

SURGICAL VERIFICATION OF PROFICIENCY

Suturing Technique Assessment Report

Suture Pattern: Vertical Mattress

Assessment Date: September 03, 2025

Assessment Result

PASS - Average Score: 4.1/5.0

Assessment Results

1. Correct deep (far-far) and superficial (near-near) passes

Score: 4/5 (Proficient)

Summary: Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not v...

2. Gentle tissue handling

Score: 4/5 (Proficient)

Summary: Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not v...

3. Square, secure knots

Score: 3/5 (Developing Pass / Generally Reliable)

Summary: Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not v...

4. Balanced tension deep vs superficial

Score: 4/5 (Proficient)

Summary: Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two

opportunities I could not v...

5. Even spacing (0.5-1.0 cm)

Score: 5/5 (Exemplary / Model)

Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not v...

6. Proper eversion

Score: 4/5 (Proficient)

Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not v...

7. Economy of time and motion

Score: 5/5 (Exemplary / Model)

Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not v...

Final Assessment

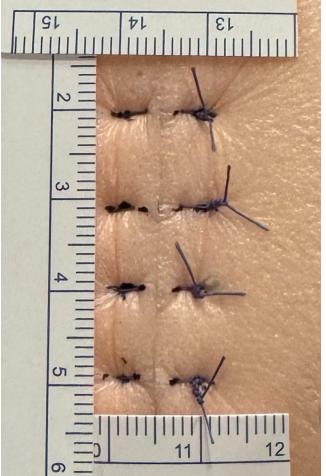
Final Score: 4 - Proficient

Summative Comment:

Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not verify were knot quality and full-field tension checks, though the line at 00:03:00–00:03:01 suggests an appropriate deep-to-superficial tension balance. Next steps: record and display the full knot-tying sequence to confirm square throws and final set off the incision line; standardize bite dimensions (far-far 6–8 mm, near-near 2–3 mm) and mirror exit points across the wound; and use a brief, consistent tensioning sequence (seat deep, adjust superficial to just-everted, then secure) with a quick perfusion check for blanching. These tweaks will make your already efficient, gentle technique more reproducible and durable.

Visual Comparison

Side-by-Side Comparison: Gold Standard vs. Learner Performance

Gold Standard	Learner Performance
 A photograph of a vertical mattress suture on human skin. The suture is a continuous loop that goes up and down through the tissue at regular intervals. A metal ruler is placed horizontally across the suture line, with markings from 1 to 15 visible. The suture line is perfectly straight and evenly spaced.	Final frame from analyzed video would appear here in actual implementation

The gold standard image above represents the ideal final result for Vertical Mattress suturing technique. Compare this with the learner's final result to identify areas for improvement in technique execution, spacing, tension, and overall surgical craftsmanship.

Video Analysis Narrative

1. Correct deep (far-far) and superficial (near-near) passes: At 00:00:44–00:00:45, you position the needle perpendicular for a deep pass, and at 00:02:59 the sequence of deep then superficial passes appears appropriate for a vertical mattress, with the needle trajectory staying orthogonal to the skin surface. That perpendicularity supports accurate bite geometry and reduces tissue shear.

To strengthen this further, standardize your bite widths: aim for the far-far bites about 6–8 mm from the edge with symmetric depth on both sides, and the near-near bites 2–3 mm from the edge just at the dermal level. A quick visual check after each pass—confirm the entry and exit points mirror across the wound—will keep the stitch vertical rather than oblique. 2.

Gentle tissue handling: In the 00:00:44–00:00:45 segment and again around 00:03:00, I saw a single, precise grasp per edge with minimal forceps use. That restraint preserves perfusion and avoids crush marks. Keep building on this by placing your forceps teeth squarely into the dermis (not the epidermis) right at the edge, and use them only to evert and present the bite rather than to pull the tissue toward the needle.

When you need exposure for the near-near pass, consider using the needle as a tiny retractor under the dermis instead of regrasping the skin. Re-grasp the needle at the 2/3–1/3 point to maintain control without torque that can transmit force to the tissue. 3.

Square, secure knots: Knot tying is not captured in the frames provided, so I cannot verify configuration, throw count, or final set. Because the vertical mattress places a buried loop under tension, knot integrity is critical to prevent strangulation or loosening. On your next recording, keep the entire knot sequence on camera and lay each throw flat before advancing tension.

For braided suture, a 2-1-1 sequence is typically sufficient; for monofilament, plan for 3-1-1. Seat the first throw to approximate, then set the superficial throw just enough to evert without blanching; position the knot to one side of the wound rather than directly over the incision. 4.

Balanced tension deep vs superficial: At 00:03:00, the deep portion looks supportive, and the superficial closure appears gentle rather than cinched, which is the right balance for a vertical mattress. This balance protects the deeper tissue from gapping while avoiding ischemia at the epidermis. To make this reproducible, tighten the far-far loop to approximate and support, then pause and assess edge height before setting the near-near.

Use your pickups to lightly “milk” the edges together; if you see blanching or beveling inward, back off a few degrees of tension on the superficial throw before securing. A consistent “progressive snugging” sequence—far-far to seating, near-near to eversion, then final set—will keep the pattern predictable. 5.

Even spacing (0.5–1.0 cm): At 00:03:01, spacing between stitches appears uniform and within the desired 0.5–1.0 cm interval, matching the spacing seen in earlier placed sutures. Even spacing distributes tension evenly and prevents dog-ears. To lock this in, previsualize or lightly mark your planned positions, and keep a 1:1 relationship between inter-suture distance and far-far bite width.

Start and end the run with the first and last stitches the same distance from the wound ends to avoid edge puckering. 6. Proper eversion: At 00:03:01 there is a slight ridge along the closure line indicating eversion, with no visible inversion in these frames.

That subtle ridge is what you want from a vertical mattress to counteract edge settling during healing. If you need a touch more lift, deepen the near-near pass to the lower dermis and keep its exit very close to the epidermal-dermal junction; that geometry pushes the epidermis upward. Support the far edge

with your forceps while driving the near-near to avoid shallow, lamellar bites that can invert.

After tying, run a fingertip lightly across the line; if the ridge is flat or edges bevel inward, adjust by increasing near-near depth or slightly widening the far-far on the flatter side. 7. Economy of time and motion: Your hands remain close to the suture pad with minimal movement off-screen.

In the 00:00:44–00:00:45 segment there were 0 departures, and from 00:02:59–00:03:01 I saw the same disciplined hand positioning with only minor adjustments near the field. This economy keeps the field stable and the needle under control. To trim the remaining micro-inefficiencies, keep the needle preloaded in the driver with the curve aligned to the next pass, and stage your suture tail consistently to the same side so you don't hunt for it between throws.

Rotate through the wrist and forearm rather than repositioning your shoulder or lifting off the pad. Summary: Across the captured intervals, your vertical mattress technique shows perpendicular needle driving, consistent layering of far-far then near-near passes, restrained tissue handling, and uniform spacing; a slight ridge at 00:03:01 confirms useful eversion. The two opportunities I could not verify were knot quality and full-field tension checks, though the line at 00:03:00–00:03:01 suggests an appropriate deep-to-superficial tension balance.

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