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| **Case Title** | Car vs. Cyclist |
| **Scenario Name** | Death Ride |

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| **Learning Objectives -** [**Use action words**](http://ubccpd.ca/sites/ubccpd.ca/files/Accreditation_Learning%20Objectives_%20Verbs.pdf) | |
| **Knowledge:**   1. Standard ATLS protocols for blunt multi - trauma resuscitation 2. Understanding of the management of an open pelvic fracture in a hemodynamically unstable patient. 3. Disposition of a patient with both head injury and an unstable hemodynamically significant pelvic fracture | |
| **Skills:**   1. Management of the airway in a patient with facial trauma, swelling and a head injury. 2. Binding of a pelvic fracture | |
| **Attitude/Behaviours:**   1. Demonstrate Team skills 2. Demonstrate Situational awareness 3. Demonstrate Graded Assertiveness | |
| **Scenario Environment** | |
| **Location** | Trauma Resuscitation room 3 |
| **Monitors** | Standard ED monitors |
| **Props/Equipment** | Pelvic binder or sheet |
| **Make-up/Moulage** | Facial contusions/swelling |
| **Potential Distractors** | None |

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| **Case Introduction:** |
| 50 year old female  Cycling, helmet on, struck by car—side swiped at 50-60km/hour.  Thrown 15 feet. Helmet cracked and damaged.  Prehospital notification given. Unstable VS with EHS. |

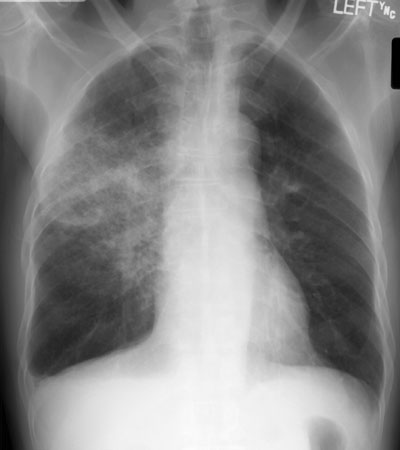
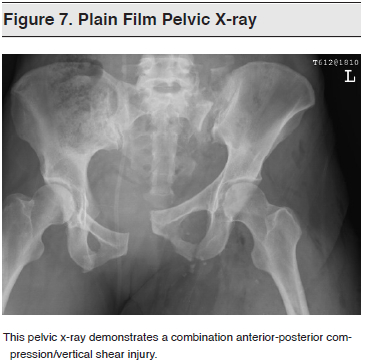
| **Patient Parameters** | **Effective Management** | **Notes** |
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| **Phase 1: Unstable**  **Condition:** Unstable Presentation  **Initial Assessment**   * **Heart Rhythm:** Sinus * **HR:** 130 * **BP:** 92/62 * **RR:** 24 * **SP02:** 94% * **T:** 36 * **Glucose:**  8.6 * **CNS:** GCS 8 (M4, V2, E2) * **Chest:** Crackles Right Base * **CVS:** HS normal * **GI:** Soft * **GU:** Pelvis Unstable * **Integ:** Contusions and swelling to face/eyes/moth * **Weight:** 80 kg | 1. **Take a focused history** (see Notes column)  * Intro as above * No information from patient   **Medical Management**   * Oxygen * Complete VS and glucose * 2 X IVs * Fluid bolus of NS * Full head to toe exam * Recognize Unstable Pelvis * Recognize unstable hemodynamics and need for acute intervention * Recognize Airway compromise and need for intubation. * Investigations – CXR, Pelvis XRay, CT Head/Cspine – Pan Scan, Labwork – CBC, G and S, Lytes, Renal function, Lipase, VBG/ABG, ECG   **Consequences of ineffective management**   * Further Hypotension * Airway failure and respiratory arrest (Airway is difficult due to facial swelling) | 1. **Focused history**  * No information from patient   **PMHx**   * HTN   **Meds**   * Ramipril   **Allergies**   * None |
| **Phase 2: Deterioration**  **Condition:** Deterioration  **Physical Examination**   * **Heart Rhythm:** Sinus * **HR:** 140 * **BP:** 75/35 * **RR:** 20 * **SP02:** 90% * **CNS:** Decreased GCS * **Chest:** Crackles Right base | 1. **Patient Reassessment** (see Notes column)   Patient continues to decline in hemodynamics and level of consciousness   1. **Medical Management**  * Increase Fluids and Blood products * Assess imaging * Wrap/bind pelvis * Intubate patient with Ketamine and Roc/Succ * Recognize potential difficult airway due to facial smash * Disposition – to CT scan * Neurosurgery and Orthopedic referral   **Consequences of ineffective management**   * Severe Hypotension * PEA arrest * Death | 1. **Patient Reassessment**   **Airway**   * No longer maintaining airway * Needs Intubation * Unstable Maxilla / facial smash   **Breathing**   * Needs to be intubated   **Circulation**   * Tachycardia and hypotension worsen in severity. |

**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:**

**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**

LABORATORY \*LIVE\* Lab Summary Report

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| --- | --- | --- | --- |
| **Test** | **DATE/TIME here** | **Flag** (H or L) | **Reference** |
| **CBC** | | | |
| WBC |  |  | 3.5 – 10.8 10^9/L |
| RBC |  |  | 4.3 – 5.7 10^12/L |
| Hgb | 94 | **L** | 130 – 170 g/L |
| HCT |  |  | 0.37 – 0.47 L/L |
| Platelets |  |  | 150 – 400 10^9/L |
| D-Dimer |  |  | <250 mcg/L |
| **Chemistry** | | | |
| Na |  |  | 137 – 145 mmol/L |
| K |  |  | 3.5 – 5.0 mmol/L |
| Cl |  |  | 98 – 107 mmol/L |
| HCO3 |  |  | 22-26 mmol/L |
| Urea |  |  | 2.5 – 6.1 mmol/L |
| Creat |  |  | 62 – 106 umol/L |
| GFR Est |  |  | > 60 ml/min |
| Glucose - Random |  |  | 3.0 – 11.0 mmol/L |
| Lactate |  |  | 0.9 – 1.8 mmol/L |
| CK |  |  | 5 – 130 U/L |
| Troponin |  |  | <0.03 mcg/L |
| **Coags** |  |  |  |
| INR |  |  | 0.9 – 1.2 |
| PTT |  |  | 28 – 38 s |
| **ABGs** | | | |
| **Arterial** | | | |
| pH | 7.27 | **L** | 7.35- 7.45 |
| pCO2 | 60 | **H** | 35 – 45 mmHg |
| PO2 | 80 |  | 80-100 mmHg |
| BE | 10 | **H** | -2.0 to +2.0 mmol/L |
| HCO3 | 14 | **L** | 22 – 26 mmol/L |
| O2 Sat |  |  | 95 – 100% |

**EKGs**

