Pediatric Emergency Medicine
Core Curriculum:
Supraventricular Tachycardia Scenario

Created: April 4, 2012
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# Resource Outline

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1. Instructor Contact Information

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2. Description of Scenario

Scenario Overview
This scenario teaches learners to recognize and manage pediatric supraventricular tachycardia.

The scenario is simulation-based with an integrated team communication focus.

Learners will participate in a simulation scenario and be asked to identify the signs and symptoms of supraventricular tachycardia and its management (See Appendix A).

At the end of training, the learners should be able to recognize the seriousness of the situation and recruit a full resuscitation team. The primary complication for the team to recognize and manage is hemodynamic instability with hypotension and inadequate perfusion.

Educational Rationale on How the Scenario Generalizes to Real-Life Circumstances
Supraventricular tachycardia is the most common rhythm disturbance in children, affecting approximately 1 in 250 children. Its incidence is greater in critically ill children or those with congenital or acquired heart disease. Supraventricular tachycardia is defined as an abnormally rapid heart rhythm that originates proximal to the ventricles.

Clinically, heart rates in SVT are usually 220-280 beats per minute in infants and 180-240 bpm in older children. Onset and offset are usually abrupt. Manifestations can be non-specific: palpitations, chest pain, fatigue, lightheadedness, failure to eat/drink well (especially in infants) and additional signs of heart failure.

Medical providers should recognize children in supraventricular tachycardia early. Medical providers should initiate reinstitution of a normal sinus rhythm rapidly and beware of the risk for potential deterioration of the rhythm if not treated appropriately, in a timely manner.

The goal of this scenario is to provide the learner with an opportunity to manage life threatening pediatric supraventricular tachycardia, where the correct steps need to be taken in a limited period of time.

Key elements include performing the primary survey, eliciting critical history (fussiness and inadequate fluid intake), recognizing the need to call for team assistance early in an event, recognizing supraventricular tachycardia (non-variable narrow complex tachycardia plus secondary signs of heart failure including hypotension, diminished pulses, delayed capillary refill and altered mental status), treating supraventricular tachycardia (adenosine, cardioversion-synchronized) and its potential acute complications.

Duration of Training Session: 1 hour

Frequency of Scenario: Goal is to have each learner experience this scenario approximately once/year. We have a non-mandatory curriculum that offers a different scenario every 2 weeks. This particular scenario is offered approximately 4 times a year to try to ensure that all our learners are exposed at least once.

Number of Trainees per Session: 5 to 10
3. Target Trainees

Primary: Pediatric and emergency medicine residents, fellows, faculty and nurses
Secondary: N/A
4. Prerequisite Knowledge and Skills

**Required background knowledge:**

- Signs and symptoms of supraventricular tachycardia
- Knowledge of valsalva techniques, adenosine
- TeamSTEPPS communication terminology (See Appendix B)

**Required background skills expected in trainees prior to receiving training in the target scenario:**

- Assessment of circulation
- How to provide supplemental oxygen
- How to apply and safely use cardioversion/defibrillation equipment
5. Goals and Objectives

Goal 1: Recognition of Supraventricular tachycardia
The learner will demonstrate recognition of supraventricular tachycardia in a safe and professional manner. (ACGME Competencies: Medical Knowledge\(^A\), Patient Care\(^B\), Interpersonal and Communication Skills\(^C\), Professionalism\(^D\), Systems-based Practice\(^E\))

**Objective 1a - Initial patient assessment** \(^{[A, B, C, D]}\)
The learner will be expected to discuss what s/he would look for in an initial physical examination (primary survey e.g. airway, breathing, circulation, disability, exposure) and history (SAMPLE- Signs and symptoms, Allergies, Medications, Past medical history, Last meal, and Events) of any pediatric patient s/he is evaluating.

**Objective 1b– Appropriate monitoring** \(^{[A, B, C]}\)
The learner should apply basic monitoring standards for a patient with an arrhythmia (cardiorespiratory monitors, pulse oximetry, blood pressure, and temperature). S/he should obtain a patient weight or accurate estimate (e.g. Broselow-Luten Tape).

**Objective 1c - Identification of supraventricular tachycardia** \(^{[A, B, C]}\)
The learner should identify signs and symptoms of supraventricular tachycardia in history (fussiness, poor oral intake) and in physical examination (non-variable narrow complex tachycardia, hypotension, diminished pulses, delayed capillary refill, altered mental status).

**Objective 1d - Distinguish between compensated and uncompensated supraventricular tachycardia** \(^{[A, B,C]}\)
The learner should distinguish between compensated supraventricular tachycardia (tachycardia with adequate perfusion) and uncompensated supraventricular tachycardia (tachycardia with hypotension, hypoxia and altered mental status).

Goal 2: Management of Supraventricular tachycardia
The learner will treat supraventricular tachycardia in a safe and professional manner. (ACGME Competencies: Medical Knowledge\(^A\), Patient Care\(^B\), Interpersonal and Communication Skills\(^C\), Professionalism\(^D\), Systems-based Practice\(^E\))

**Objective 2a - Management of compensated supraventricular tachycardia** \(^{[A, B, C]}\)
The learner should apply supplemental oxygen, obtain a 12-lead EKG if possible in a timely fashion, utilize valsalva techniques (e.g. ice slurry applied to face without obstructing the airway), obtain IV access and administer adenosine. Cardioversion/defibrillation equipment should be applied prior to adenosine in anticipation of potential complications.

**Objective 2b - Management of uncompensated supraventricular tachycardia** \(^{[A, B, C]}\)
The learner should administer synchronized cardioversion (0.5-1 J/kg) or rapidly administered adenosine intravenously (if IV access is established and it will not delay cardioversion). Goal is to convert the rhythm within 2 minutes.
5. Goals and Objectives

**Objective 2c - Equipment setup** [A, B, C, E]
The learner should be able to set up the equipment required to treat a patient in supraventricular tachycardia: supplemental oxygen, intravenous or intraosseous access equipment, cardioversion/defibrillation equipment.

**Objective 2d - Demonstrate understanding of the relevant anatomy** [A]
The learner should be able to identify pediatric anatomy necessary for placement of cardioversion/defibrillation equipment.

