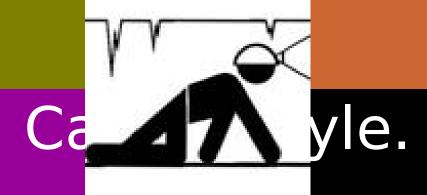
## Caving Style



CUCC Austria Lapo Gamme /06/14

### Scenario

 Dave, aged 22, no known medical problems (apart from being a bit special in the head).

 He was bringing up the rear on your trip and you all hear a massive thump at the bottom of the pitch you just came down, followed by silence.

• "FFS DAVE!!!!!"

## Initial Assessment

 Aim: Stabilise, identify immediately life-threatening problems.

- A = Airway
- B = Breathing
- C = Circulation
- D = Disability
- E = Exposure/Environment

## ABC

- A: Talking/mumbling? If not:
  - Torch & look
  - Chin lift/Jaw thrust
- B: Breathing?
  - Feel on cheek while looking at chest for rise & fall.
- C: Obvious bleeding?
  - Check inside oversuits (esp PVC) & down wellies

## Bleeding

- Elevate bleeding area if possible
- Compression: manual/bandage/duct tape
- Body areas to pay special attention to- lots of blood can be lost to internally:
  - Abdomen & pelvis
  - Upper legs (broken femurs)

## Hypovolemic Shock

- Lack of blood
- Weak pulse and shallow breathing
- Reduced level of consciousness

- Elevate legs
- Nil by mouth (at least initially)

## DE

- D:
  - AVPU scale: Alert? Responds to: Voice? Pain? Unresponsive?
  - Any neck/back pain?
- E:
  - Safe environment for further examination?
  - Pain anywhere(grope thoroughly- especially chest/abdomen/upper legs)? bleeding?
  - Cold?

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## Spinal injury

- Suspect if any of:
  - High impact injury/unconscious patient
  - Head/back contact
  - back/neck pain
- Avoid movement if possible
- C spine support
- Avoid chin lift- use jaw thrust if airway obstruction – if enough people
- Log roll to examine back/ put on stretcher

## 2ry Assessment- Top to Toe Survey

- Aim: Discover the problem/fix non-life-threatening problems/monitor for any change
- Head:
  - Keep them talking if alert. Recovery position or constantly monitor breathing.
  - Pupils- Assess using backup torch
  - Concussion/compression
  - Unless scalp bleeding leave helmet on.
- Neck/wrist- Pulse rate. Compare to yourself. Document.
- Chest: Resp rate, symmetrical chest expansion, pain.
  - Flail chest- padding & strapping over flail segment
  - Chest wounds- one way valve
- Abdo: check for pain in all 4 quadrants.
- Limbs: check throroughly, splints & dressing smaller wounds

## Harness/crush Syndromes

- Harness: from immobility in harness
  - Unconsciousness can occur after 5 mins
  - On recovery- sudden return of blood pooled in legs can lead to BADNESS (+/- death)
  - Management: sit up for >30mins, then slowly lie down in small increments at a time.
- Crush: from crushing injuries releasing toxins when cut off from body circulation.
  - If trapped >15mins
  - When released potassium from crushed cells to circulation can lead to BADNESS- can cause heart attack.
  - Management: release within 15mins or get help prior to release

## Medical History

- A llergies
- M edications
- P ast medical history
- L ast food & drink
- E vents leading to incident

## Hypothermia

- Keep off rock- tackle bags, wellies etc.
- Remove wet clothing if possible
- Emergency bag
- Huddle
- Bothy if you have one
- Candle

Remember the rest of your group!

## Heat Exaustion/heatstroke

- Characterized by dehydration +/- overheating
- Difference:
  - exhaustion- weakness/dizziness/faintness, cold & clammy, rapid breathing.
  - Heatstroke- above plus confusion & stop sweating, hot & red.
- Management:
  - Exhaustion- encourage drinking, stop, lie down & raise legs. Should begin to improve within 15mins.
  - Heatstroke- actively cool (wet clothes etc), recovery position, help likely required.

