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| **Case Title**  | Cocaine Toxicity with Chest Pain |
| **Scenario Name** | Cocaine Toxicity  |

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| **Learning Objectives -** [**Use action words**](http://ubccpd.ca/sites/ubccpd.ca/files/Accreditation_Learning%20Objectives_%20Verbs.pdf) |
| **Knowledge:**1. Apply basic ACLS protocols
2. Demonstrate management of Cocaine toxicity
3. Demonstrate initial management of chest pain
4. Demonstrate initial management of V. tach
 |
| **Skills:**1. Perform high quality CPR
2. Perform defibrillation
3. Perform intubation
4. Demonstrate EKG interpretation
 |
| **Attitude/Behaviours**1. Demonstrate Team skills
2. Demonstrate Situational awareness
3. Demonstrate Graded Assertiveness
 |
| **Scenario Environment** |
| **Location** | ED |
| **Monitors** | Telemtry/Crash Cart/defibrillator |
| **Props/Equipment** | IV, MedsAirway equipmentEKG |
| **Make-up/Moulage** | None |
| **Potential Distractors** | None |

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| **Case Introduction:** |
| Walk in Arrival. Call to ED acute care bed 4. 35 year old male on 4 day binge using cocaine and crack cocaine, IV, PO, insufflation. |

| **Patient Parameters** | **Effective Management** | **Notes** |
| --- | --- | --- |
| **Phase 1: Unstable Chest Pain, Agitated****Condition:** UnstableAgitated, hallucinating, headache**Initial Assessment*** **Heart Rhythm:** Sinus Tachycardia
* **HR:** 140
* **BP:** 230/130
* **RR:** 24
* **SP02:** 95% on R/A

***Will not allow further physical assessment at this time due to agitation*** | 1. **Take a focused history** (see Notes column)
2. **Medical Management**
* History and physical exam.
* Oxygen, IV, monitor, vitals.
* Lorazepam IV for CP, agitation
* Fluids
* ASA and Nitro
* Treat hypertension with Benzos, Phentolamine (no b-blockers).
 | 1. **Focused history**
* Arrives to ER with friend.
* Has Chest Pain, agitated, hallucinating, headache.
* Difficult patient.

**PMHx*** Smoker
* Drug abuse

**Meds*** Drug abuse

**Allergies*** NKDA
 |
| **Phase 2: Respiratory Decompensation****Condition:** UnstableStruggling to breath, Spo2 and GCS start falling (Crack lung- acute lung injury)**Physical Examination*** **Heart Rhythm:** Sinus Tachycardia
* **HR:** 150
* **BP:** 170/100
* **RR:** 28
* **SPO2**: 85%
* **CNS:** GCS 8
 | 1. **Patient Reassessment** (see Notes column)-*Recognizes change in condition*
2. **Medical Management:**
* Intubation
* Lasix
* Positive pressure ventilation

*When Chest pain, Hypertension, and airway addressed – progress to Phase 3 (V. Tach with a pulse)* | 1. **Patient Reassessment**

**Airway*** Sats and GCS falling, struggling to breath- must intubate

**Breathing** * Falling sats

**Circulation*** BP decreasing post meds
 |
| **Phase 3: Ventricular Tachycardia with pulse****Condition:** Highly unstablePatient unresponsive, eyes closed, intubated**Physical Examination*** **Heart Rhythm:** Ventricular Tachycardia
* **HR:** 140
* **BP:** 150/90
* **RR:** intubated and bagged
* **CNS:** GCS 3
 | 1. **Patient Reassessment** (see Notes column)-*Recognizes change in condition- Rhythm*
2. **Medical Management:**
* Appropriate V. tach management:
	+ Synchronized cardioversion
	+ Bicarbonate

**Consequences of ineffective management*** If defibrillation used instead of synchronized cardioversion, progress immediately to Phase 4 (V. Tach Arrest)
* Otherwise, allow a couple rounds of cardioversion, and then progress to Phase 4
 | 1. **Patient Reassessment**

**Airway*** Obstructed, must intubate if not already done so

**Breathing** * Apneic, must bag

**Circulation*** Pulses present, must use synchronized cardioversion
 |
| **Phase 4: Ventricular Tachycardia arrest****Condition:** CodingPatient unresponsive, eyes closed, intubated**Physical Examination*** **Heart Rhythm:** Ventricular Tachycardia (PEA)
* **HR:** 145
* **BP:** -/-
* **RR:** intubated and bagged
* **CNS:** GCS 3
 | 1. **Patient Reassessment** (see Notes column)-*Recognizes change in condition- Rhythm*
2. **Medical Management:**
* Appropriate V. tach cardiac arrest management:
	+ CPR
	+ Defibrillation
	+ More bicarbonate
	+ Lidocaine/amiodarone etc.

**Consequences of ineffective management*** If ACLS guidelines followed correctly, progress to phase 5 (ROSC)
 | 1. **Patient Reassessment**

**Airway*** Obstructed, must intubate if not already done so

**Breathing** * Apneic, must bag

**Circulation*** Pulses absent, must do CPR
 |
| **Phase 5: ROSC****Condition:** UnstableROSC, remains sedated and ventilated**Physical Examination*** **Heart Rhythm:** Sinus Tachycardia
* **HR:** 130
* **BP:** 100/50
* **RR:** 12 on ventilator
* **SpO2:** 96% vented on high oxygen
 | 1. **Patient Reassessment** (see Notes column)-*Recognizes change in condition*
2. **Medical Management:**
* Post Arrest Care
 | 1. **Patient Reassessment**

**Airway*** Protected with ETT

**Breathing** * On ventilator

**Circulation*** ROSC
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| **Expected Patient Management** | **Debriefing Points** |
| 1. **Student**
2. **R1**
3. **Senior IM resident**
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**References:**

**X-RAYS**



**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**

CBC Normal, Lytes Normal, Troponin 0.7, BUN/Cr Normal

**EKGs**

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