**Objective 2e - Technical skills** [E]
The learner should position the patient for cardioversion/defibrillation. Using techniques to ensure the safety of the patient and all staff, the learner should deliver cardioversion/defibrillation electricity.

**Goal 3: Teamwork and Communication Skills**
The learner will become more skilled in the management and leadership of emergency personnel including physicians, nurses, and ancillary personnel. (ACGME Competencies: Medical Knowledge\(^A\), Patient Care\(^B\), Interpersonal and Communication Skills\(^C\), Professionalism\(^D\), Systems-based Practice\(^E\))

**Objective 3a – Team structure and leadership** [C, D, E]
The learner will be exposed to a full-scale manikin-based simulation in which the learners are faced with a life threatening emergency due to supraventricular tachycardia. They will be expected to clearly identify (verbally or with visual cues) and maintain a team leader (orders, priorities verbally stated by team leader) and team member roles (questions, information directed to team leader).

**Objective 3b – Communication skills** [C, D, E]
The learner will be required to direct available resources to manage supraventricular tachycardia. The team will be expected to brief at the beginning of the scenario and huddle during the scenario. The goal of briefing and huddling is to create a shared mental model, so that the team is on the same page regarding working diagnoses, treatment priorities and plan of care. S/he will coordinate, direct and communicate with a resuscitation team using directed call-out and check-back.
6. Instructor Notes

These are general “tips”. Everything in this section is included because at one time or another, we forgot to do it. The result was a suboptimal learning experience.

a. Environmental Set Up (See Section 10)
   - Try to re-create the location, look, and feel of the participants’ work environment.
   - Place simulator in a gown, diaper, etc. in order to maximize realism.

b. Pre-Simulation Introduction
   - Share a “learning contract” with participants. An example of some elements you may include: “We believe each of you is intelligent, well-trained, and doing their best” (adapted from the Center for Medical Simulation, Cambridge, MA). “We recognize this is a fictitious environment. We ask you to stretch your imagination, go beyond your comfort zone and help promote each others’ learning”.
   - Share ground rules with participants (e.g. “Treat others with respect, maintain confidentiality”).
   - Share the agenda (e.g. “We will begin with a 15 min simulation followed by a 30 min debrief.”).
   - Orient your participants (e.g. Review capabilities of simulator being used. Review location/availability of equipment/supplies. Identify facilitator to whom requests/questions should be directed during the simulation).
   - Review safety issues (e.g. correct use of defibrillator).
   - Review principles of teamwork and communication – TeamSTEPPS (See Appendix B).
   - Review expectations of team leaders and members: take time to plan before a patient arrives (brief) and “get the team on the same page” (huddle).

c. Scenario Notes
   - A “trigger” is a critical time or event that signifies the start or end of a Stage in the scenario. These are the critical steps that help the scenario progress. Please review these prior to conducting your session.
   - Prompts. Sometimes learners get stuck- miss a physical exam finding, critical piece of history or don’t know/fail to implement a critical action that’s needed to help the team meet a learning objective or advance to the next stage. When this happens, the facilitator, who is actively monitoring the team’s progress, may choose to ask a question, state a que or have a third party “drop a critical hint” to mobilize the team towards meeting the objectives. The instructor needs to balance “keeping the team from failing to meet the learning objectives” with the team’s opportunity to work through a problem. Careful not to shift it from self-discovery to a lecture!

d. Debriefing (See Appendix C)
   - Try to have participants step away from the simulator, into a different space (e.g. chairs in a circle or separate room). This physical cue helps participants shift from “doing” - a clinical focus to “reflecting” - a learning focus.
   - Remind participants that the debriefing time is intended to focus on the group’s performance.

e. Learner considerations
   - Each group of learners’ needs will vary. Thus, we have included a range of potential objectives, which can be tailored to suit different learner groups. E.g. for our less
Instructor Notes

experienced clinical providers, we focus more on the medical decision making goals. For our more advanced providers, we focus more on the team work and communication goals.

- If you are instructing more experienced learners, consider “titrating” the learning objectives. E.g. for learners that have limited medical knowledge, one dose of electricity will be all that we require to move from Optional Stage 3 to Stage 4. For experienced providers, if we include Optional Stage 3, we will require the team to administer at least 3 shocks plus epinephrine, before advancing them to Stage 4.

- If you are instructing more experienced learners, consider “titrating” the scenario’s signal to noise ratio. E.g. for resident learner groups, we will run the scenario as written. For those with more experience, we might add more “noise”. This could be an actor playing the role of a parent who gives less history, is crying or questioning the team.

- Participants. The most realistic and richest learning experiences occur when all the participants are performing their “normal” roles. E.g. physician functions as physician, nurse as a nurse, respiratory therapist as a respiratory therapist. If your learner group does not contain the full spectrum of “normal team members”, you may have to either ask some participants to function in different roles or provide “actors” to fill the necessary roles. Recognize that realism is going to be lost and learning opportunities missed. E.g. If the group is all physicians, none of your learners may have drug measuring/administration experience. As an instructor, you will need to make decisions on how much you want them to do to “get credit” and be able to advance to the next Stage in the scenario. Is it enough to be able to order the drug? Do they need to find the vial? Draw it up? Administer it to the simulator? Your answer should be driven on helping your learners to achieve the learning objectives.

- This scenario is part of the Pediatric Emergency Medicine Simulation Curriculum. The curriculum includes didactic sessions, skills sessions, and patient based education on topics ranging from SVT to resuscitation skills to teamwork. In addition, it includes several simulation scenario modules, presented on a rotating basis. We are in the process of submitting all of the scenario modules to MedEdPORTAL.

