cpdsolutions

transferring knowledge through excellence in training

Preparation, Acute Pitchside and Post-Match Injury Management on Match Day Mini Series

Session 2 - Acute Pitchside Injury Management

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Qualified to cover Pitch side?

ATTMiF (Level 5)

- Advanced Trauma Medical Management in Football
- Doctors and Physiotherapists
- Accredited with the Faculty of Pre Hospital Care, Royal College of Surgeons (Edinburgh)
- Practical>Theory
- Team Leader

ITTMiF (Level 4)

- Intermediate Trauma Medical Management in Football
- Medical and Allied medical health care professionals
- Practical>Theory
- Part of the medical team

Touchline Checklist

- Referee/ 4th Official
- Check radio link with doctor/video analysis team
- Put on PPE
- Water bottle in bag
- Final check of bag

UNRESPONSIVE PLAYER

- *Check for dangers to yourself before attending to the player*
- Danger
- Response
- Airway
- C spine
- Breathing
- Circulation
- Dysfunction
- Exposure

DANGER

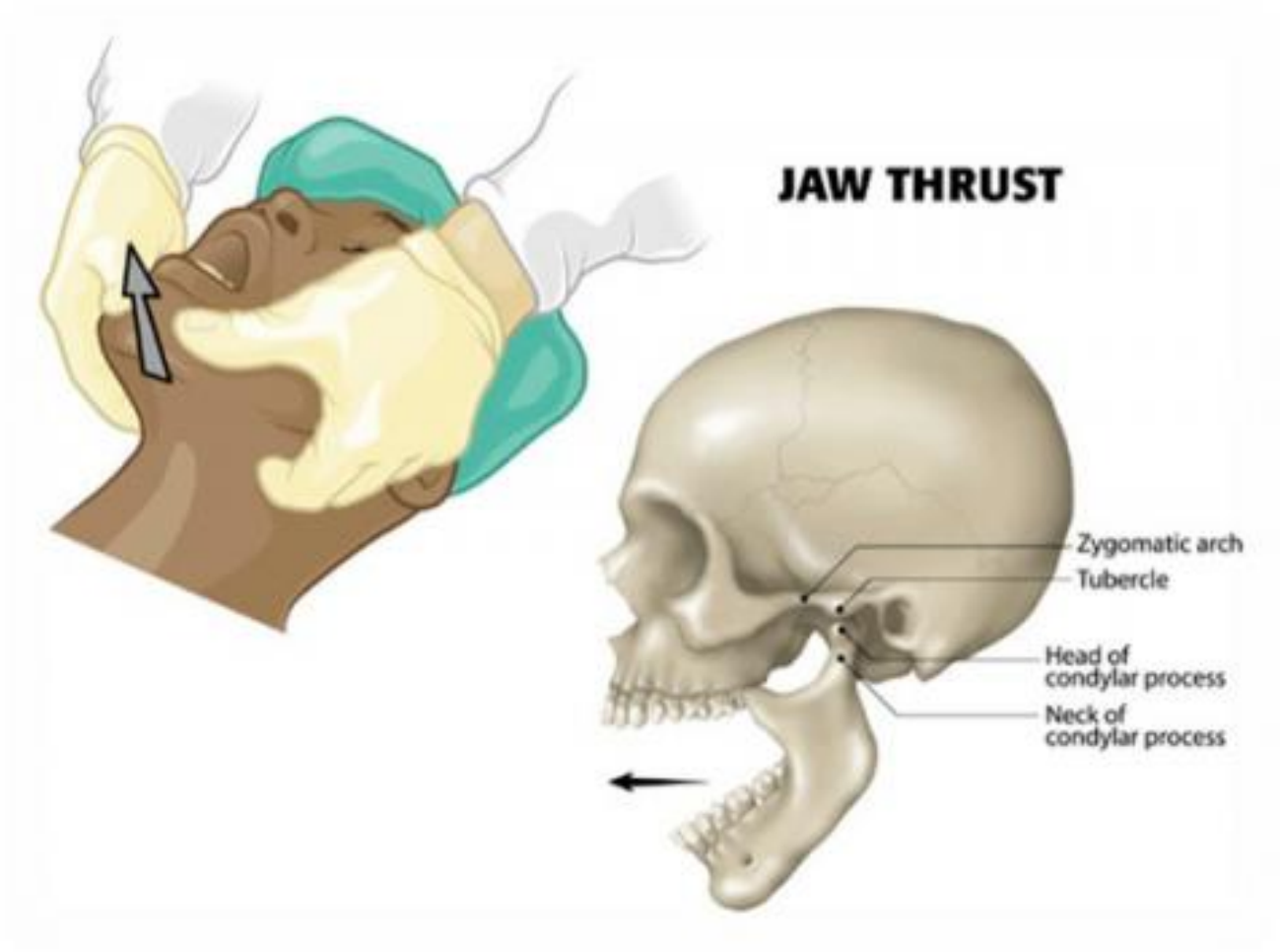
‘If you are incapacitated you are of no help in the injury situation’

Response

- Approach from the head
- Control C spine with manual in-line stabilisation (MILS)
- Note player response to your voice
- NO response apply painful stimuli by pinching ear.
- NO RESPONSE assess….

