

ASSESSMENT: VESSEL ANASTOMOSIS

RESIDENT NAME _____ YR OF TRAINING _____ DATE _____

EVALUATOR _____ TIME TO COMPLETION _____

	Poor			Excellent	
1. Arteriotomy	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:

2. Graft orientation	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:

3. Bite	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:

4. Spacing	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:

5. Needle holder use	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:

6. Use of forceps	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		Understand angles, not consistent		Consistent correct angles
	Not compensate for depth		Partial compensation for depth		Compensate for depth
	Does not consider subsequent angles		Partial consideration of subsequent angles		Consistent adjustment for subsequent angles

Additional Comments:

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:

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

Additional Comments:

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

Additional Comments:

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

Additional Comments:

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

Additional Comments:

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

Additional Comments:

Overall Pass Fail

General Definitions

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