- Impact of the curriculum. We have studied our Pediatric Emergency Medicine Simulation Curriculum as a whole, and are in the process of submitting our results for publication. We have observed that over the course of a year, our learners’ performance (in medical decision making, technical skills and teamwork) improves. There is a dose response (greater exposure, better performance).
Common Errors and Prevention Strategies:

a. Failure to recognize supraventricular tachycardia.
   **Strategy:** Review signs of supraventricular tachycardia: narrow complex tachycardia, lack of p-waves, lack of variation in rate, hypotension, diminished pulses, delayed capillary refill, cool/dusky/pale skin/extremities and altered mental status.

b. Failure to treat supraventricular tachycardia.
   **Strategy:** Review treatment for supraventricular tachycardia- oxygen, valsalva techniques (e.g. ice slurry application to face without airway obstruction), adenosine IV and synchronized cardioversion (0.5-1 J/kg).

c. Failure to treat uncompensated supraventricular tachycardia with synchronized cardioversion.
   **Strategy:** Review need to convert SVT with synchronized cardioversion. Failure to synchronize can result in the generation of fatal arrhythmias: e.g. ventricular tachycardia or ventricular fibrillation.

d. Failure to provide supplemental oxygen.
   **Strategy:** Review goal of supplemental oxygen: to improve oxygen delivery and meet metabolic demand, preventing progression to cardiac arrest. This is not dependent on measured oxygen saturation. Review equipment available for oxygen administration.

e. Failure to rapidly administer intravenous adenosine.
   **Strategy:** Review goal of rapid administration of adenosine IV (push fast, through IV proximal to heart). Review equipment available to achieve this (e.g. 3-way stop-cock, adenosine and IV flush connected to 3-way stop cock, rapid sequential administration of each, use of more than one medication delivery personnel).

f. Inefficient teamwork
   **Strategy:** Review need to brief (discuss team roles) prior to a critical situation and huddle (ad-hoc planning to re-establish situation awareness) during a crisis.

g. Inefficient communication: lack of call-out
   **Strategy:** Review importance of directed communication:
   “Survey physician- What’s the circulatory status?”

h. Inefficient communication: lack of check-back
   **Strategy:** Review use of closed-loop communication:
   Team Leader: “Synchronized cardioversion, 1J/kg, for a total of 10 J”.
   Medication Preparation Nurse: “synchronized cardioversion 10J”.
   Team Leader: “Correct”.

General strategies to solve the problems

- Increase knowledge base: assigned reading, lectures, teamwork and communication training
- Debriefing focused to re-evaluate critical thinking and structure planning of actions
7. Common Errors and Prevention Strategies

- Teaching points based on errors
- Regular simulation training to avoid previous mistakes
- Behavioral change comes slowly: learners improve and sustain those improvements when they practice, practice and practice. We believe it’s critical to develop opportunities for your learners to develop their skills over time.
8. Cognitive Training

Key methods for delivering cognitive training include the following:

- Supraventricular tachycardia Learner Handout (See Appendix D).
Skills Training Scenario: SVT

Patient

| Age: 6 Months | Weight: 8 kg | Gender: Male |

Scenario: The nurse is bringing back an “ill-appearing” child. S/he has not obtained vitals: the patient is initially fully clothed and not on monitors. The patient is initially in SVT, without hemodynamic compromise. Anticipated interventions include valsalva techniques and adenosine. The patient then develops SVT, WITH hemodynamic compromise. Anticipated interventions include synchronized cardioversion. The patient then resumes a sinus rhythm with hemodynamic stability.

Learning Objectives:

1. Recognize SVT
   a. Initial patient assessment
      i. SAMPLE history, initial physical
   b. Appropriate monitoring
      ii. Heart & respiratory, oximetry, blood pressure, temperature
   c. Identification of SVT
      iii. Signs: pallor, mottling, fussiness
      iv. Symptoms: Narrow complex tachycardia

2. Manage SVT without hemodynamic compromise
   a. Support airway and breathing
   b. Apply ice slurry to face/valsalva maneuvers
   c. Adenosine
      i. 1st dose: 0.1 mg/kg, max 6 mg
      ii. 2nd dose: 0.2 mg/kg, max 12 mg

Learning Objectives continued:

3. Manage SVT WITH hemodynamic compromise
   a. Support airway and breathing
   b. Synchronized cardioversion 0.5-1 J/kg

4. Teamwork skills
   a. Team structure and leadership
      i. Determine and indicate team leader and member roles
   b. Communication skills
      i. Brief prior to starting the scenario
      ii. Huddle as needed during the scenario
      iii. Utilize directed communication
      iv. Utilize check-back for closed loop communication

Facilitator Notes:

Give team intro outside the simulation area. Patient is initially clothed, no triage vitals, not on monitors.

PMH: (If asked) see Stage 1 Instructor Information

Scenario Intro:

ED: Jackson is a 6 month old. Today his aunt is caring for him (not a regular caretaker). She thought his color looked funny. He’s been fussy all morning, not drinking bottles. She brought him in on the bus.
9. Skill Training

Prelude: 0-3 min
Give team the scenario intro outside the simulation area. You may answer any
questions (if asked) based on the information in the scenario intro. Give them up to three
minutes to plan: decide on roles, priorities, organizational elements before entering the
simulation area.

Stage 1: Supraventricular tachycardia (SVT), Stable: 3-5 minutes, maximum

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>HR</td>
<td>248</td>
</tr>
<tr>
<td>Spo2</td>
<td>98%</td>
</tr>
<tr>
<td>BP</td>
<td>95/66</td>
</tr>
<tr>
<td>RR</td>
<td>30</td>
</tr>
<tr>
<td>Temp</td>
<td>37.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technologist Information</th>
<th>Teaching Objectives</th>
<th>Instructor Information</th>
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<tbody>
<tr>
<td>Soft, intermittent crying throughout stage.</td>
<td>Primary Assessment</td>
<td></td>
</tr>
<tr>
<td>Clear, shallow breath sounds.</td>
<td>▪ ABCDE</td>
<td></td>
</tr>
<tr>
<td>Adenosine responses:</td>
<td>Recognize SVT</td>
<td></td>
</tr>
<tr>
<td>▪ 1st dose, no response</td>
<td>Manage SVT without hemodynamic compromise</td>
<td></td>
</tr>
<tr>
<td>▪ 2nd dose, HR to 118 abruptly for 10 sec, then ramp back to 248 over 20 seconds.</td>
<td>▪ Oxygen</td>
<td></td>
</tr>
<tr>
<td>After 2 min in this stage or 2nd Adenosine dose → Go to Stage 2</td>
<td>▪ Place IV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Valsalva maneuvers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Adenosine x 2 doses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Request EKG</td>
<td></td>
</tr>
<tr>
<td>History (if asked):</td>
<td>History (if asked):</td>
<td></td>
</tr>
<tr>
<td>S- fussy, not eating, color seems off</td>
<td>S- fussy, not eating, color seems off</td>
<td></td>
</tr>
<tr>
<td>A- NKDA</td>
<td>A- NKDA</td>
<td></td>
</tr>
<tr>
<td>M- gave Tylenol ~ 4 hours ago for fussiness</td>
<td>M- gave Tylenol ~ 4 hours ago for fussiness</td>
<td></td>
</tr>
<tr>
<td>P- no known medical history</td>
<td>P- no known medical history</td>
<td></td>
</tr>
<tr>
<td>L- drank ~ 1oz 4 hours ago</td>
<td>L- drank ~ 1oz 4 hours ago</td>
<td></td>
</tr>
<tr>
<td>E – no illnesses, no trauma, got dropped off by mom ~ 8 hours ago</td>
<td>E – no illnesses, no trauma, got dropped off by mom ~ 8 hours ago</td>
<td></td>
</tr>
</tbody>
</table>