Airway

- **LOOK inside players mouth for possible blockage**
- Remove any external objects with forceps
- **STILL BLOCKED?**
- Remove excess secretions with suction
- **STILL BLOCKED?**
- Apply jaw thrust to open airway in unconscious player



C spine

Protected with MILS

Call For Help

- Defibrillator (AED)
- Oxygen
- Entonox

Breathing

Next 10 seconds

LOOK

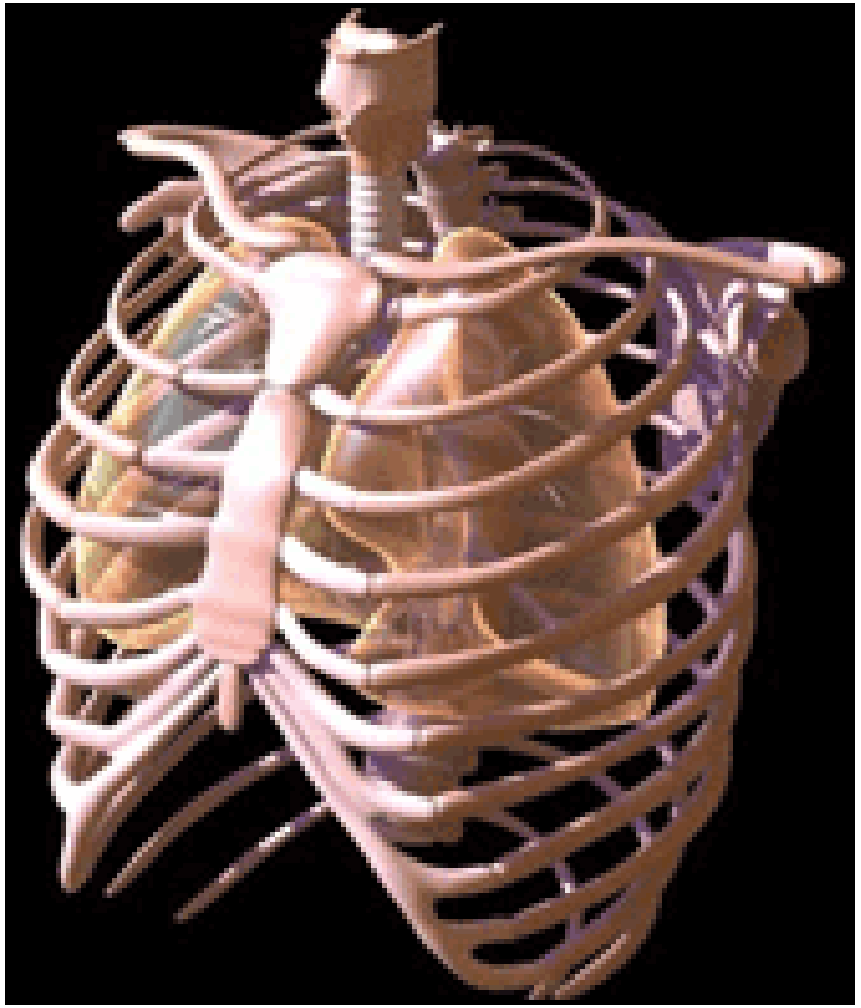
- Is the chest rising, equally/bilaterally
- Trachea position
- Neck veins
- Chest Wounds

LISTEN

- Absent or additional breathing sounds

FEEL

- Chest rising, equally/bilaterally
- Crackling (Surgical Emphysema)
- **BEWARE OF AGONAL BREATHING**



MAGIC NUMBERS

12 BREATHS PER MINUTE AT REST (RESPIRATION RATE)

APPLY 100% OXYGEN at 15 LITRES PER MINUTE

CHEST RISE 2-3X PER 10 SECONDS

BREATHING OR NOT?

