

Acute sports injuries-what are the real emergencies?

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General Orthopaedic Surgeon
Upper Limb, Hand & Sports Injuries (knees)

Profile

Gavin Anthony Nimon

University of Adelaide- intern 1990

Advanced Trainee –Orthopaedics 1998

Senior Registrar Year 1999 QEH

Senior Registrar/ Consultant PMR Edinburgh

Consultant DGRI 2000-2005

Senior Visiting Medical Specialist- QEH & LMHS -2005



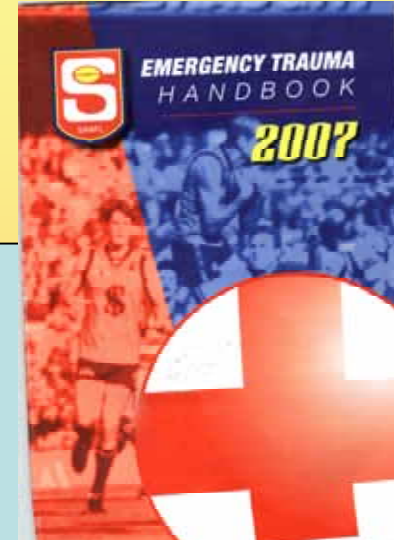
Sports Medical Practitioner – (The Doc)

- Commitment
- Knowledge & Training
- Shift in ideation- (common ground)
- Hobby- High risk, low rewards



Emergencies

- Can occur from
 - Trauma to previously healthy
 - Aggravation of pre-existing problem
 - Sudden onset of medical condition
- Need knowledge of both medical & surgical conditions
- Need appropriate equipment
 - Medical bag / resus/ defib
 - Airway / spinal board/ collars
- Respect universal precautions



Collapsed Patient

Trauma

- Head Injury
- Spinal Injury
- Thoracic:-
 - Flail Chest
 - Haemothorax
 - Pneumothorax
 - Cardiac
- Abdominal Injury
 - Visci
- Multiple fractures
 - Pelvic
- Blood Loss

No Trauma

- Cardiac
 - Coronary vessels
 - Arrhythmia
 - Hypertrophic CM
- Hyperthermia
- CVA
- Hypoglycaemia
- Hyponatremia
- Respiratory
 - Asthma
- Anaphylaxis
- Drugs
- Vasovagal

Management of Collapse (ATLS / EMST Principles)

- Airway / Spine
- Breathing (Chest- symmetry and sounds)
 - (tracheal deviation ? Pneumthorax -)
- Circulation- BP + Pulse
- Neurological screen



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Severe Head Injury

- Always ABC 1st
- If semi or conscious assess before transfer
- Unconscious- extricate MO lead
 - If regains conscious- doesn't return to field
- Check for haematomas, aural canal & CSF (nose)
- Assess pupils & baseline GCS (nurse 30 degs)

Eye Opening

- 4 spontaneous
- 3 To Speech
- 2 To Pain
- 1 No response

Verbal Response

- 5 Alert & Orientated
- 4 Disoriented Conversation
- 3 Speaking but non-sensible
- 2 Moans or unintelligible sounds
- 1 No response

Motor Response

- 6 Follows commands
- 5 Localises Pain
- 4 Movement or Withdrawal to pain
- 3 Decorticate Flexion
- 2 Decerebrate Extension
- 1 No response

Indications for Urgent Referral

- Prolonged loss of consciousness (5 mins)
- Increasing headache, nausea & Vommiting
- Unequal Pupils
- Gradual \uparrow in BP or \downarrow in pulse rate
- Convulsion
- Changing Neurological signs



Spinal Trauma

- Suspect it
 - ↓ sensation
 - Neck pain
 - Weakness/ paralysis
- Immobilise & Extricate
- Unless airway problem, leave helmet on



Laryngeal Injury

- Neck trauma can compromise airway
- Blunt trauma can cause:-
 - Hoarseness
 - Stridor
 - Drooling
- Requires Ambulance to hospital
- Stick sports can cause fractured larynx
 - Pain & hoarseness
 - Subcutaneous emphysema
 - Palpable fracture
- Cricothyrotomy may be required



Chest Injuries

- Pneumothorax- (+/- rib fractures)
 - SOB, Tracheal shift, ↓ breath sounds, ↑ resonance
 - Requires hospital
 - If deteriorates, has distended neck vessels, cyanosis or ↓ BP
 - ? Tension- 12-14 g needle 2nd ics, midclavicular line
- Haemothorax
- Open chest wounds
- Flail chest
- Cardiac contusion



Abdominal Injuries

- Direct Blow to lower ribs or abdomen
 - Remove from field and observe
 - BP / Pulse vital/ respiratory rate
 - IV & Fluids required - transfer
- Organs that can be injured include
- Spleen (LUQ pain/ shoulder pain)
 - Liver (RUQ pain)
 - Rectus Abdominis haematoma
 - Kidneys (flank tenderness, swelling)- urine sample

Acute and subacute injuries presenting to GP

- Patient's expectations very high
- Less forgiving of missed diagnosis
- Sports person less accepting of all
- X-ray first line investigation

AC Joint injuries

Grade 1-6

- Really “sprain” or “out”
- Most people do better with surgery
- Surgery best < 2 weeks
- 3-6 months off sport



Acute Shoulder dislocation

- Fall or tackle in contact sports
- Early reduction
- Little role for sling
 - If chronic, leave out ASAP
 - 1st time, arthroscopic assesment
 - X-ray required



Finger injuries

- Always x-ray (regular surprises)
- Assess rotation and motion
- Aware of central slip and pip joint injuries
- Phone call if unsure
- Rehab is a lot harder than expect



Use of Local

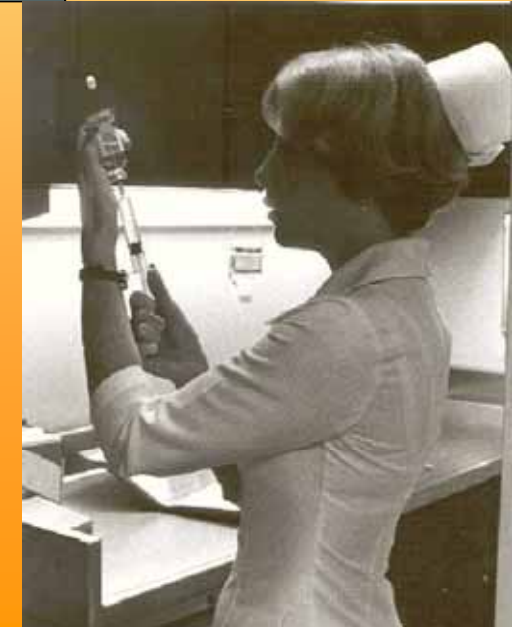
(*common place in sporting circles JW Orchard BJSM 2002*)

- Must not be detrimental
 - Avoid weight bearing joints
- Will it work
- Will it make a difference



Injuries commonly injected

Rib
Iliac crest
AC joint
Finger/ thumb
Ankle (syndesmosis)
Subacromial bursa



Need more than band aids



If not sure
Just like
“who wants to be a
millionaire”

Phone a friend

04379 18552

Gavin Nimon- GP advice
line