Exam (If asked):
alert
mottled hands and feet
no hepatosplenomegaly

Responses:
▪ Valsalva maneuvers,
application of ice slurry to face- no response
▪ Adenosine: 0.1 mg/kg - no response.
▪ Adenosine: 0.2 mg/kg - 30 second effect
# Stage 2: SVT with Hemodynamic Compromise: 5-10 minutes, maximum

<table>
<thead>
<tr>
<th>HR</th>
<th>285</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spo2</td>
<td>89%</td>
</tr>
<tr>
<td>BP</td>
<td>42/22</td>
</tr>
<tr>
<td>RR</td>
<td>12</td>
</tr>
<tr>
<td>Temp</td>
<td>37.5</td>
</tr>
</tbody>
</table>

**Technologist Information**
- Oxygen saturation and blood pressure fall.
- Weaker pulse.

**Teaching Objectives**
- Manage SVT with hemodynamic compromise
  - BMV with 100% oxygen
  - IV or IO access
  - Synchronized cardioversion

**Instructor Information**

<table>
<thead>
<tr>
<th>Exam (If asked):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mottled to elbows and knees</td>
</tr>
<tr>
<td>Capillary refill 5 seconds,</td>
</tr>
<tr>
<td>Unresponsive to pain.</td>
</tr>
</tbody>
</table>

**Responses:**
- Adenosine: 0.2 mg/kg- if repeated, no response.
- Cardioversion- SYNCHRONIZED cardioversion (0.5-1J/kg)→ Go to Stage 4
- Cardioversion- UNSYNCHRONIZED or defibrillation→ Go to Stage 3

**Optional Stage 3: Ventricular fibrillation: 10-15 minutes, maximum**

<table>
<thead>
<tr>
<th>HR</th>
<th>Ventricular fibrillation</th>
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<tbody>
<tr>
<td>Spo2</td>
<td>Not reading</td>
</tr>
<tr>
<td>BP</td>
<td>Not reading</td>
</tr>
<tr>
<td>RR</td>
<td>0</td>
</tr>
<tr>
<td>Temp</td>
<td>37.5</td>
</tr>
</tbody>
</table>

**Technologist Information**
- Stage 3 ONLY if
  - UNSYNCHRONIZED cardioversion, defibrillation or failure to cardiovert in Stage 2.
  - After defibrillation or 5 minutes in this stage→ Go to Stage 4.

**Teaching Objectives**
- Recognize ventricular fibrillation caused by unsynchronized cardioversion or defibrillation or failure to cardiovert
  - Initiate Cardiopulmonary Resuscitation
  - Defibrillate with 2J/kg

**Instructor Information**

<table>
<thead>
<tr>
<th>Exam (If asked):</th>
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</thead>
<tbody>
<tr>
<td>Apnea, Pulseless, Unresponsive</td>
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**Responses:**
- Defibrillation, Go to Stage 4
## 9. Skill Training

### Stage 4: Resolution-Sinus Rhythm: 15-17 minutes, maximum

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR</td>
<td>128</td>
</tr>
<tr>
<td>Spo2</td>
<td>98</td>
</tr>
<tr>
<td>BP</td>
<td>88/64</td>
</tr>
<tr>
<td>RR</td>
<td>28</td>
</tr>
<tr>
<td>Temp</td>
<td>37.5</td>
</tr>
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</table>

#### Technologist Information
- Sinus rhythm
- Clear breath sounds
- Strong pulses

#### Teaching Objectives
- Reassess ABCDE’s
- Consider additional evaluation and disposition
  - EKG
  - Cardiology/Critical care consult

#### Instructor Information
- **Exam (if asked):**
  - Strong pulses, mottling resolving
- **Responses:**
  - End scenario after 2 min in this Stage.

Below are examples of learning objective based statements & questions you may use to debrief the team. Please see Appendix C- Debriefing Overview for general recommendations on overall debriefing format.

### Examples of debriefing for different Learning Objectives

<table>
<thead>
<tr>
<th>SAMPLE History</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
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<tbody>
<tr>
<td><strong>Debriefer Script</strong></td>
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</tbody>
</table>
| I noticed that you (did/didn’t) ask some historical questions. I think (that’s great/could have helped) because the history guides differentials.  
  - What “historical questions” were you thinking about?  
  - Are there any tools/pneumonics you used to help you? | SAMPLE history  
  - Symptoms  
  - Allergies  
  - Medications  
  - Past medical history  
  - Last meal  
  - Events leading up | |

<table>
<thead>
<tr>
<th>Airway and Breathing Support with Cardiac Disturbances</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
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<tr>
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| I noticed that you (quickly/took a while) to (apply oxygen/provide BVM assistance). I think that’s (great/could be a problem) because with arrhythmias oxygenation suffers. I think it’s important to get the oxygen on ASAP.  
  - What did you think about this patient’s oxygen/breathing? | Apply supplemental O2 early if hemodynamically stable  
  - Bag mask ventilate with 100% O2 in unstable patients | |
## Circulatory Assessment

