

**ASSESSMENT: VESSEL ANASTOMOSIS**

RESIDENT NAME \_\_\_\_\_ YR OF TRAINING \_\_\_\_\_ DATE \_\_\_\_\_

EVALUATOR \_\_\_\_\_ TIME TO COMPLETION \_\_\_\_\_

	<b>Poor</b>				<b>Excellent</b>	
<b>1. Arteriotomy</b>	1	2	3	4	5	
	Not identify artery		Partial artery exposure		Full artery exposure	
	Off-midline		Mainly midline		Consistent midline	
	Multiple "tracks"		Thick single "track"		Thin single "track"	
	Injury to back wall		Close to back wall		No injury to back wall	
	Marked irregular edge		Mild irregular edge		Smooth edge	
Additional Comments: _____						

<b>2. Graft orientation</b>	1	2	3	4	5	
	Unable to orient		Orient with some hesitation		Proper heel-toe orientation	
	Not know start point		Start with some hesitation		Consistent start	
	Not know end point		Knows end point with		Knows end point	
	Marked hesitation		Some hesitation		No hesitation	
Additional Comments: _____						

<b>3. Bite</b>	1	2	3	4	5	
	Irregular entry/exit		Mostly regular entry/exit		Consistent regular entry/exit	
	Hesitant, multiple punctures		Mostly single puncture		Consistent single puncture	
	Inconsistent distance from edge		Mostly consistent from edge		Consistent from edge	
Additional Comments: _____						

<b>4. Spacing</b>	1	2	3	4	5	
	Uneven/irregular spacing		Mostly even spacing		Consistent even spacing	
	Irregular distance from previous bite		Mostly consistent distance from previous bite		Consistent distance from previous bite	
Additional Comments: _____						

<b>5. Needle holder use</b>	1	2	3	4	5	
	Awkward finger placement		Functional finger placement		Comfortable, smooth finger placement	
	Unable to rotate instrument		Hesitant when rotating		Smooth rotation	
	Awkward and not facile		Moderate facility		High facility	
	Inconsistent needle placement		Generally good placement		Consistent proper placement	
Additional Comments: _____						

<b>6. Use of forceps</b>	1	2	3	4	5	
	Awkward or no traction		Moderate proper traction		Consistent proper traction	
	Unable to expose		Able to assist in exposure		Consistent proper exposure	
	Not use to stabilize needle		Able to stabilize but rough		Knows when to stabilize, gentle	
Additional Comments: _____						

7. Needle angles	1	2	3	4	5
	Not aware of angles Not compensate for depth Does not consider subsequent angles		Understand angles, not consistent Partial compensation for depth Partial consideration of subsequent angles		Consistent correct angles Compensate for depth Consistent adjustment for subsequent angles

Additional Comments:

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8. Needle transfer	1	2	3	4	5
	Marked hesitation in mounting needle		Able to mount needle with hand and partial manipulation		Able to mount needle and manipulate needle easily

Additional Comments:

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9. Suture management	1	2	3	4	5
	Not use tension Suture entangled		Tension use inconsistent Sutures occasionally get in way		Proper use of tension Suture consistently not in way

Additional Comments:

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10. Knot tying	1	2	3	4	5
	Marked hesitancy, slow speed No follow through Not able to tie, breakage Loose or "air" knot		Moderate facility, moderate speed intermittent follow through Able to tie and tension, intermittently loose		Consistent facility, no hesitancy Consistent follow through Consistent tension and tight

Additional Comments:

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11. Hand mechanics	1	2	3	4	5
	No pronation or supination Awkward finger/hand motion No wrist motion		Incomplete pronation or supination Hesitant finger/hand motion Incomplete wrist motion		Able to modulate pronation/supination Smooth, comfortable motion Smooth, appropriate wrist motion

Additional Comments:

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12. Use of both hands	1	2	3	4	5
	Awkward /not coordinated use Non-dominant hand neglect		Moderately coordinated use Moderate use of non-dominant hand to assist/expose		Smooth, seamless coordination Full use of non- dominant hand to assist/expose

Additional Comments:

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13. Economy of time and motion	1	2	3	4	5
	Marked hesitation Not aware of goal Unable to do task		Some hesitation Some awareness of goal Able to do task but discontinuous		No hesitation Fully aware of goal Able to do task smoothly

Additional Comments:

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**Overall**            Pass            Fail

### General Definitions

1. **Poor:** unable to accomplish goal; marked hesitation
2. **Below average:** able to partially accomplish goal with hesitation
3. **Average:** able to accomplish goal with hesitation, discontinuous progress and flow
4. **Good:** able to accomplish goal deliberately, with minimal hesitation, showing good progress and flow
5. **Excellent:** able to accomplish goal without hesitation, showing excellent progress and flow