NORMAL

CONTINUE
WITH
ASSESSMENT

<u>ABSENT</u>

BEGIN
CARDIO
PULMONARY
RESUSCITATION
(CPR)
Slide 33

Circulation

- Carotid Pulse
- **RADIAL PULSE**
- Capillary refill
- Internal Bleeding

I. Chest
II. Abdomen
III. Retroperitoneal
IV. Pelvis
V. Long Bones

MAGIC NUMBERS

RADIAL PULSE
90mmHg

CAROTID PULSE
70mmHg

Capillary refill test-press for 5 seconds and supply returns in 2 seconds

APPLY 100% OXYGEN at 15 LITRES PER MINUTE

Pulse *10* beats+ per *10* seconds (NON-EXERCISING)

CAROTID OR RADIAL PULSE?

ABSENT

SEVERE TRAUMA

START CPR

Slide 33

PRESENT

Continue Assessment

Dysfunction

- **AVPU score**

- **Pupil response to light**

I. **Dilated**

II. **Symmetrical response**

A	ALERT
V	Respond to VERBAL stimuli
P	Respond to PAINFUL stimuli
U	UNRESPONSIVE

Exposure

- Expose injury site to assist examination
- Check for distal pulses
- Players relevant medical history
- Manage non life threatening injuries

AFTER

EVERY

INTERVENTION

REMEMBER

TO

REASSESS

A-E

HAS ANYTHING CHANGED?

Secondary Survey

Head

Neck

Shoulders

Chest

Abdomen

Spine

Pelvis

Genital/Rectal

Legs

Arms

Basic Life Support (BLS)

CPR

<u>Chest Compression</u>

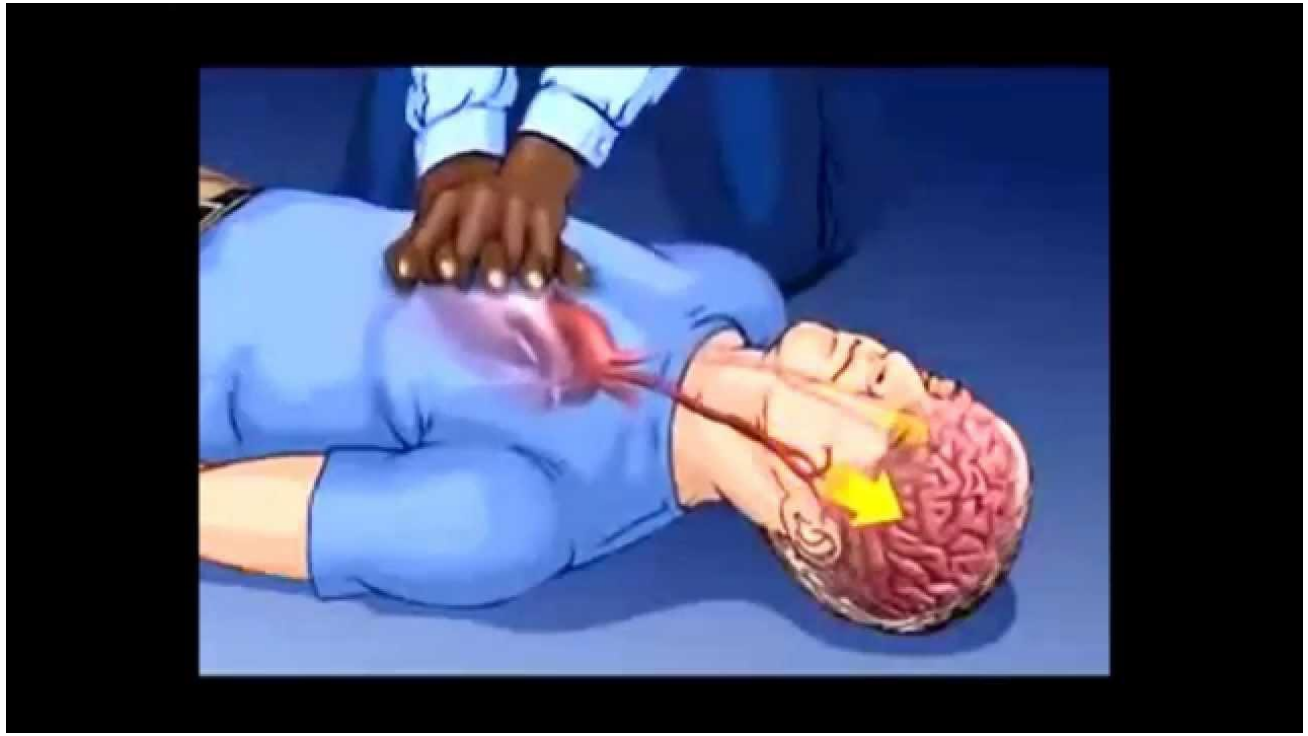
Apply from head end or side

Place interlocked hands in centre of chest

Press down in rhythmic manner

Allow recoil

Maintain contact



MAGIC NUMBERS

Depth of compression 5-6cm

Dial 999 if not already done so

Give 30 chest compressions with 2 ventilations

Rate of 100-120 compressions per minute

Basic Life Support (BLS) Cardio Pulmonary Resuscitation (CPR)

