Motorcyclist vs Tree

PRU Sim 3

Information for facilitators

This teaching session is designed to be delivered by the roadside to a small group. It generally runs for 20 minutes followed by a debrief of approximately 20-25 minutes (**40-45 mins total**).

Aim

The aim for this session is for learners to gain familiarity with the management of massive maxillofacial injury and inevitable surgical airway management.

What you will need

There are **THREE** components to this session:

Page 2 contains background information that can be read to the group and an expected sim progression.

Page 3 contains details of the scenario with expected progression for the sim technician.

Page 4 contains the checklist for facilitators to fill out during the scenario and a list of equipment required.

Motorcyclist vs Tree

Introduction

> *"You are responding to a Category 1 call of a motorcyclist who has hit a tree.*
>
> *He is bleeding heavily from his face. A crew is just about to arrive on scene.*
>
> *The job is located on a country road on the outskirts of the city."*

Expected Progression

- ☑ Initial responder on scene is unable to maintain an airway and ventilate the patient.
- ☑ There is copious amount of bleeding from the face.
- ☑ The team are unable to BVM ventilate and an igel will also fail due to massive facial disruption.
- ☑ Intubation is not possible due to disrupted anatomy.
- ☑ A surgical cricothyroidotomy will need to be performed.
- ☑ Once the airway is protected the maxillofacial injury will need splinting.
- ☑ The patient remains GCS 4 – E1 V1 M2.
- ☑ He will need optimising and transfer arranging to the MTC.

Motorcyclist vs Tree

PRU Sim 3

Case title	Motorcyclist vs Tree			Sim no.	PRU 3
Setting	Roadside	Patient age	31	Patient sex	M
Diagnosis	Polytrauma with severe chest and pelvic injuries			Curriculum code	
Injuries	• ICH and depressed skull fracture • Massive maxillofacial fractures and disruption with catastrophic haemorrhage • Laryngeal fracture				
Staff required	1 x PRU Paramedic, 1 x PRU Doctor, 2 x Ambulance staff				
Learning objectives	1. To gain familiarity with management of maxillofacial injury 2. How to splint maxillofacial fractures to control massive haemorrhage 3. How to manage the severely brain injured patient				

INITIAL SETUP

Observations				Arrival route	N/A
HR	129	GCS	E 1 V 1 M 2 = 4/15	Carers?	None
RR	40			**Visible external findings:** Grossly displaced facial structures with ongoing 'brisk' bleeding. Gasping and gurgling. Surgical emphysema around the neck structures. **Progression:** All plan A-C airway management will fail. Requires surgical airway. Needs rapid packaging and transfer to the nearest TU/MTC. Can consider HTS management.	
SpO2	68%	Pupils	6mm L 2mm R		
BP	100/78	Temp	35.7°C		
CRT	3	Weight	80 kg		
Glucose	7.2				
Equipment on arrival	Standard response bags	Additional info	Adult mannequin. Surgical airway trainer.		

Motorcyclist vs Tree

PRU Sim 3

DOMAIN	TASK	TIME	DONE
Preparation	Role allocations		
	Disposition discussions		
Initial Actions	Scene safety		
	Information gathering		
	Introductions to individuals on scene		
	Early update to control		
Assessment	Identification of catastrophic haemorrhage		
	A-E assessment		
	Rapid escalation of airway management		
	Immobilisation considered		
	Monitoring applied		
Interventions	Surgical airway		
	Maxillofacial splinting		
	IV access		
	Pelvic binder		
	Tranexamic Acid (TXA)		
	HTS		
	Scoop		
	Blankets		
Decision-Making	Consider HEMS resource (not available)		
	Hospital destination		
	Major blood loss protocol activation		