

Scenario 1: Challenging airway management		
<b>Scenario:</b> Airway management in patient with neck and facial trauma	<b>Patient:</b> Jimmy Chu 50 year old man	<b>Simulator</b> SIMMAN Essentials
<b>Case Summary:</b> Jimmy Chu is the owner of a shoe shop who was attacked this morning by a group of thugs. They hit him over the head and neck with a hockey stick and started a fire in the shop before leaving. Jimmy was in the shop for approximately 10 minutes before the firemen and CDA arrived. He was in the thick of smoke and fire. Jimmy has no medical problems or allergies.  On arrival to the ED, Jimmy has a hoarse voice with carbonaceous soot on the face and singed nose hairs.  Jimmy has a threatened airway and will require emergent intubation of a potentially difficult intubation.  Consideration given to the other injuries and maintenance of manual C-spine protection is important in this scenario.		<b>Participant Briefing:</b> BAT call 50 year old man assaulted and burns from shop fire GCS 15 BP 140/70 HR 90 RR 22 Sats 98% ETA 1 minute  <u>Ambulance Handover</u> I – 50 year old man, owner of a shop M – Alleged assault with a hockey stick to the side of the neck and head, then shop was set fire to. I – Tender left side of the neck, some minor bruising to the left side of the head, burns to face and upper torso, coughing lots and a hoarse voice. S –HR 90, BP 140/70, sats 98% on O2, BSL 5.0, GCS 15 T – Cannula. 10mg maxalon. 5mg morphine. A – No known allergies M – nil medication B – no known medical problems O – Shop fire, lots of smoke and fire was near the patient, found on ground floor. Nil other patients at this stage.

This project was possible due to funding made available by Health Workforce Australia

Clinical Issues	Human factors / Non technical issues
Preparation and planning in trauma Management of the threatened airway – burns and soft tissue trauma Management of burns – skin and inhalation	Teamwork and leadership Forensic issue Communication with other services
<b>Learning Objectives:</b> Preparation and planning to receive trauma To recognise potential airway compromise in burns To co-ordinate team to manage potentially difficult airway To recognise need for senior specialist help early	
<b>Faculty Actors:</b> Faculty nurse will be capable and helpful, Jimmy the patient will be co-operative, he will have a hoarse voice and demonstrate stridor if a C-spine collar is applied	
<b>Patient Moulage:</b> Black soot over face - especially nose and mouth, manikin starts covered in sheet with handover on the abdomen	
<b>Equipment &amp; Props:</b> EdWISE Airway box and extras Black moulage of soot Laminated ambulance handover sheet	

<b>Monitor:</b> ED setup ECG SPO2 CO2 ready NIBP	<b>Investigations:</b> ABG – pH 7.30, PO2 80, PCO2 30, BE -4, HCO3 23 CO 0.2	
Patient presentation	Expected response by participants	Faculty /Actors Notes
<b>BAT Call</b> 50 year old man assaulted and burns from shop fire GCS 15 BP 140/70 HR 90 RR 22 Sats 98% ETA 1 minute	Preparation and planning of team and equipment	Prompts team to prepare, finds items as asked  Should have only the minute per the BAT call  At one minute mark pull back the sheet to reveal the ambulance handover
<b>Initial Presentation</b> Rhythm sinus HR 90 BP 140/70 RR 22 SPO2 98% Temp 36 Conscious level GCS 15	Structured approach to trauma – AcBCDE  Recognition of threat to airway and potential difficulty  Recognition of trauma and potential C-spine threat.	Nurse – helpful, points out threat to airway if team not recognise (can be through graded assertiveness)  Jimmy Chu – answers questions with hoarse voice, states throat hurts and coughs lots. Increasing difficulty and evidence of stridor if team not acting on these actions. Comments again of being struck on neck and head.

<b>Deterioration</b> Increasing stridor and shortness of breath HR 100 BP 150/70 Sats 93% RR 26	Team should prepare for difficult MILS intubation  Successfully intubates the patient with RSI. Confirms ETT placement and secures tube.	
<b>Recovery</b> Post intubation HR 90 BP 140/60 Sats 94% (on 100%) RR as per team	Ongoing care post intubation	Prompt for post intubation care including consideration of disposition
<b>Debrief Guide</b>		
<b>Key clinical issues</b>  Recognition of potential airway compromise due to 2 factors trauma and airway burns Planning for intubation Possible C-spine injury requiring immobilisation CO poisoning and vascular injury requiring attention once airway secured Forensic case for police	<b>Key non technical issues</b> Communication in a team Forensic issue, evidence required for police	

### Ambulance Handover

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