<u>Ventilations</u>

Maintain open airway (Jaw Thrust or Head Tilt/Chin Lift *illustrated)*

Apply pocket mask (80% O2) oxygen attached

Insert oral or nasal airway if necessary (Slide 36)

Blow carefully into the one way valve of the mask and watch for chest rise

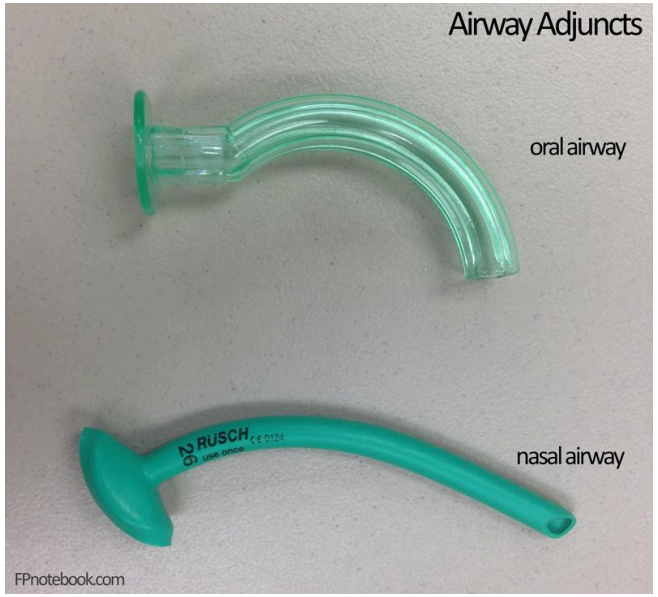
2 person CPR allows workload to be shared

Child 5 rescue breaths followed by 15:2

AIRWAY ADJUNCTS

Oropharyngeal

- Size 00 (baby) – 5 (large adult)
- Sized – incisors to angle of the jaw
- Insert upside down and rotate when half way in



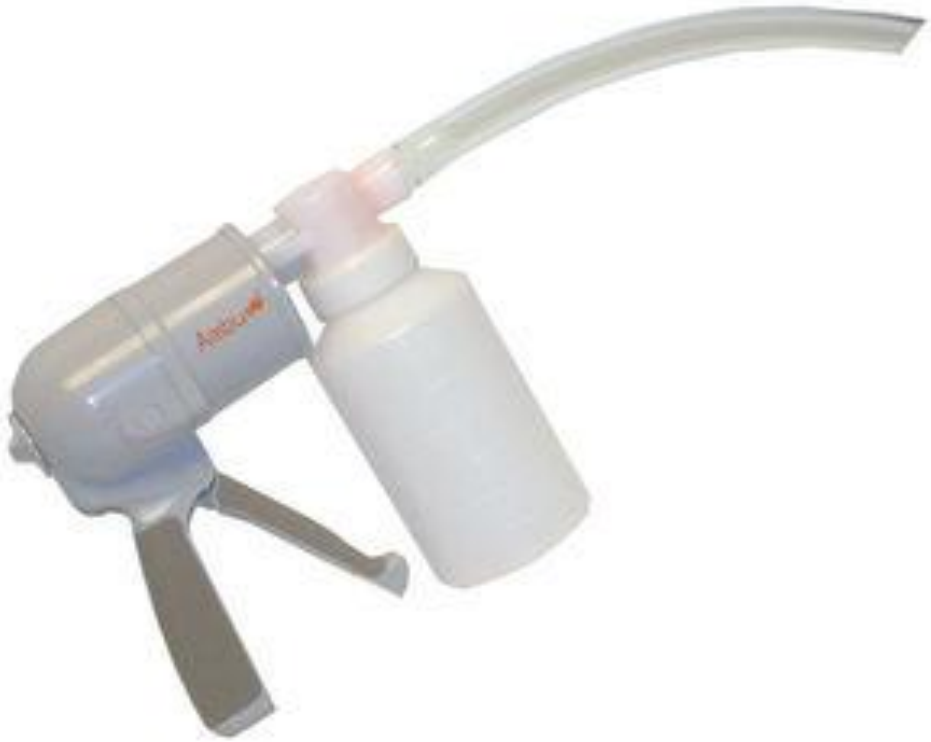
Nasopharyngeal

- 6-7mm (female) 7-8mm (male)
- R nostril first
- Avoid in:-

I. Players with nasal injuries
II. Base of skull fractures
III. Nasal polyps
IV. Children under 12
V. Hypothermia

SUCTION

- Suction of fluids from OP or NP cavities
- Blood/Sputum/Vomit
- Suction in the mouth only as far as you can see and on the way out
- 5-10 second duration

