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| **Case Title** | Hyperkalemic Cardiac Arrest with distraction |
| **Scenario Name** |  |

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| **Learning Objectives -** [**Use action words**](http://ubccpd.ca/sites/ubccpd.ca/files/Accreditation_Learning%20Objectives_%20Verbs.pdf) | |
| **Knowledge:**   1. Recognition and treatment of hyperkalemic cardiac arrest. | |
| **Skills:**   1. Managing distractions/multiple MDs and expectations during a code | |
| **Attitude/Behaviours:**   1. Demonstrate Team skills 2. Demonstrate Situational awareness 3. Demonstrate Graded Assertiveness | |
| **Scenario Environment** | |
| **Location** | Code blue on Ward |
| **Monitors** | Telemetry, BP, O2 |
| **Props/Equipment** | Lifepack, code meds, IV equipment, hyperkalemia treatment meds (Calcium, BiCarb, Ventolin, Insulin/Glucose), D5NS + 20 KCl IV fluid |
| **Make-up/Moulage** | None |
| **Potential Distractors** | Patients MRP come in midway through code – doesn’t recognize arrest. Disruptive, shouts incorrect orders, etc. |

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| **Case Introduction:** |
| 74 year old patient post hip replacement surgery. Code blue called on wards for cardiac arrest. CPR in progress |

| **Patient Parameters** | **Effective Management** | **Notes** |
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| **Phase 1: Initial Assessment/resuscitation**  **Condition:** Cardiac arrest  **Initial Assessment**   * **Heart Rhythm:** Wide complex rhythm * **BP:** -/- * **RR:** apneic * **SP02:** 88% BVM * **T:** 36.6 * **Glucose:** 5.8 * **CNS:** GCS 3, eyes closed * **Chest:** Good A/E bilat with bagging * **GI:** N * **GU:** N | 1. **Take a focused history** (see Notes column) 2. **Medical Management**  * ACLS management of cardiac arrest (EPI/Shock/Etc) * Recognition and treatment of hyperkalemia. (Calcium, BiCarb, Ventolin, Insulin/Glucose) * Patient will improve/respond well to appropriate treatment   **Consequences of ineffective management**   * If hyperkalemia not considered/recognized nurse will bring in ECG from “earlier that day” with peaked T-Waves. | 1. **Focused history**  * No issues intraoperatively. Some post op nausea.   **PMHx**   * Renal patient – pre dialysis. Typical GFR 35-40. Diabetic induced renal failure. * HTN * DM II   **Meds**   * Multiple * Not on insulin * On D5NS + 20 KCl since OR yesterday.   **Allergies**   * None |
| **Phase 2: Distraction**  **Condition:** Ongoing code blue  Attending physician/surgeon comes in. Tells people to stop CPR. Voices conflicting orders. Argues with decisions of team leader. Generally distracting etc.  **Physical Examination –** No change from above. | 1. **Patient Reassessment** (see Notes column) 2. **Medical Management**  * As above | 1. **Patient Reassessment**   **Airway**   * Must continue BVM   **Breathing**   * Apneic- must continue BVM   **Circulation**   * Pulseless- must continue CPR |

**Insert more lines if more phases required.**

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| **Expected Patient Management** | **Debriefing Points** |
| 1. **Student** 2. **Junior Resident** 3. **Senior Resident** | * ACLS * Management of hyperkalemia * Strategies to deal with distractions, multiple team leaders, etc. during code blue situations. |

**References:**

**LABS – click** [here](https://extranet.interiorhealth.ca/IHUBCFaculty/Diagnostics/Forms/AllItems.aspx?RootFolder=%25252FIHUBCFaculty%25252FDiagnostics%25252FLabs&View=%25257bFD97E2FE-FD01-433F-B9CB-D75A4195924E%25257d) **OR fill out below**

LABORATORY \*LIVE\* Lab Summary Report

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| --- | --- | --- | --- |
| **Test** | **DATE/TIME here** | **Flag** (H or L) | **Reference** |
| **CBC** | | | |
| WBC | 10.8 |  | 3.5 – 10.8 10^9/L |
| RBC |  |  | 4.3 – 5.7 10^12/L |
| Hgb | **115** | **L** | 130 – 170 g/L |
| HCT |  |  | 0.37 – 0.47 L/L |
| Platelets | 310 |  | 150 – 400 10^9/L |
| D-Dimer |  |  | <250 mcg/L |
| **Chemistry** | | | |
| Na | 140 |  | 137 – 145 mmol/L |
| K | **8.9** | **H** | 3.5 – 5.0 mmol/L |
| Cl | 98 |  | 98 – 107 mmol/L |
| HCO3 | **28** | **H** | 22-26 mmol/L |
| Urea | **12.5** | **H** | 2.5 – 6.1 mmol/L |
| Creat | **130** | **H** | 62 – 106 umol/L |
| GFR Est |  |  | > 60 ml/min |
| Glucose - Random | 5.8 |  | 3.0 – 11.0 mmol/L |
| Lactate | **2.6** | **H** | 0.9 – 1.8 mmol/L |
| CK |  |  | 5 – 130 U/L |
| Troponin | 0.00 |  | <0.03 mcg/L |
| **Coags** |  |  |  |
| INR | 1.0 |  | 0.9 – 1.2 |
| PTT | 30 |  | 28 – 38 s |
| **ABGs** | | | |
| **Arterial** | | | |
| pH | 7.35 |  | 7.35- 7.45 |
| pCO2 | **46** | **H** | 35 – 45 mmHg |
| PO2 | 85 |  | 80-100 mmHg |
| BE |  |  | -2.0 to +2.0 mmol/L |
| HCO3 | **29** | **H** | 22 – 26 mmol/L |
| O2 Sat | **89** | **L** | 95 – 100% |

**EKGs – click** [here](https://extranet.interiorhealth.ca/IHUBCFaculty/Diagnostics/Forms/AllItems.aspx?RootFolder=%25252FIHUBCFaculty%25252FDiagnostics%25252FECGs&View=%25257bFD97E2FE-FD01-433F-B9CB-D75A4195924E%25257d) **or paste**