<table>
<thead>
<tr>
<th>Debriefers Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| I noticed that you *(did/didn’t)* check the *(heart rate/feel the central pulses/check peripheral or end organ perfusion)*. I thought this was *(great/could have been done earlier)* because a thorough assessment of circulation gives you a better idea of how a patient is compensating. | HR (count, monitor)  
- Central pulses (femoral)  
- Peripheral pulses (radial, pedal)  
- Capillary refill  
- End organ perfusion: mental status, urine output | |
| ▪ What did you think about this patient’s circulation? | | |

## Cardioversion

<table>
<thead>
<tr>
<th>Debriefers Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| I noticed you decided to *(cardiovert/defibrillate)* *(with/without synchronizing)*. This is *(great/concerning)* because with SVT you want to synchronize your cardioversion. If it’s not synchronized, you risk inducing ventricular tachycardia or ventricular fibrillation.  
▪ How did your team decide what to do?  
▪ Did anyone have other thoughts? |  
- Hemodynamically stable SVT= valsalsva or medications or synchronized cardioversion  
- Hemodynamically unstable SVT= synchronized cardioversion  
- Pulseless Arrest= cardiopulmonary resuscitation and defibrillation | Might want to say something here like “In hemodynamically stable patients with SVT who have failed adenosine x 2, consider cardiology consult +/- sedation for synchronized cardioversion.” |

## Recognizing SVT

<table>
<thead>
<tr>
<th>Debriefers Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| I noticed the patient’s rhythm looked abnormal. For me, this is the first step. Then I start trying to categorize it.  
▪ What did you think about the rhythm?  
▪ How could/have you in the past determined the rhythm? | Review rhythm on monitor/EKG:  
SVT  
▪ Abnormal vs. normal  
▪ Too fast vs. too slow  
▪ Narrow complex vs. wide complex  
Sinus tach vs. SVT  
SVT:  
▪ Pallor, mottling, fussiness, poor feeding | |
# 9. Skill Training

## Manage SVT Without Hemodynamic Compromise

<table>
<thead>
<tr>
<th>Debrief Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| Initially your patient had SVT without hemodynamic compromise: BP was normal, the patient was alert and saturations were 98%. I noticed you (did/didn’t) perform a stepwise escalation of support (**apply supplemental oxygen, obtain an EKG, attempt valsala maneuvers, obtain IV access, give adenosine**). This was (great/could put you in a bad position) because this was your opportunity to prepare prior to decompensation.  
  - How did you decide on/implement your treatment plan? | Primary Assessment  
  Support breathing:  
  - Apply oxygen  
  - Obtain EKG  
  - Consider valsala interventions  
    - Ice slurry application to face  
  - Obtain IV access  
  - Adenosine  
    - 1<sup>st</sup> dose: 0.1 mg/kg, max 6 mg  
    - 2<sup>nd</sup> dose: 0.2 mg/kg, max 12 mg | |

## Manage SVT with Hemodynamic Compromise

<table>
<thead>
<tr>
<th>Debrief Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| Your patient decompensated. BP dropped, saturation dropped, and the patient became unresponsive = SVT with hemodynamic compromise. I noticed you (did/didn’t) support the ABC’s and quickly provide **synchronized** cardioversion. This was (great/could have been better) because you need to act fast to restore perfusion.  
  - How did you decide on/implement your treatment plan?  
  - What helped/hindered you? | Support ABC’s  
  - Obtain IV/IO access  
  - Administer synchronized cardioversion (.5 to 1 J/kg)  
  - Recognize **unsynchronized** cardioversion or defibrillation could lead to a fatal arrhythmia  
  - For ventricular fibrillation, start cardiopulmonary resuscitation and defibrillate as soon as possible | |
Examples for debriefing different Teamwork Learning Objectives

<table>
<thead>
<tr>
<th>Roles and Responsibilities</th>
<th>Debrief Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| Team leader                 | It looked like you *did/did not* have a clear team leader and defined team roles. I think this is *great/concerning* because clear team roles can help a team function smoothly - improving how quickly interventions take place and reducing errors.  
- What did you think about your roles?  
- What worked well?  
- What could have been better? | - Clear direction, coordination, timely interventions  
- Foot of patient  
Airway/Procedure MD  
- Manage airway/c-spine  
- Head of patient  
Survey MD  
- Primary, Secondary survey, pulses with CPR, reassess  
Nursing roles  
- Medication Prep (draw-up meds)  
- Medication Admin (give meds)  
- Documenting (time keeper) | |

**Brief and Huddle**

<table>
<thead>
<tr>
<th>Debrief Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| I noticed that your team *(did/didn’t/took a while to)* *(brief prior to the patient’s arrival/huddle after the initial evaluation)*. I thought this was *(great/could have helped you work better as a team)*.  
- What *(helped/hindered)* your team from *(briefing/huddling)*?  
- How did that impact your team?  
- What could your team have done differently?  
- How can you make sure that *(does/doesn’t)* happen again? | The goal of a brief/huddle is to create a shared mental model. Assure all team members know what the working diagnosis is, treatment priorities and next steps in care.  
- Everyone on the team is responsible for making this happen. Anyone can ask for a brief/huddle. Brief/huddle is usually led by team leader.  
- If one team member doesn’t know what’s up or what’s next, s/he is probably not alone. | |
## Directed call out

<table>
<thead>
<tr>
<th>Debrief Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| I noticed that you *(did/didn’t/intermittently)* used *(peoples names/roles/eye contact)* when *(calling out orders/asking for assistance)*. I thought this was *(great/could have been more directed)*.  
  - What did you notice about orders/questions that were asked?  
  - How did this impact your team?  
  - What would you Directed call out. A tactical communication skill to assure that important orders/questions are specifically directed to one individual (rather than called out into the air).  
  - Example:  
    - “Jennifer-What’s the circulatory status?”  
    - “Kim- Give shock 16 Joules ”  
    - “Team leader- we lost the pulse” | |

## Closed loop communication/Check back

<table>
<thead>
<tr>
<th>Debrief Script</th>
<th>Reference Material</th>
<th>Instructor Notes</th>
</tr>
</thead>
</table>
| I noticed that you used closed-loop communication *(consistently/a lot/rarely)*. Closed-loop communication can be critical for catching errors and assuring that *(information/an order/a request)* is heard.  
  - What did you think about your communication loops?  
  - How did that impact your team?  
  - Has anyone seen problems with this in a patient resuscitation?  
  - Has anyone seen closed loop communication prevent an error?  
  - How could you do it differently next time?  
  | Closed loop communication/check back is a strategy that requires verification of information. This enables the sender of the message to verify it has been heard, and heard correctly. It enables the receiver to confirm what they heard is correct.  
  - Team leader “adenosine 0.8 mg IV push”  
  - Medication preparation nurse “adenosine 0.8 mg IV push”  
  - Team leader “correct” | |

Supraventricular Tachycardia
# 10. Equipment Set-up

## Simulation Environment preparation

Before each simulation, ensure the anticipated resuscitation equipment is available for the team’s use.

