TSDA THORACIC SURGERY DIRECTORS ASSOCIATION

Cardiopulmonary Bypass Assessment
Aortic Cannulation

Date_____
Resident_____ Year of training _____
Evaluator_____ Time to completion_____

Aortic cannulation assessment—rating scale:
Components of performance rating scale

1. Assess aorta for suture placement/cannulation 1 2 3 4 5
(palpate aorta, assess for calcification, adequate BP for suture placement)

2. Needle angles 1 2 3 4 5
(proper angle to permit needle point to puncture orthogonal to tissue plane; consider depth of field, limits of access, and space constraints)

3. Needle removal from aorta 1 2 3 4 5
(follow curve of the needle to minimize tissue trauma)

4. Depth of bite 1 2 3 4 5
(proper depth of entry and exit points; proper and consistent depth of needle and suture)

5. Suture advance and spacing 1 2 3 4 5
(proper distance of suture travel in aorta, even spacing; consistent distance from previous bite)

6. Control of scalpel 1 2 3 4 5
(proper orientation relative to aorta; proper size of aortotomy)

7. Cannula placement 1 2 3 4 5
(proper orientation of bevel; hold close to tip, proper insertion depth)

8. Securing cannula and knot-tying 1 2 3 4 5
(adequate tension, facility; follow for finger and hand to secure knots, not too loose or tight)

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

TSDA THORACIC SURGERY DIRECTORS ASSOCIATION

Cardiopulmonary Bypass Assessment
Venous/Atrial Cannulation

Date_____
Resident_____ Year of training _____
Evaluator_____ Time to completion_____

Venous cannulation assessment—rating scale:
Components of performance rating scale

1. Assess atrium for suture placement/cannulation 1 2 3 4 5
(atrial appendage identified, away from RCA)

2. Needle angles 1 2 3 4 5
(proper angle to permit needle point to puncture orthogonal to tissue plane; consider depth of field, limits of access, and space constraints)

3. Needle removal from tissue 1 2 3 4 5
(follow curve of the needle to minimize tissue trauma)

4. Depth of bite 1 2 3 4 5
(proper depth of entry and exit points; proper and consistent depth of needle and suture)

5. Suture advance and spacing 1 2 3 4 5
(proper distance of suture travel in atrium, even spacing; consistent distance from previous bite)

6. Control of scissors 1 2 3 4 5
(orientation, cut trabeculations, size of atriotomy)

7. Cannula placement 1 2 3 4 5
(orientation, proper depth)

8. Securing cannula and knot-tying 1 2 3 4 5
(adequate tension, facility; follow for finger and hand to secure knots, not too loose or tight)

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