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| VCH Color Logo | Coastal Simulation Program  Scenario Name: Long QTc resulting in TdP cardiac arrest. |  |

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| **Learning Objectives:**  By the end of the debriefing the participants should be able to:  *Knowledge & Skills (PAR Nurses)*:   * + Rapidly recognize changes in clinical state.   + Assess and recognize the need for anesthetist assistance   + Engage anesthetist and give SBAR report.   + Recognize changes on the ECG monitor   + Check for pulse, and initiate CPR   + Activate Code Blue   + Maintain safety (sharps, defibrillator, body fluids)   *Attitudes and Judgement:*   * + Use closed Loop Communication- clear and direct orders (MD), repeat back orders (RN), notify leader when order completed (RN, Lab, ECG).   + Communicate roles (leader, medication administrator, runner, recorder/timekeeper)   + Utilize interdisciplinary staff effectively.   + “Think aloud” involve team members (when appropriate) in the decision-making process.   *Patient Safety:*   * Look for underlying causes (labs, imaging, history) * Treat underlying causes * Post-arrest follow-up (ICU?, Consults, Medications) | | | | | | |
| **Patient Description:**  **Name: Natalia Smirnoff**  **Age:** 45  **Weight:** 55kg  **Sx: Thyroidectomy**    **Medical Hx :**  Hyperthyrodism  IBS  HTN  Tachycardia  Alcoholism  **Rx:**  HCTZ 25mg daily  Ramipril 2.5 mg daily  Amlodipine 5mg daily | | | **Skills required prior to simulation/learner assessment:**  Psychomotor: Ability to maintain effective CPR for up to 2 minutes. Adequate use of bag-valve-mask and oral airway.  Cognitive: Assessment of changing status.  Ability to recognize changes on the bedside-monitor.  Recognition of emergency. Call for help.  Teamwork: Support vital signs while organizing into effective team.  Who are my learners?  Nursing, RT, ICU team, MD | | | |
| **Monitors: ECG, SpO2, BP cuff, defibrillator** | | | | | | |
| **Physical Props/Equipment:**  ECG, Mock drug tray, Crash cart  Mock ICU intubation bin  Sim-man, ambu-bag, mock-chart. | | | | **References, Resources, Protocols, Algorithms, or Evidence Informed Practice Guidelines:**  ACLS algorithms | | |
| **Equipment available in room:** | | | | | | |
| **Room set up**:  PAR 22  Crash-cart  Mock intubation kit(ET tube)  Ambu-bag (from SIM) | **Medications & Fluids:**  Normal saline | **Diagnostics:**  CBC  Chemistry  ABG’s Lactate  ECG 12-lead  Old ECG | | | **Documentation forms:**  Lab reports | **Confederates**  interdisciplinary staff |
| **Mannequin:** SIM-Man | | | | | | |
| **Personnel:**  Nurse, RT, Code Team, Anesthetist | | | | | | |

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| **Scenario Transitions / Patient Parameters** | **Effective Management** | | **Consequences of Ineffective Management** | **Notes** |
| **phase 1 Setting:** | | | | |
| Initial exam: VS BP 120/60, HR 70, RR 28, O2 sat 98% on 2L, Temp 36.5, Neurologically intact, airway patent.  C/o Anxiety, Palpitations, Chest discomfort.  Bedside monitor showing:  Sinus rhythm with frequent multi-focal PVCs. | Observe patient  Reassure  Review bloodwork  Call anesthesia  Request blood-work  Request 12-lead ECG | |  |  |
| **phase 2** | | | | |
| Patient’s status unchanged  (initially).  ECG tech arrives at the scene.  12-lead ECG showing sinus rhythm with frequent PVCs , but no ischemic changes. While test underway, rhythm changes to “torsades de pointes” ventricular tachycardia (captured on 12-lead and bedside monitor)  Patient unconscious and pulseless at this point. | -Check for pulse.  -Call “Code Blue”  -Commence CPR  -Ensure airway management  -Give SBAR report to the anesthetist (upon his/her arrival)  -Assign responsibilities  Recorder / runner /  -Ensure remaining patients are looked after | | Delayed CPR unfavorable outcome.  100% O2 via Bag-valve-mask (oral airway) if not patient cyanotic  Poor outcome  Timely anesthesia involvement is  crucial. |  |
| **Phase 3** | | | | |
| Anesthetist and ICU team on the scene.  CPR ongoing  Patient attached to defibrillator via Quick-Combo Pads (monitor shoving torsades de pointes)  Defibrillation #1 ineffective  MgSO4 given on MD order.  Subsequent defibrillation effective in converting to NSR. | -Ensure uninterrupted CPR.  -Communicate roles with ICU team  -Maintain safety during defibrillation  -Suggest MgSO4 if not ordered by MD  -When rhythm converts to NSR follow up with, lab work, 12-lead, CXR. | | Long pauses in CPR = unfavorable outcome.  No MgSO4 resulting in refractory V-Tach |  |
| Possible debrief points:  Focus Debrief on learning objectives  Possible questions to facilitate the debriefing about the Medical Content  1. What runs through your mind when you notice change in rhythm?  a. This should trigger discussion of rhythm recognition and progression down ACLS algorithm (including effective CPR)  2. Discuss team work, roles and communication.  Prepared by B. Bielec RN, LGH | | Debrief notes | | |