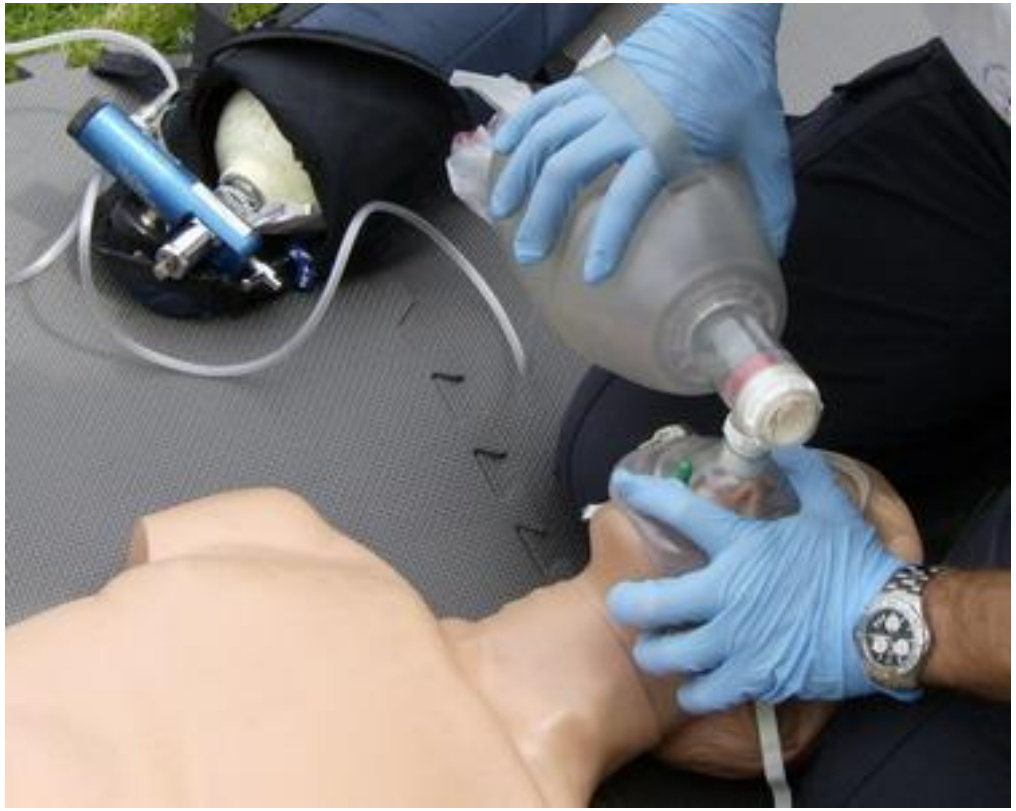


NOT BREATHING BUT HAS A PULSE

Ventilate as previous slide and check for pulse every 10 seconds

Use ambu bag/bag valve mask (BVM) if available (97%O_2)

Oxygen attached



Automated External Defibrillator

Apply immediately

Listen and follow commands

Maintain chest compressions until instructed

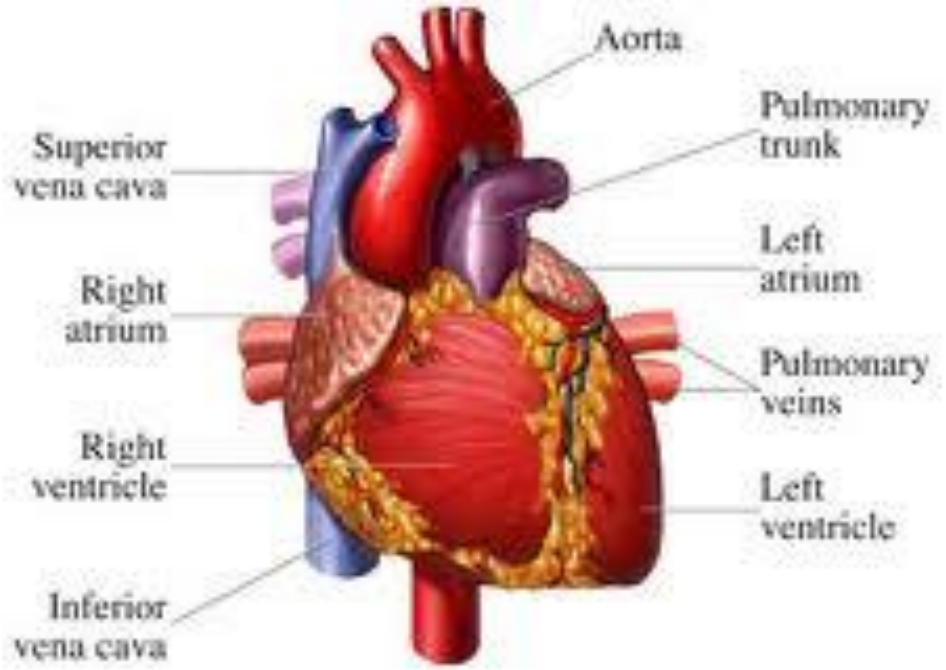
Recommence chest compressions immediately after analysis (2 mins) and shock advised