## Resources

- PALS reference cards, material
- Patient Weight Estimator
- Pediatric Resuscitation Medication references (e.g.: Broselow tape, reference cards)
- Documentation forms

## Universal Precautions

- Staff gowns
- Gloves
- Mask and face shields

## Medications (consider having all or only a limited number of medications available)

- Adenosine
- Amiodarone
- Atropine
- Etomidate
- Fentanyl
- Ketamine
- Lidocaine
- Midazolam
- Normal Saline/Lactated Ringers
- Rocuronium
- Succinylcholine
- Epinephrine 1:10,000

## Equipment

- Simulator in hospital gown, on bed
- Monitor – NIBP, HR, RR, Oxygen saturation, temperature
- Blood Pressure cuff, Heart Rate monitor leads, Oxygen saturation probe,
  defibillator cables
- Oxygen hook-up on wall or cylinder
- Bag-mask system, multiple size masks
- O₂ Mask, simple and/or non-rebreather
- Suction
- Thermometer
- Temperature probe
- Nasal, oral airways, multiple sizes
- Shoulder roll
- Endotracheal tubes- 3.0, 3.5, 4.0, 4.5, 5.0, cuffed or uncuffed, stylets
## 10. Equipment Set-up

**Equipment Cont’d**

- Laryngoscope, Miller and Mac blades, multiple sizes
- End-tidal CO2 colorimeter
- Nasogastric tube(s)
- Stethoscopes
- IV/Angiocaths, various sizes
- IO needles, 2 sizes
- Gauze, Tape
- IV tubing
- IV pumps, pressure bags
- Syringes, multiple sizes
- Bedside blood sample processors: glucose, lytes, gases
- Specimen tubes
- Crash cart & backboard
- Defibrillator
### 11. Assessment Methods

**Type(s) of Assessment Methods Used in This Scenario:**

- [ ] Pre-test Only
- [ ] Pre-test & Post-test
- [ ] Post-test Only
- [✓] Medical Management Evaluation/Debriefing Form *(Appendix E)*
- [✓] Teamwork and Communication Evaluation/Debriefing Form *(Appendix F)*
- [✓] Simulation Session Evaluation *(Appendix G)*
### 12. Appendices

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<th>Appendix A</th>
<th>Pediatric Supraventricular Tachycardia Scenario Algorithm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix B</td>
<td>Teamwork and Communication (Team STEPPS) References</td>
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<td>Appendix C</td>
<td>Debriefing Overview</td>
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<td>Pediatric Supraventricular Tachycardia Medical Management Evaluation/Debriefing Form</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Pediatric Supraventricular Tachycardia Teamwork and Communication Evaluation/Debriefing Form</td>
</tr>
<tr>
<td>Appendix G</td>
<td>Pediatric Supraventricular Tachycardia Simulation Session Evaluation Form</td>
</tr>
<tr>
<td>Appendix H</td>
<td>References</td>
</tr>
</tbody>
</table>
Appendix A: Scenario Algorithm

**SCENARIO TIMELINE**

**Prelude:**
- Time: 0.3 min
- Triggers: Initial history provided outside the simulated patient care area.
- End: 2 min into scenario

**Act 1: Supraventricular Tachycardia (SVT), Stable**
- Time: 3-5 min
- Triggers: Start 3 min into scenario.
- End: After 2 mins in this act or 2° Adenosine dose.

**Act 2: SVT with Hemodynamic Compromise**
- Time: 5-10 min
- Triggers: Start 5 min into scenario.
- End: After 5 mins in this act or cardioversion/defibrillation.
  - Cardioversion – SYNCHRONIZED (0.5-1 J/kg) – go to Act 4
  - Cardioversion – UNSYNCHRONIZED or DEFIBRILLATION – go to Act 3

**Act 3: Ventricular Fibrillation**
- Time: 10-15 min
- Triggers: Only if UNSYNCHRONIZED cardioversion, DEFIBRILLATION or failure to cardiovert in Act 2.
- End: After cardioversion or 5 mins in this act.

**Act 3: Resolution- Sinus Rhythm**
- Time: 15-17 min
- Triggers: SYNCHRONIZED cardioversion or 15 min into scenario
- End: 2 mins into this act.

**VITAL SIGNS**

- **Rhythm:** supraventricular tachycardia
- **HR:** 248 bpm
- **BP:** 95/66
- **SAT:** 98%
- **RR:** 30/min
- **Temp:** 37.5°C

- **Rhythm:** ventricular fibrillation
- **HR:** Not reading
- **BP:** Not reading
- **SAT:** 98%
- **RR:** 0
- **Temp:** 37.5°C

- **Rhythm:** sinus
- **HR:** 120 bpm
- **BP:** 88/64
- **SAT:** 98%
- **RR:** 26/min
- **Temp:** 37.5°C

**FACILITATOR INFORMATION**

- **Allow team to brief outside the simulated patient care area**
- **If requested, additional history available.**

- **Exam available if requested.**
- **Adenosine: 0.1 mg/kg – no response**
- **Adenosine: 0.2 mg/kg – 30 sec effect.**

