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SHSS6067

Sports Trauma Management Initial Assessment and Management

*Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives*



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Previously...

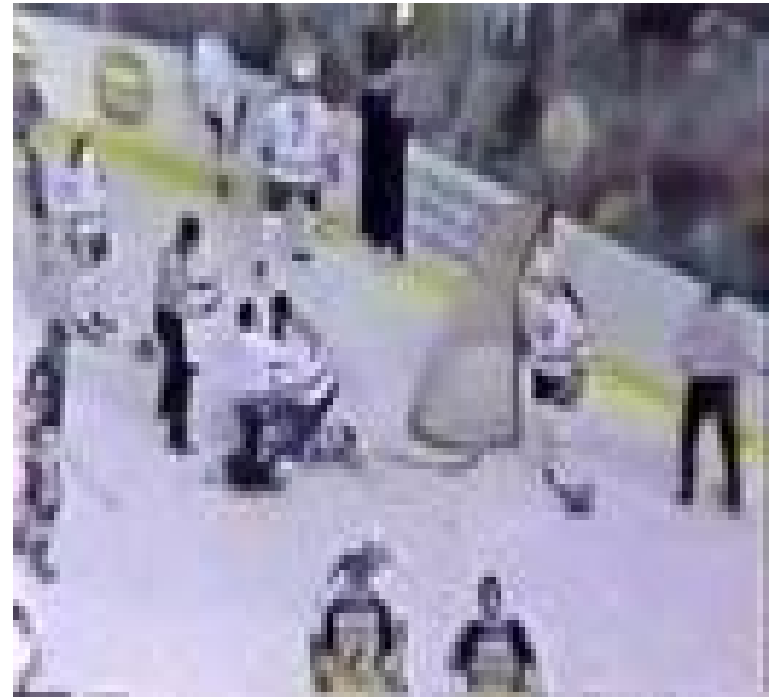
- Algorithms
- SAFE Approach
- Primary Survey (with Resuscitation as required)
- Secondary Survey
- Definitive Care (onward referral)

The Primary Survey

1. Catastrophic haemorrhage control
2. Airway maintenance with C- spine protection
3. Breathing with adequate ventilation
4. Circulation with haemorrhage control
5. Disability: neurological status
6. Exposure and Environment control & Everything Else

Catastrophic haemorrhage control

- A catastrophic haemorrhage would be obvious on the approach to the injured player
- Any obvious catastrophic bleed should be dealt with:-
 - Application of compression with a dressing directly over the wound
 - Use of a tourniquet ?



Airway Maintenance with C-Spine Protection

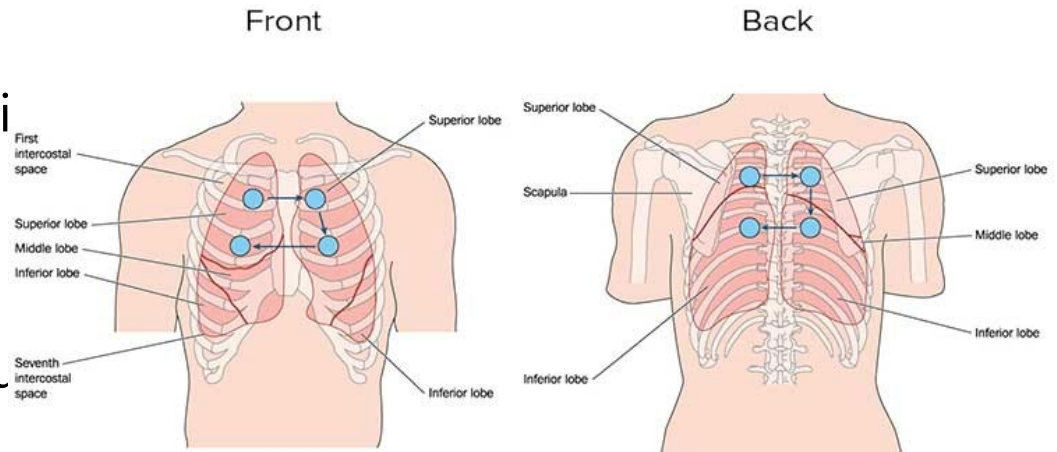
- If you suspect a spinal injury you must protect the C-spine using Manual In-line Immobilisation at the initial approach
- Then we can assess the airway
 - Are they talking in full sentences?
 - If so, they have a patent airway!
 - Listen to the quality of the voice
 - It can indicate airway status and let you know about any potential airway problems
- Important to identify airway issues early
 - Hypoxia & Hypercarbia are progressive, they may not be apparent initially but can be life threatening so its important to keep checking the primary survey !