Rotate workload according to number of competent helpers

How does it work?

A third of patients with pre hospital cardiac arrest present with ventricular Fibrillation (VF) or Ventricular Tachycardia (VT)

The AED aims to normalise the cardiac cells abnormal activity and allow the heart to re-establish an effective rhythm



Reversible causes of Cardiac Arrest

H x 4	**T x 4**
Hypothermia	Toxins
Hypovolaemia	Tension Pneumothorax
Hypo/Hyperkalaemia	Thrombus
Hypoxia	Tamponade (Cardiac)

Head and Neck Injuries in Sport

A

CERVICAL

SPINE

INJURY SHOULD

BE

ASSUMED

IN

ALL

INJURIES

ABOVE

THE CLAVICLE

CONSCIOUS	UNCONSCIOUS
• Maintain MILS and do not move until manual help arrives	• Maintain MILS and do not move until manual help arrives
• Apply ABCDE procedure at all stages	• Apply ABCDE procedure at all stages. Clear airway management takes priority
• Adjust MILS according to the position the player has landed in	• Adjust MILS according to the position the player has landed in

Log Roll

- Team work and practice essential
- Manoeuvre of choice with suspected spinal
- Ideally 4 person technique
- Person applying MILS controls procedure
- Rolled onto a spinal/long board or attached to scoop stretcher
- Application of semi rigid collar

Stiff neck extrication cervical collar

- Adjustable collar
- Sized by the distance from trapezius muscle to the point of the chin using finger measurements
- Applied in player supine
- Be aware of interference with airway management, raised intercranial pressure and pain
- Triple immobilisation

ONLY

WITH

TRIPLE IMMOBILISATION IN PLACE

CAN MANUAL

C-SPINE

CONTROL

BE RELEASED

REMOVAL FROM FIELD OF PLAY

- 6-8 persons required ideally
- 2-3 either side
- 1 at the head to talk to player
- 1 to guide the stretcher off the pitch
- Feet first

Recognise a Concussion

VISIBLE

- Dazed or vacant look
- None or slow response in rising
- Unbalanced
- Confused
- Seizure
- Emotional
- Irritable

SYMPTOMS

- Headache
- Dizziness
- Reduced mental response
- Visual Disturbance
- Nausea and/or vomiting
- Drowsiness and/or fatigue
- Sensitive to light or noise
- Feeling of ‘pressure in head’

Suspected Concussion MUST be IMMEDIATELY REMOVED FROM THE PITCH……and NOT RETURNED to activity that day

Fractures and Dislocations in Sport

Fracture **Management**

- MILS and ABCDE
- Oxygen if necessary
- Entonox for pain relief if no head or chest fractures
- Open/closed
- Player response
- Re assure
- Check distal pulses/nerve impairment
- Realign if compromised
- Recheck distal pulses/nerve impairment
- Splint