- **Exam available if requested.**
- **Adenosine: 0.2 mg/kg – if repeated, no response.**
## Teamwork and Communication (TeamSTEPPS) Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>The ability to adjust strategies and altering a course of action in response to changing conditions (internal and external).</td>
</tr>
<tr>
<td>Brief</td>
<td>Discussion prior to start that assigns essential roles, establishes expectation, anticipated outcomes and likely contingencies.</td>
</tr>
<tr>
<td>Call-Out</td>
<td>A tactic used to communicate critical information during an emergent event. Helps the team prepare for vital next steps in patient care. (Example: “Airway status?” – “Airway clear”; “Breath sounds?” – “Breath sounds decreased on right”)</td>
</tr>
<tr>
<td>Check-Back</td>
<td>A communication strategy that requires a verification of information. The sender initiates the message; the receiver accepts it and restates the message. In return, the sender verifies that the re-statement of the original message is correct or amends if not. (Example: “Give Benadryl 25 mg IV push” – “Benadryl 25 mg IV push” – “That’s correct”)</td>
</tr>
<tr>
<td>CUS</td>
<td>Signal phrases that denote “I am Concerned, I am Uncomfortable, This is a Safety Issue.” When spoken, all team members will understand clearly not only the issue but the magnitude of the issue.</td>
</tr>
<tr>
<td>Debrief</td>
<td>Brief, informal information exchange session designed to improve team performance and effectiveness.</td>
</tr>
<tr>
<td>DESC Script</td>
<td>A technique for managing and resolving conflict. Describe the specific situation or behavior; provide concrete data. Express how the situation makes you feel/what your concerns are. Suggest other alternatives and seek agreement. Consequences should be stated in terms of impact on established team goals; strive for consensus.</td>
</tr>
<tr>
<td>Huddle</td>
<td>Ad hoc planning to re-establish Situation Awareness; designed to reinforce plans already in place and assess the need to adjust the plan.</td>
</tr>
<tr>
<td>SBAR</td>
<td>A framework for team members to structure information when communicating to one another. S = Situation (What is going on with the patient?) B = Background (What is the clinical background or context?) A = Assessment (What do I think the problem is?) R = Recommendation (What would I do to correct it?)</td>
</tr>
<tr>
<td>Shared Mental Model</td>
<td>An organizing knowledge structure of relevant facts and relationships about a task or situation that are commonly held by team members</td>
</tr>
<tr>
<td>Situation Awareness</td>
<td>The ability to identify, process, and comprehend the critical elements of information about what is happening to the team with regards to the mission. It’s knowing “What is going around you” and “What is likely to happen next”.</td>
</tr>
<tr>
<td>Situation Monitoring</td>
<td>The process of actively scanning and assessing elements of the situation to gain information or maintain an accurate awareness or understanding of the situation in which the team functions.</td>
</tr>
<tr>
<td>Two-Challenge Rule</td>
<td>Assertively voicing concern at least two times to ensure it has been heard.</td>
</tr>
</tbody>
</table>
Appendix C: Debriefing Overview

Simulation creates the opportunity to debrief.

We believe that the focus of each simulation should be the DEBRIEF.

Simulation creates the opportunity to examine our medical management, technical skills and teamwork and communication skills. It facilitates discussion about challenges in a safe environment in order to improve the quality of patient care.

Framework for debriefing:

Each debrief should consist of 4 components:

- Introduction
- Discussion of emotions
- Discussion of medical management and technical skills
- Discussion of teamwork and communication skills

1) Introduction

This “sets the stage” for debriefing and creates expectations.

What you might say:

- This is an opportunity to reflect and learn, improve our medical care, team work, and communication.
- Everyone should be able to ask questions and share their thoughts.
- Once you leave this session, we encourage open discussion of the concepts, but ask you to not to discuss individual performance.

2) Emotional experience discussion

There are a couple of camps regarding discussing emotions. One perspective is that until emotions are dealt with, it’s difficult for adult learners to “move on”: switching gears to process thoughts, actions and opportunities for improvement. Another perspective is that adult learners should process their emotions independently.

Our perspective is the first. If a group or team member is emotionally charged (sad, mad or frustrated) regarding something that did or didn’t happen in a scenario, it’s usually difficult for the individual or the group to be actively engaged, receptive to feedback and able to promote learning, until the emotions are addressed.

An example: a medication error occurs. One team member may think it is all his/her fault. S/he may feel embarrassed, judged, etc. If he/she can verbalize this, other team members may offer different perspectives, which enable the team to process the error together, potentially identifying contributing systems issues. If the emotions aren’t addressed- 3 separate people may feel embarrassed, responsible and not engage in a discussion, failing to identify systems issues which led to the error.

What you might say:

- How did that feel?
- Can you tell me more? Why?
Appendix C: Debriefing Overview

3) Medical management and technical skills
This portion of the discussion focuses on the medical aspects of the scenario. It’s usually more comfortable to begin with these “facts”.

What you might say:
- Let’s begin by discussing medical management.
- What did you think was wrong with the patient? Can someone briefly summarize what happened in this scenario?
- How did you reach those conclusions?

4) Teamwork and communication (a. k. a. crew resource management, non-technical skills, human factors)
This portion of the discussion focuses on how the team worked together. It can be emotionally charged and difficult to discuss without feeling personal. The challenge is to try to generalize specifics into themes.

What you might say:
- Let’s talk about how you functioned as a team.
- What did your team do well?
- What could your team do differently next time?
- That is something I see often. Has anyone else experienced that? How have you seen that handled?

4) Summarizing
- This is your opportunity to ensure the key learning points are highlighted
- Try to identify approximately three take-home points
- You may ask the participants’ to identify take home points or call them out yourself.

Medical management/technical skills examples:
(a) This was a scenario of pediatric SVT.
(b) Signs of SVT: narrow complex tachycardia, potentially signs of decreased perfusion.
(c) Treatment of SVT: valsalva techniques, supplemental oxygen, adenosine, cardioversion.

Teamwork/ communication examples:
(d) Recognize need for a full resuscitation team when a patient develops SVT.
(e) Designate leadership and team member roles to ensure coordinated team functioning.
(f) Use brief or huddle to create a shared mental model for the working diagnosis and treatment plan.