Breathing with Adequate Ventilation

Is the player breathing?

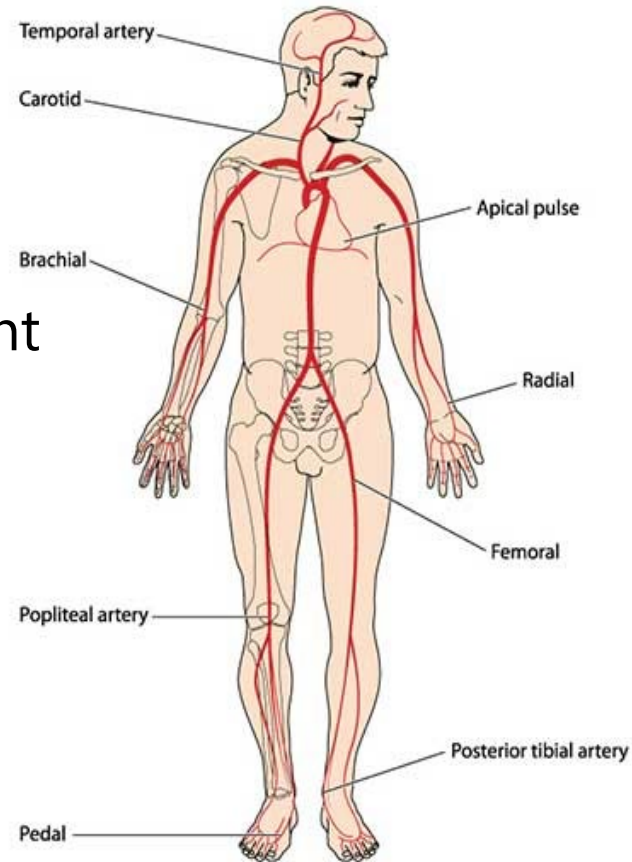
- If so, what is the rate of their breathing?
- Does the chest wall expand evenly (right to left side?)
- Palpate for soreness, crepitation or tenderness
- Unlikely for this to be an immediate life threatening injury so we will need to monitor breathing for deterioration
- More detailed assessment will happen off field in the medical room



Circulation with Haemorrhage Control

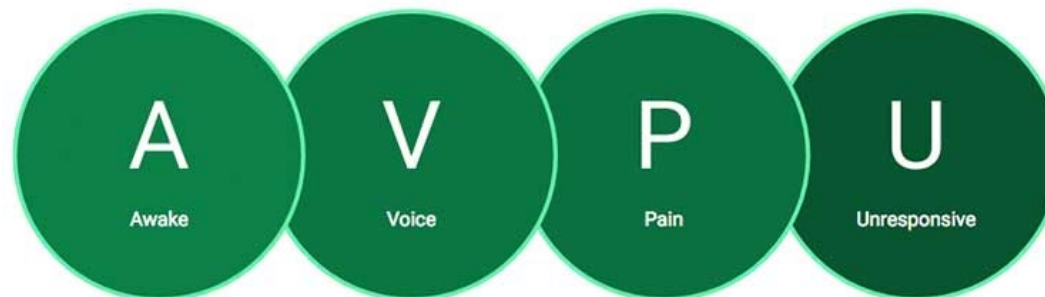
We need to check:

- Pulse – presence of the Radial Pulse is a key on-field assessment method
- Pulse – rate and volume
- Colour of the player – noting pallor
- Mental status – conscious level and agitation
- Evidence of external bleeding
- Evidence of internal bleeding



Disability including Neurological Status

- On field assessment uses
 - A for Alert (orientated in Time, Place & Person)
 - V for VOICE Response (e.g. only has their eyes opens when you talk to them)
 - P for Pain Response to Stimulus (e.g. only has their eyes open when they are in pain)
 - U for Unresponsive (Does not open their eyes to voice or painful stimulus)
- Pupillary Response
- C-spine clearance
- Glasgow Coma Scale (in medical room)