- Chest #

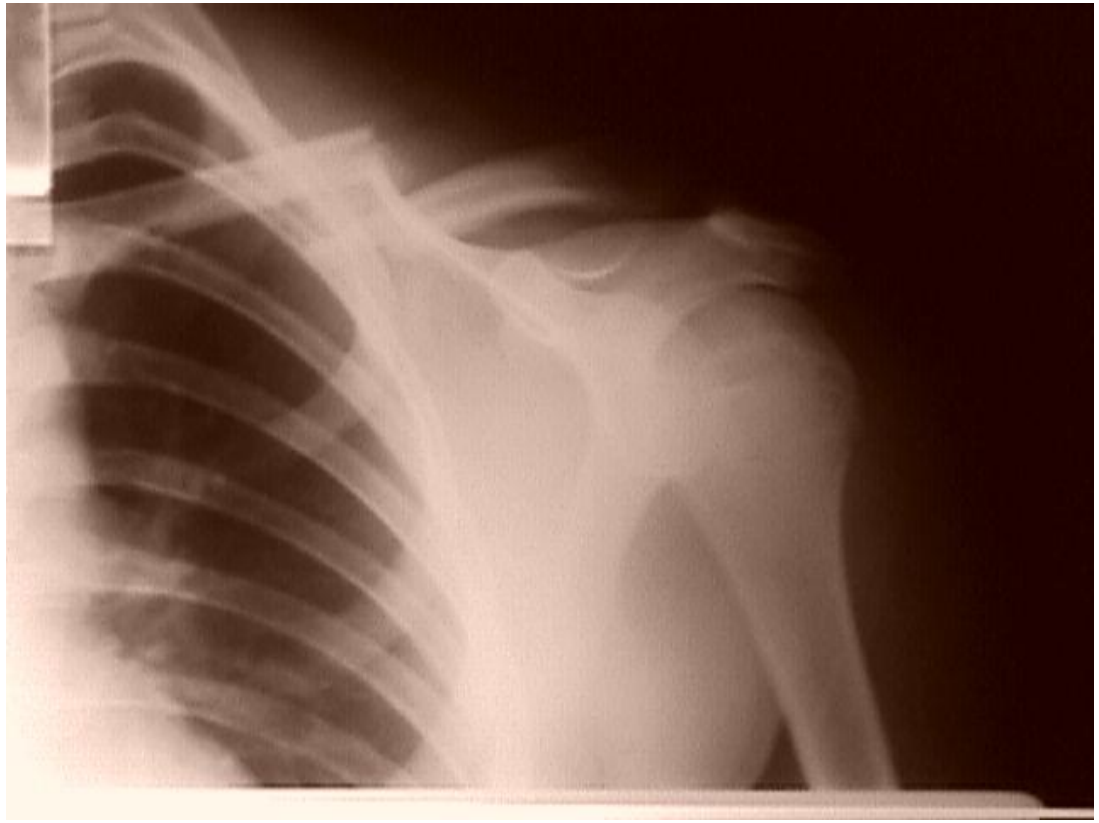
I. ABCDE as can lead to hypoxia
II. Open/closed
III. Associated Shoulder girdle

- Rib #

I. ABCDE/haemoptysis/cyanosis/pain
II. ↑ respiration rate/asymmetry
III. May need hospitalisation urgently
IV. Pain relief

