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| **Case Title** | Clonidine Intoxication |
| **Scenario Name** | Clonidine Intoxication |

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| **Learning Objectives -** [**Use action words**](http://ubccpd.ca/sites/ubccpd.ca/files/Accreditation_Learning%20Objectives_%20Verbs.pdf) | |
| **Knowledge:**   1. Identify signs and symptoms of clonidine intoxication | |
| **Skills:**   1. Management of clonidine intoxication 2. Demonstrate appropriate supportive & therapeutic interventions | |
| **Attitude/Behaviours:**   1. Demonstrate Team skills 2. Demonstrate Situational awareness 3. Demonstrate Graded Assertiveness | |
| **Scenario Environment** | |
| **Location** | ED |
| **Monitors** | Bedside monitor |
| **Props/Equipment** | Ventilator  ECG - with sinus bradycardia  CXR - post intubation |
| **Make-up/Moulage** |  |
| **Potential Distractors** |  |

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| **Case Introduction:** |
| 6 yr old girl brought to the ED because of lethargy. Had no medical history. Upon arrival in the ED you are asked to see the child immediately. |

| **Patient Parameters** | **Effective Management** | **Notes** |
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| **Phase 1: Lethargic**  **Condition:** lethargic, but well developed child  **Initial Assessment**   * **Heart Rhythm:** Sinus * **HR:** 70 * **BP:** 100/50 * **RR:** 16-20 * **SP02:** * **T:** 34.8 * **CNS:** somnolent with poor muscle tone and slight hyporeflexia, gag reflex is intact, patient became more active and at times agitated with tactile stimulation. PERL – slightly reactive to light * **Chest:** normal * **CVS:** regular bradycardia * **GI:** normal * **Weight:** 12 kg | 1. **Take a focused history** (see Notes column) 2. **Medical Management**   Airway   * Talk to the patient ,she responds briefly * Optimize airway position * Suction the airway as needed   Breathing   * Check oxygen saturation * Apply monitors – “sinus bradycardia” * Provide oxygen delivery – no change in clinical appearance * Auscultate chest - Equal air entry * No added sounds   Circulation   * Monitors (if not done yet) * Check pulse, cap refill, BP – HR 70 * Start IV   Expose the patient   * No rash, no petechiae * Order ECG * Order blood work   + Blood gas, CBC differential, Electrolytes, BUN, Cr | 1. **Focused history**  * The young girl & her sibling ate dinner at neighbors house 1 hr prior to the incident * The neighbor revealed that she is on clonidine tablets * Not sure if there are tablets missing from her medication * No other medications available at home   **PMHx**   * Previously healthy * No hx of fever or antecedent illness   **Meds**   * Nil   **Allergies**   * NKA |
| **Phase 2: Deterioration**  **Condition:** worsening. Evolves to hypotension  **Physical Examination**   * **Heart Rhythm:** Sinus * **HR:** 60 * **BP:** 70/40 * **RR:** 25 * **SP02:** 98% RA * **T:**  35 Ax * **Glucose:** 6 (provide when asked by student) | 1. **Patient Reassessment** (see Notes column) 2. **Medical Management**  * Naloxone IV one dose given repeated with no response * Activated Charcoal 1g/kg * IV NS bolus 20/kg * Atropine 0.02/kg * Call for ICU | 1. **Patient Reassessment**   **Airway**   * Reassessment: stable   **Breathing**   * Reassessment breathing, auscultation normal * Apply 100% oxygen – no change in clinical appearance   **Circulation**   * Reassess HR, pulse, BP * Consider giving fluid bolus 20cc/kg NS – no change in vital signs |
| **Phase 3: Unresponsive**  **Condition:** unresponsive, bradycardia, and hypotension. Patient became unresponsive with slow and shallow breathing with intermittent apnea  **Physical Examination**   * **Heart Rhythm:** Sinus * **HR:** 60 * **BP:** 60/30 * **RR:** 10 * **SP02:** 85% | 1. **Patient Reassessment** (see Notes column) 2. **Medical Management**  * Intubation and ventilation * IV NS bolus 20/kg * Dopamine infusion | 1. **Patient Reassessment**   **Airway**   * Position airway * OP airway * Prepare for intubation   **Breathing**   * Shallow respiration and apnea   **Circulation**   * Reassess HR, pulse, BP, cap refill * Bolus NS 20cc/kg – no change * ECG – sinus bradycardia |
| **Phase 4: Intubated**  **Condition:** intubated and sedated; no movement  **Physical Examination**   * **Heart Rhythm:** Sinus * **HR:** 110 * **BP:** 85/50 * **RR:** 24 * **SP02:** 98% - intubated * **T:** 37 Orally | 1. **Patient Reassessment** (see Notes column) 2. **Medical Management**  * Check blood sugar * Call ICU (if not done already) * Prepare for transport after stabilized | 1. **Patient Reassessment**   **Airway**   * Ensure proper position is maintained   **Breathing**   * Intubated   **Circulation**   * Give more fluid to 60-80 cc/kg |

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

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

**References:**