Exposure and Environment Control & Everything Else

- This element of the primary survey will consider other medical emergencies such as
 - Hypothermia
 - Heat illness
- Top to survey including
 - Fractures
 - Dislocations
 - IF time allows, do not delay transfer to the emergency department
- This is often done rapidly prior to extrication to the medical room or ambulance

Re-Evaluation

- Continuous monitoring of vital signs and neurological status
- Identifying deterioration
- Identifying other less obvious or acute life threatening or potentially life or limb threatening injuries may become more apparent

Re-Evaluation should occur after:

- Intervention
- Deterioration
- Cause for concern
- Uncertainty

The Secondary Survey

Only proceed to this if:

- Primary Survey with appropriate
- Resuscitation has been completed
- ABCDE have been Reassessed
- Vital Signs are Normalising

The Secondary Survey

- Full history of the incident
- Players PMHx
- Systematic head to toe examination of the patient designed to detect all of the players injuries
 - Pain
 - Deformity
 - Haematomas
 - Evidence of blood loss
 - Vascular compromise
 - Neurological compromise

SAMPLE forms

S – Signs and Symptoms
A – Allergies
M – Medications
P – Past Medical History
L – Last Meal or Drink
E – Event and Environment of the injury or illness

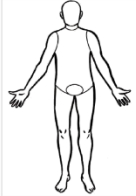
SOAP NOTE

Name	Age	Emergency Contact	Contact Number
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Subjective Assessment

Signs and Symptoms In the case of pain, ask about: • Onset • Region or Radiate • Provoke • Severity • Quality • Time
Allergies
Medications
Past Medical History
Last Meal
Events Leading up to the Emergency

Objective Assessment

Time Time of Each Assessment				
Indicate Level of Consciousness Alert, Verbal, Painful, Unresponsive				
Describe Breathing				
Describe Circulation Colour, Temperature				
Describe Skin Sensation, Moisture				
Describe findings of Head-to-Toe Check				

Assessment Summary

Summarise the situation and the issues that may arise as a result of the initial problem.

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Plan



Plan for each problem on the problem list; this should include care and transportation. How often do you plan to monitor the ill or injured person?

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Definitive Care

- Completion of Primary and Secondary survey
- Monitoring and re-evaluation
- Documentation (SAMPLE)
- Transfer to Emergency Department

Definitive Care

- When completing a face to face hand over to paramedics use the pneumonic ATMIST
 - A** for **A**ge and sex of athlete
 - T** for **T**ime of injury (and Estimated Time of Arrival)
 - M** for **M**echanism of Injury
 - I** for **I**njuries present and suspected
 - S** for **S**igns including Physiological Parameters
 - T** for **T**reatment given and needed

A	Age, name and date of birth of patient	Age:			
		Name:			
		Date of Birth:			
T	Time of incident or onset of symptoms				
M	Mechanism of injury or medical complaint				
I	Injuries/exam findings				
S	Signs	GCS:	AVPU:	Resps:	
		BM:		Heart Rate:	
		B/P:		O2 Sats:	
		Temp:		ECG Attached (please tick):	Yes
		NEWS Score:			No
T	Treatment given	Drugs given:			
		Amount:			
		Time Given:			
Clinician		Name:		Date:	
		Surgery:			
		Tel Number:			

Summary

1. Catastrophic haemorrhage control
2. Airway maintenance with C-Spine protection
3. Breathing with adequate ventilation
4. Circulation with haemorrhage control
5. Disability: neurological status
6. Exposure and Environment control & Everything Else

- **SAMPLE**
- **ATMIST**

Resources

- Faculty of Pre Hospital Care, Manual of Core Material (Royal College of Surgeons of Edinburgh)
- Advanced Life Support Manual (Resuscitation Council UK)
- Essential of Immediate Medical Care (C. John Eaton) (ISBN 0-443-05345-6)
- Handbook of Immediate Medical Care (Greaves et al) (ISBN 0-7020-1881-3)
- Practical Pre-hospital Care (Greaves et al) (ISBN 978-0-443-10360-5)
- Pre-Hospital Care (Cooke) (ISBN 0-443-05987-X)
- Pre-hospital Trauma Life Support Manual (ISBN 0-8151-6333-9)
- Pre Hospital Medicine (Greaves & Porter) (ISBN 0-340-67656-6)
- <http://www.resus.org.uk/>
- <http://www.rcsed.ac.uk/>
- <http://www.basics.org.uk/>