- Skull #

I. Urgent hospitalisation
II. ? C spine/concussion
III. Watch for CSF from ear/nose



Dislocations

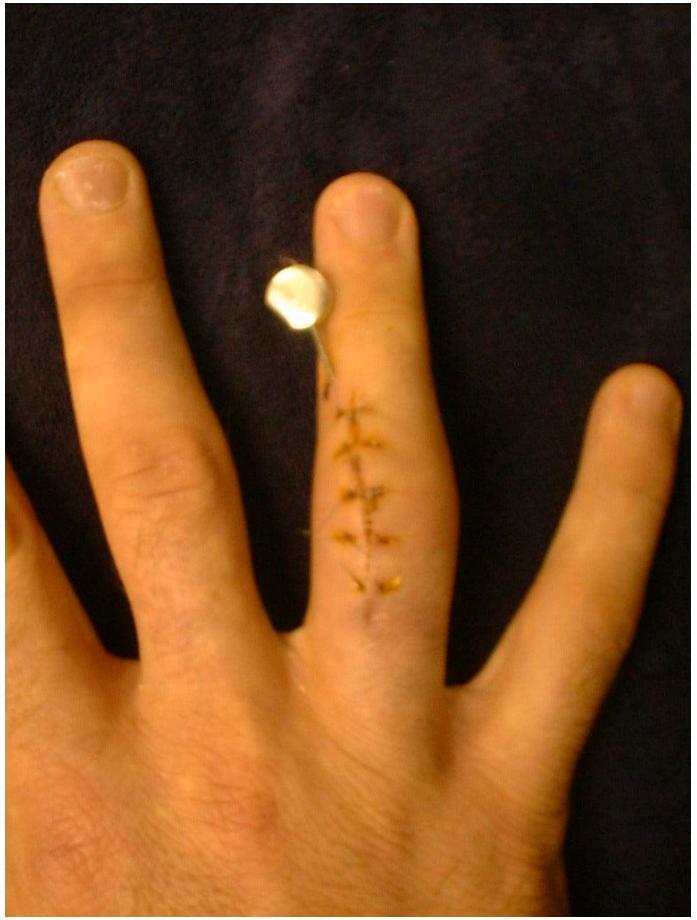
- Common sites:-

I. Shoulder

II. Patella

III. PIP/DIP joint of fingers

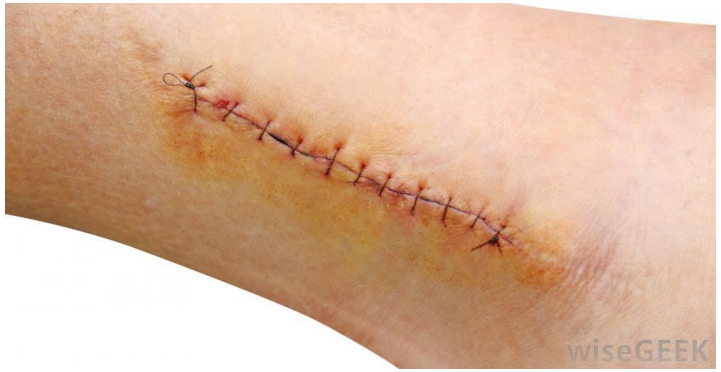
- Realign to prevent ischaemia
- Presume # until proven otherwise
- Major joints only reduce if XS pain and easy to perform
- Minor NWB joints, maybe realigned on the touchline but need further examination post match



Wounds in Sport

Irrigation

Doctor’s dilemma

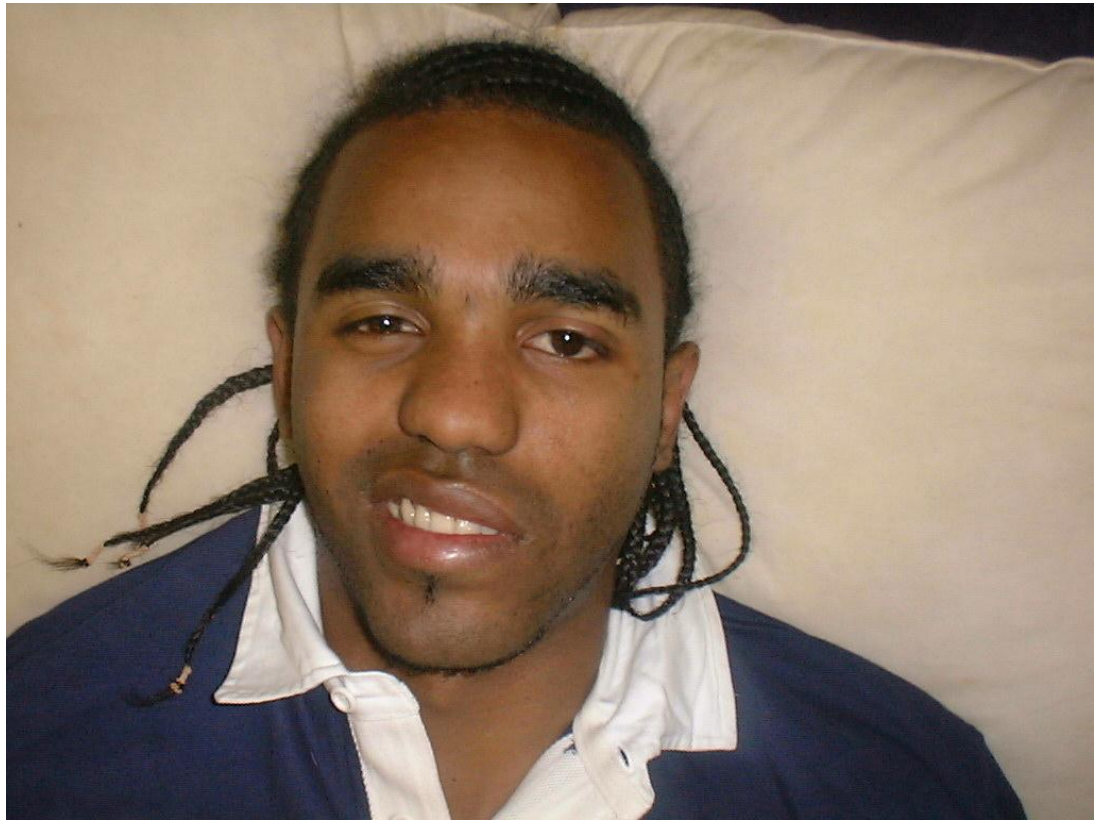


- Stitch
- Staple
- Glue
- Touchline/Dressing Room
- Time constraint

Soft Tissue Injuries in Sport

Any other Business

- Anaphylaxis
- Asthma
- Diabetes
- Hypothermia
- Bells Palsy!



Best result for medical team!!

- No injuries
- No re-occurrence of previous injuries
- …. And 3 points!!