REAL BLEED™ ADVANCED SUTURING WORKSHOP

Bowel Injury Repair and Anastomosis

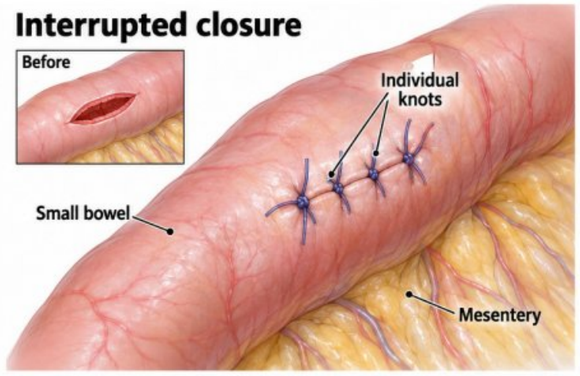
General surgery | 120-minute faculty-led lab | Suturing and leak assessment using an aortic tissue surrogate

PREPARE / 15 MIN One compact aortic segment; no added vessel or patch. Reserve separate left and right sidewall sites and a central join. Keep enough room for clamps and sutures, plus tubing slack for approximation. Both cannulas stay attached. Stop flow during open-tissue work.

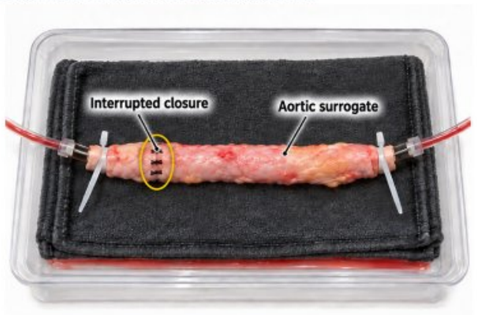
READ THE IMAGES Bowel anatomy above; aortic surrogate below. Suturing practice, not bowel physiology.

01 Interrupted closure

INDIVIDUAL SUTURES / 20 MIN



ONE CONNECTED AORTA / THREE REPAIR SITES

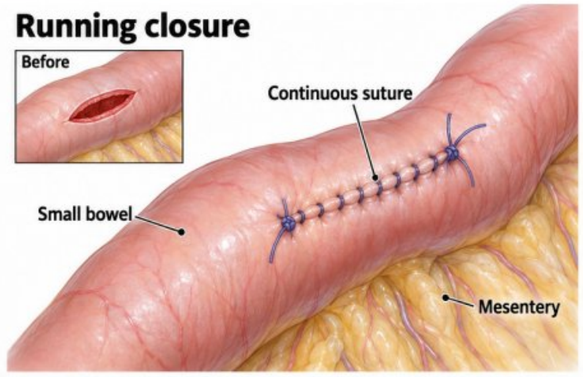


Compact working sites / previous repairs retained

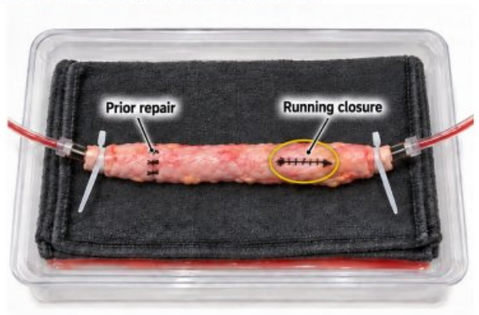
Clinical: Repair a selected small bowel opening with interrupted sutures.
Rehearse: Close a small left-side opening on the aortic surrogate using separate knots.
Check: Inspect edge apposition, knot security and tissue handling without narrowing the lumen.