## Incident Reporting- SBAR

- Cave rescue need to know what to respond to- don't panic, take your time and make sure you have assessed fully-?going for help?waiting for call out.
- Situation- name, age & sex of casualty & mechanism of injury
- Background- any known medical problems/allergies
- Assessment- any injuries/issues found on assessment, current vital signs (pulse rate etc.) & significant +ve/-ve findings.
- Recommendations- anything you have already done/what the patient needs.
- If you are sending someone out to contact cave rescue it is probably worth writing this info down to give to them to take out to enable the CRO to respond appropriately.

## Preparation

- Know any medical problems before you go, especially:
  - Asthma- should always carry a blue inhaler when caving.
  - Diabetes- ensure have extra snacks, glucose tabs, jam (gel/jam- can rub on inner cheek and absorb if unconscious-HIGH GLUCOSE NEVER A PROBLEM IN ACUTE SETTING-ALWAYS GIVE IF KNOWN DIABETIC.
  - Epilepsy- how long since last fit, how regular etc (?safe to cave at all). Avoid belaying Etc.
- Always carry:
  - Duct tape, emergency bag, emergency food ?mini 1st aid kit

## Suggested Mini 1st aid kit

- Squirty sterile saline
- Antiseptic wipes
- Sterile dressing pads
- Bandages
- Duct tape
- Pencil/pen & waterproof paper
- Tampon
- Safety Pin (for slings)
- Snoopy loops

**Paracetamol** 

Ibuprofen

### Other stuff:

- Duct tape
- Emergency Bag
- Food

## Other useful stuff if more space

- Sam splints
- Ibuprofen/diclofenac (voltarol) gel
- Candle & lighter
- Fun drugs
  - Tramadol
  - Codeine/cocodamol (latter= codeine+paracetamol)

Rehydration salts Glucogel/jam

Waterproof markercan write info on casualty.

Spare warm stuff e.g. hat.

## Drugs info

- All meds
  - check for allergy before giving
  - Beware children- different doses
  - Don't use 2 from the same class at once- leads to overdose
- Analgesics (painkillers)
  - Paracetamol
  - Anti-inflammatories- ibuprofen, diclofenac
  - Simple opiates (morphine-related)- codeine, tramadol

## Paracetamol

### Max dose:

- 1g (2x 500mg tabs)
- 4x/day, separated by >4hours/dose

### Cautions:

 Overdose- dangerous in ANYTHING above the recommended dose. (TAKE CARE: cocodamol already contains paracetamol do not use both or you will overdose!)

### Other info

- Reduces temperature
- Synergistic effect with other painkillers so always give in some form!

## Ibuprofen/Diclofenac

### Max dose:

- Ibuprofen: 400mg (comes in 200mg or 400mg tabs)
- Diclofenac (voltarol): 50mg (usually comes in 25mg tabs)
- Both: max 3x/day, separated by >4hours.

### Cautions:

- Asthma- triggers attack in some. Only give if had before with no issues.
- Gut ulcers/indigestion- can worsen. Unlikely a massive problem from one dose unless had bleeding from gut in past.
- Don't use with Aspirin

### Other info:

- Good antiinflammatory effect- good for sprains/strains/anything swollen- reduces swelling as well as pain
- Diclofenac > Ibuprofen- in terms of effects and side effects!

## Codeine/Tramadol

### Max dose:

- Codeine: 60mg, (usually comes in 8mg (over the counter) or 30mg)
  Cocodamol= codeine plus paracetamol.
- Tramadol: 100mg (usually 50mg tabs)
- Both: up to 4x/day, separated by >4hrs.

### Cautions:

 Tramadol can have some odd side effects- people can feel either really ill or go a bit loopy. It also works far better in some people than others. It's useful to know how you respond before you use it if you do carry any.

#### Other info-

- tramadol technically stronger than codeine (for those who respond well).
- No antiinflammatory effect
- Very rarely may reduce respiratory rate

## Summary

- Primary assessment: ABCDE- Stabilise
- Secondary assessment: "top to toe". gather more information to aid reporting of injury & identify more minor stuff.
- Take time to fully assess before getting cave rescue
- PREPARE before your trip- know your group & carry appropriate stuff.
- Avoid carrying drugs you are unfamiliar with
- Don't pack the big first aid kit in the top of your rucksack
- DON'T GET INJURED IN THE FIRST PLACE.

# Any other ideas/questions/additions