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| VCH Color Logo | Coastal Simulation Program  Scenario Name: Cardiac arrest due to block airway  ICU Insitu |  |

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| **Learning Objectives:**  **By the end of the debriefing the participants should be able to:**  ***Knowledge & Skills*:**  *Recognize and act on cardiac rhythm changes*  *Assess airway and connect its’ relationship to bradycardia or rhythm changes*  *Initiate the appropriate treatment algorithm for the management of a patient with an obstructed airway/bradycardia*  *Perform CPR*  ***Attitudes and Judgment:***  *Demonstrate role clarity and delegation of roles and responsibilities at the beginning of the scenario*  *Demonstrate effective communication – clear messages, closed loop, sharing mental model*  *Exhibit elements of good teamwork*  *Demonstrate effective resource utilization*  ***Patient Safety:***  *Trouble shoot the patient, not the monitor.* | | | | | | |
| **Patient Description:**  **Name:** Max  Age: 64 male  Weight: 80 kg  ***Hx of current condition*:**  Intubated. 12 hours post cardiac arrest.  Levophed infusing 5 mg/minute  Sinus rhythm 80 bpm. SpO2 96%  Time 0200. No physicians available    **Social Hx:**  Smoker, diabetic, alcoholic  **Diagnosis:**  12 hours post cardiac arrest | | | **Skills required prior to simulation/learner assessment:**  **Psychomotor:**   * Defibrillator skills * CPR skills   **Cognitive:**   * Recognition of possible code situation. * Airway assessment * Rhythm assessment * Monitor integration   **Teamwork:** Task distribution between treatment and recording.  **Who are my learners?** Nurses 1, 2, RT | | | |
| **Monitors:** EKG, SpO2, BP cuff. | | | | | | |
| **Physical Props/Equipment:** Patient Monitor on, Triple lumen central line/pump infusing levophed, Normal Saline and Dextrose. Intubated and on Ventilator. N/G tube with feed running on pump. Defibrillator avail. Mock Code Drug Tray | | | | **References, Resources, Protocols, Algorithms, or Evidence Informed Practice Guidelines:**  ACLS | | |
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| **Room set up:** Intubated, ventilated patient on monitor. Defibrillator outside of room. Standard ICU room set-up | **Medications & Fluids:**  N/S infusing  NG feed infusing  Levophed infusing  Atropine  Amiodarone  Epinephrine | **Diagnostics:**  Colour capnograph | | | **Documentation forms:**  Nursing notes  Resus record | **Confederates** |
| **Mannequin set-up:**  SimMan  Monitor attached: ECG, SpO2, BP Cuff  ETT in situ  Enteral feeds infusing | | | | | | |
| **Personnel:**  Primary nurse - discovers issue  Secondary nurse - administers meds  Respiratory therapist for airway management  Recording nurse | | | | | | |

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| **Scenario Transitions / Patient Parameters** | **Effective Management** | **Consequences of Ineffective Management** | **Notes** |
| **Phase 1 Setting:** | | | |
| Stable patient. Intubated.  Sinus rhythm at 80 bpm.  Levophed infusing at 5mcg/min  SpO2 96% BP 140/75  FiO2 0.50    Set SimMan to “Can’t intubate, Can’t ventilate”.  If suctioned – state cannot pass catheter.  Rhythm deteriorates to bradycardia  34 bpm. BP 75/40 SpO2 80% | Auscultation of breath sounds.  Increase FiO2  Suction  Assess ETT placement  Take off vent and bag  Extubate  Administer Atropine and/or Epinephrine. |  |  |
| **Phase 2** | | | |
| When patient is extubated: Rhythm Ventricular Fibrillation  No pulse.  No BP. | Begin CPR.  Prepare for defibrillation.  Defibrillate 200, 300 J  RT to ventilate manually. | Rhythm deteriorates to asystole.  If effective:  Sinus Rhythm  HR 45  BP 100/60  Sat 80% |  |
| **Phase 3** | | | |
| Restoration of sinus rhythm  HR 45  BP 100/60  Sat 80% |  |  |  |
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| Possible debrief points: | | | |