02 Running closure

CONTINUOUS SUTURE / 25 MIN



ONE CONNECTED AORTA / THREE REPAIR SITES

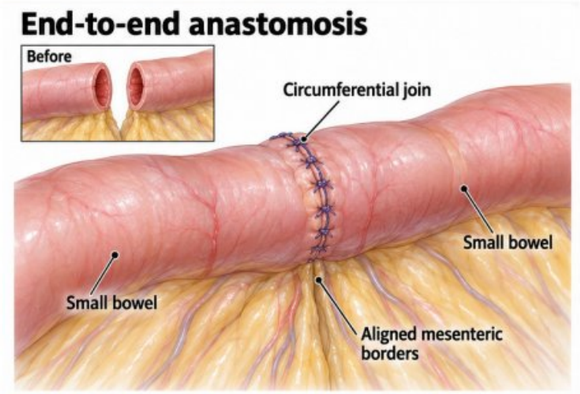


Compact working sites / previous repairs retained

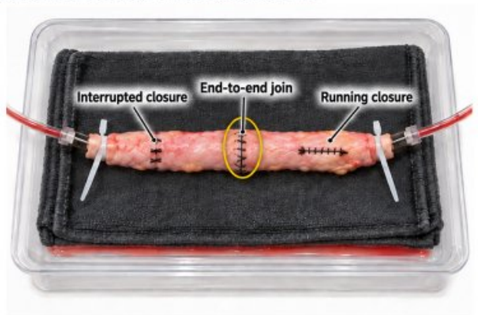
Clinical: Practice continuous enterotomy closure under faculty guidance.
Rehearse: Close a separate right-side opening with a running suture. Retain the first repair.
Check: Maintain even tension and secure endpoints; inspect for gaps or tissue gathering.

03 End-to-end join

SHORT SEGMENT RESECTION / 25 MIN



ONE CONNECTED AORTA / THREE REPAIR SITES

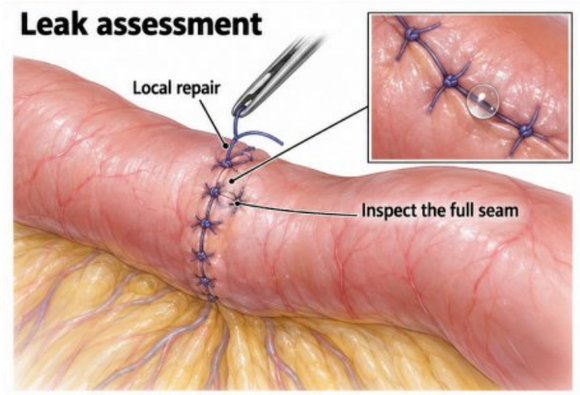


Compact working sites / previous repairs retained

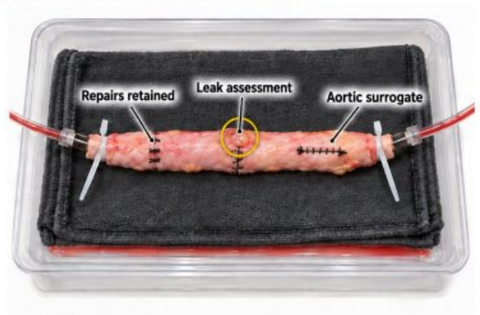
Clinical: Align bowel ends for a tension-free anastomosis.
Rehearse: Remove a minimal central aortic segment and reconnect the ends, retaining both sidewall repairs.
Check: Inspect the posterior wall, lumen and alignment. Avoid twist or back-wall capture.

04 Assess and revise

THREE-SITE LEAK CHECK / 15 MIN



ONE CONNECTED AORTA / THREE REPAIR SITES



Compact working sites / previous repairs retained

Clinical: Inspect the completed bowel repair and address a focal defect.
Rehearse: Introduce test fluid at a faculty-validated setting. Locate leaks, stop flow, repair and retest.
Check: Assess all three sites. A bench leak check does not establish bowel viability or healing.



05 FLOW. FIND. REPAIR.

FINAL CHALLENGE / 20 MIN

Reassess the interrupted closure, running closure and central join. Find a focal leak, stop flow, correct it and retest. Record suture quality, tissue handling, revisions and completion time. **Target:** three intact repairs without visible leakage at the agreed bench setting. Do not infer a clinical pressure threshold.

YOUR REAL BLEED™ SETUP

Photo at left: your original station. One aorta stays connected throughout. Separate working sites preserve earlier repairs while adding practice. Use the minimum workable tissue length and leave slack for the central join. No carotid, patch or extra conduit is required for this version.

WHAT THE MODEL REPRESENTS

The aorta is a suturing surrogate: it does not reproduce bowel layers, mesentery, perfusion or healing. Fluid passes through its lumen for leak practice; this is not bowel perfusion. Actual intestinal tissue would add handling realism but needs a separately validated leak-test setup.

Educational concept for faculty review. AI-generated illustrations are not operative photographs or calibrated drawings. Faculty select the bowel technique and validate the surrogate setup and test settings. Follow the Real Bleed IFU. This workshop practices local suturing skills; it is not a complete bowel surgery protocol.

Sources: Bowel technique Real Bleed™
One page / 17 x 11 in / Bowel Repair / Version 01

REAL BLEED™ SYSTEM | PATENT PENDING

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