General Debriefing Goals:
- Try to facilitate the TEAM’s discussion (avoid dominating the conversation)
- Ask open ended questions (avoid yes/no questions)
Appendix C: Debriefing Overview

- Discuss the team performance (not the individual)
Supraventricular Tachycardia Learning Objectives

1. Recognize Supraventricular Tachycardia (SVT)
   a. Historical elements= nonspecific: fussiness, poor feeding, or feel rapid heart rate
   b. Usually abrupt onset and offset. P waves may be absent or abnormal. QRS is narrow, rate is regular. Does not vary with respiration, temp changes, etc.
   c. Infants usually 220-320 bpm
   d. Children usually 180-250 bpm

2. Manage SVT without hemodynamic compromise
   a. Vagal maneuvers
      i. Bag of ice/water slurry placed over forehead/eyes and upper face (but not obstructing airway)
      ii. Bear down, blow against obstructed straw.
      iii. Avoid carotid massage or eyeball pressure (not recommended anymore)
      iv. Adenosine
         • Drug of choice to “break” the cycle. 15 second half-life.
         • Administer proximal to heart: IV push followed by IV push of flush (e.g. 3-way stop cock)
         • 1st dose= 0.1 mg/kg (max 6mg) if not successful, then
         • 2nd and any additional doses= 0.2 mg/kg (max 12 mg)
         • Effect: asystole
         • Side effects: feeling of doom, chest pain
      v. Be prepared to give epinephrine or pace, provide CPR if normal sinus rate does not resume

3. Manage SVT with hemodynamic compromise (hypotension, altered mental status)
   a. Support ABC’s
      i. Supplemental oxygen, position airway, suction, bag valve mask, obtain IV access, consider endotracheal intubation
   b. Synchronized cardioversion
      i. 0.5-1 J/kg synchronized cardioversion
      ii. May increase to 2 J/kg p.r.n.
      iii. Consider sedation/analgesia, but do not delay cardioversion
Appendix D: Learner Handouts

4. Core Resuscitation Skills
   a. SAMPLE History: Symptoms, Allergies, Medications, Past medical history, Last meal, Events leading up

   b. Support Airway, Breathing and Circulation
      i. Apply 100% supplemental oxygen
      ii. Position the airway to position of comfort/open
      iii. Apply monitors: Pulse Ox, cardiac monitors, blood pressure cuff
      iv. Reassess
      v. Anticipate potential deterioration and set-up equipment early (e.g. bag valve mask)

   c. Assess Circulation
      i. Heart Rate: count, verify with monitor
      ii. Pulses: CENTRAL pulses (femoral, brachial), peripheral pulses (radial, dorsal)
      iii. Check capillary refill, mottling
      iv. Check end organ perfusion (e.g. mental status, urine output)

   d. Cardioversion vs. Defibrillation
      i. Use gel/pads to improve conduction, DON’T use saline or alcohol pads to conduct (fire/short circuit risk)
      ii. Check your pad/paddle sizes. Usually: large paddles or pads = ≥10kg or ≥1yr old, small paddles or pads < 10 kg or <1 yr
      iii. Cardioversion = use if you have a pulse
          • synchronize to prevent a shock from being delivered during repolarization (potentially causing ventricular fibrillation or asystole)
          • dose 0.5-1 J/kg (may increase to 2J/kg, if needed)
      iv. Defibrillation= use this if NO pulse
Appendix E: Medical Management Evaluation/Debriefing Form

### Pediatric Supraventricular Tachycardia

**Medical Management/Technical Skills**

This checklist identifies core medical management/technical skills. It’s hard to discuss more than 3 of these during one debriefing session. We recommend focusing on 2-3 of these issues.

<table>
<thead>
<tr>
<th>Assessment of ABCDE’s</th>
<th>□ Done Well □ Needs Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific comments:</td>
<td></td>
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</table>

*What did you think of the assessment of the ABCDE’s? What could you do differently?*

<table>
<thead>
<tr>
<th>Recognizing supraventricular tachycardia</th>
<th>□ Done Well □ Needs Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific comments:</td>
<td></td>
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*Discuss Points: What are the signs of supraventricular tachycardia? Nonvariable narrow complex tachycardia, delayed capillary refill, hypotension and altered mental status*

<table>
<thead>
<tr>
<th>Managing supraventricular tachycardia</th>
<th>□ Done Well □ Needs Work</th>
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<tbody>
<tr>
<td>Specific comments:</td>
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*Discuss Points: What’s the treatment for supraventricular tachycardia? Support the ABC’s, obtain IV access, valsalva maneuvers, Adenosine rapid IV push, synchronized cardioversion*
### Appendix F: Teamwork/Communication Evaluation/Debriefing Form

#### Pediatric Supraventricular tachycardia

**Teamwork and Communication Evaluation**

This checklist identifies core teamwork and communication skills. It’s hard to discuss more than 3 of these during one debriefing session. We recommend focusing on 2-4 of these issues.

<table>
<thead>
<tr>
<th><strong>Leader/Roles Identified &amp; Maintained</strong></th>
<th>□ Done Well □ Needs Work</th>
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<tbody>
<tr>
<td>Specific comments:</td>
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*Discussion Points: What helped/hindered having clear leadership and roles? (Did team leader use verbal/visual cues to establish leadership? Did team leader say all orders/priorities? Did team members’ direct questions/info to team leader?)*

<table>
<thead>
<tr>
<th><strong>Directed Call out</strong></th>
<th>□ Done Well □ Needs Work</th>
</tr>
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<tbody>
<tr>
<td>Specific comments:</td>
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*Discussion Points: How were orders given- “Into the air” or directed at specific individuals? What did that impact you? How could they be delivered more effectively?*

<table>
<thead>
<tr>
<th><strong>Check back/Closed loop communication</strong></th>
<th>□ Done Well □ Needs Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific comments:</td>
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*Discussion Points: describe closed loop communication*

<table>
<thead>
<tr>
<th><strong>Shared Mental Model</strong></th>
<th>□ Done Well □ Needs Work</th>
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<tr>
<td>Specific comments:</td>
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*Discussion Points: How did team members share information/working diagnosis/treatment plan ((brief/huddle)?*
# Appendix G: Simulation Evaluation Form

## Simulation Session Evaluation Form: SVT

**Facilitator:** __________________________  
**Date:** ________________

**Case Presented:** Supraventricular Tachycardia

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This simulation case provided is relevant to my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The simulation case was realistic.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>3. This simulation case was effective in teaching basic resuscitation skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. This simulation case was effective in teaching SVT-specific management skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. The debrief created a safe environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. The debrief promoted reflection and team discussion.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
</tbody>
</table>

Can you list/describe 1 or more ways this simulation session will change how you do your job?

How could we improve this scenario?

Comments:
Appendix H: References