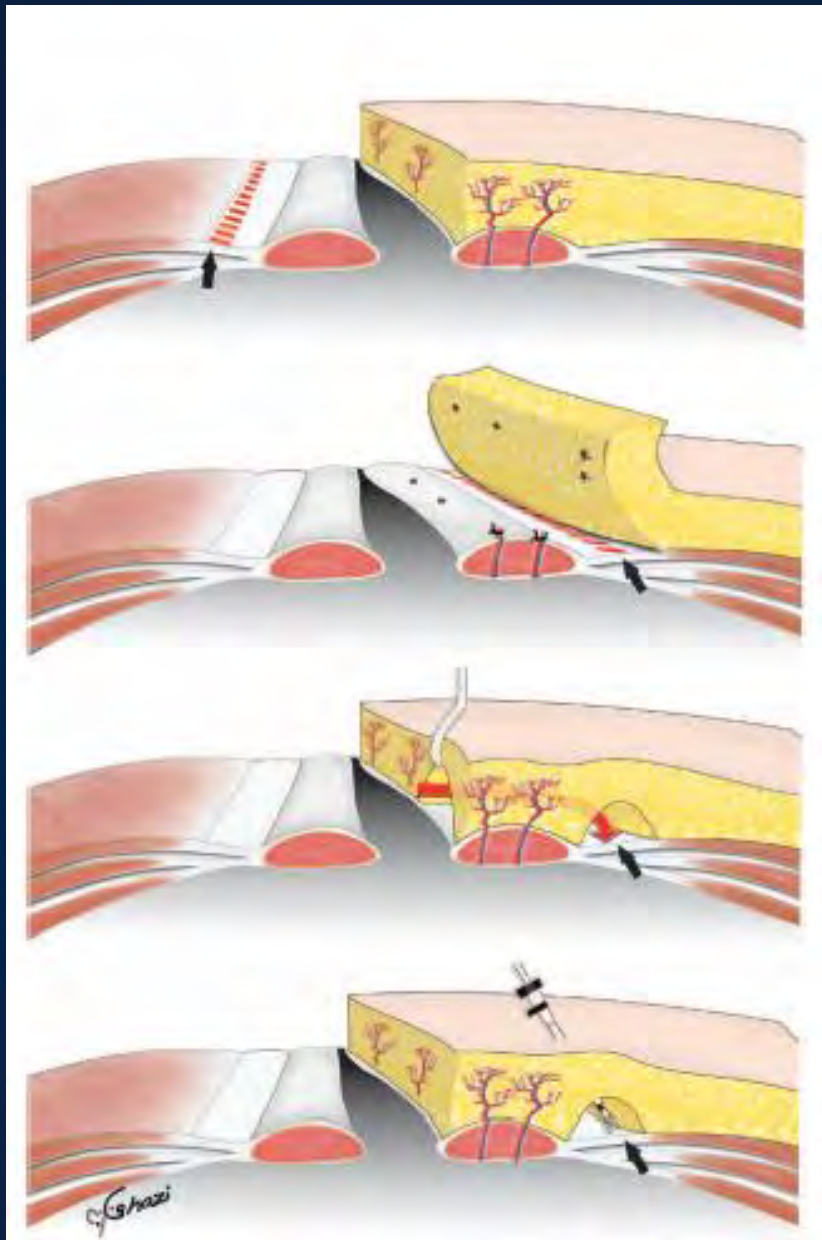






Mesh or Not

- Reconstruct a biomechanically stable abdominal wall
- Appreciate anatomy
- Mitigate effects of prior surgical trauma
- Minimize effects of co-morbidities



Principles

- Replace like with like
- Tension-free closure
- Maintain/maximize perfusion
- Control infection
- Optimize nutrition

Thank you