Westcountry Ambulance Services NHS Trust

Emergency Care Practitioner

Guidelines

2004

Version 1

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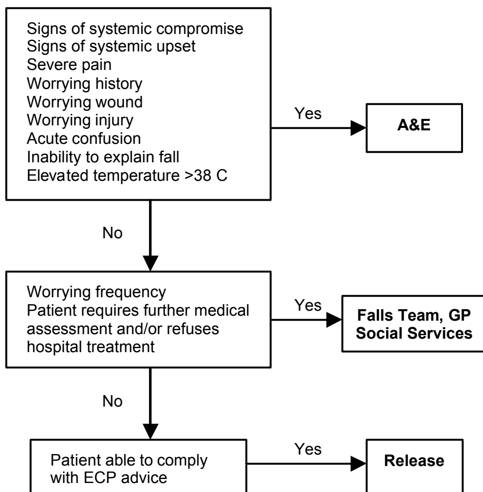
FALLS
(without injury)

Falls
Using this flowchart for any patient that has fallen and the cause of the fall can be explained. If the patient cannot explain the fall or had experienced dizzy spells prior to the fall then the patient should have a full medical assessment including BP and ECG.

Clinical Care Pathway



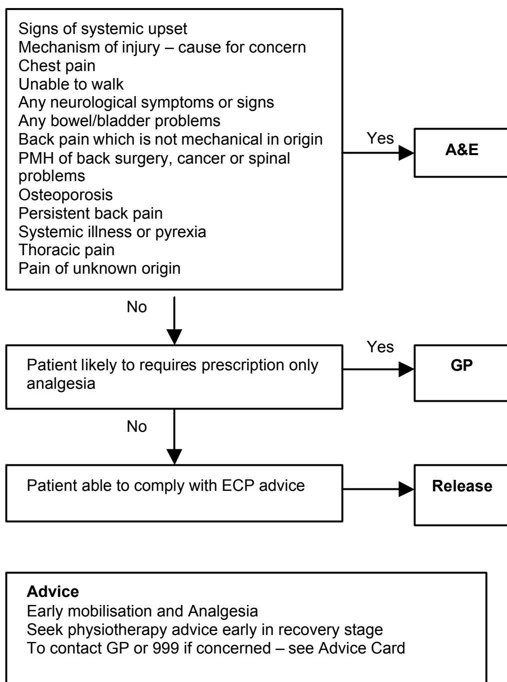
Advice
Care package in place?
Contact 999 if evidence of deterioration
See relevant advice sheet
If wound present check tetanus status

LOWER BACK PAIN

Lower Back Pain
The patient describes a pain isolated to the lower back, which is aggravated by movement which is usually precipitated by lifting or twisting.
While the assessment and management of mechanical back pain is within the scope of the Emergency Care Practitioner, patients suffering back pain from another cause must be assessed by a Doctor.

IF IN DOUBT: REFER

Clinical Care Pathway



Advice
Early mobilisation and Analgesia
Seek physiotherapy advice early in recovery stage
To contact GP or 999 if concerned – see Advice Card

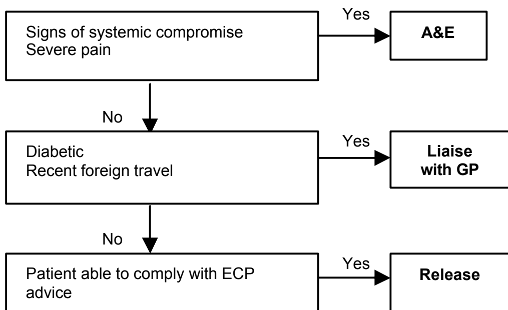
COLD OR FLU SYMPTOMS

Cold or flu symptoms
Patients will often complain of pyrexia associated with general muscle pains, headache, runny nose, cough etc.

Signs of systemic compromise
Temperature >39 degrees Celsius or fever not responding to Paracetamol
Headache not relieved with simple analgesia
Photophobia
Neck stiffness
Rash

History of foreign travel
Travel to an area where the patient was advised malaria prophylaxis was required.

Clinical Care Pathway



Advice
Take simple painkillers which suit patient, advice patient to see pharmacist to discuss further treatment.
Drink plenty of fluids
See advice sheet

CONSTIPATION

Constipation
The patient complains that they are unable to pass stools for over 48 hours. The patient should have passed wind and should be specifically asked about this.

Signs of systemic upset
Anything during the assessment of the patient that would suggest co-existing acute pathology such as infection.

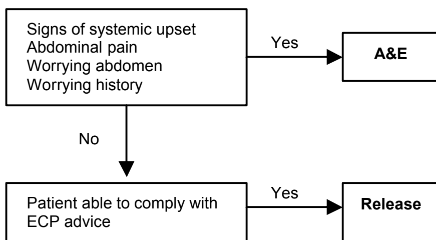
Check
Temperature
Dehydration
Vomiting
Current and recent medication

Abnormal pain
Any pain in the abdomen other than very mild pain

Worrying Abdomen
Any patient who has:

- Not passed wind or motions from the back passage for over 24 hours
- Vomiting
- Abdominal distension
- Previous abdominal surgery

Clinical Care Pathway

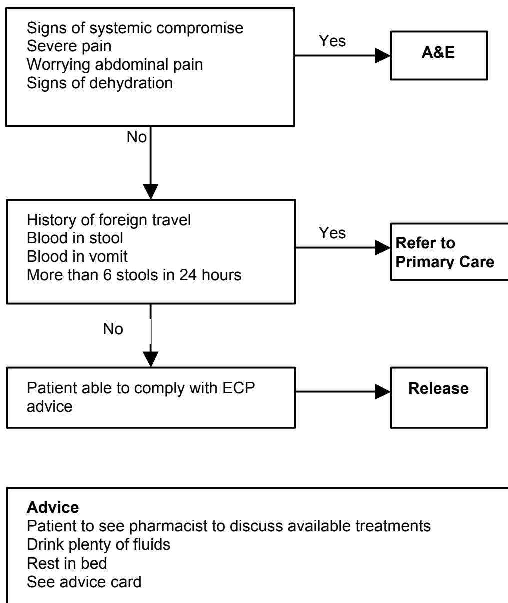


Advice
Drink plenty of fluids
See pharmacist to discuss further treatments

DIARRHOEA

Diarrhoea
Patient has diarrhoea or patient has diarrhoea and vomiting.

Clinical Care Pathway



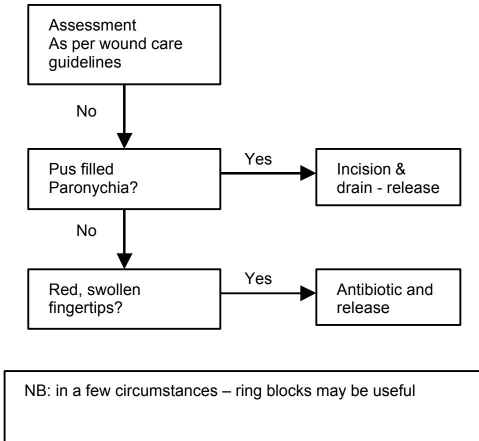
Advice
Patient to see pharmacist to discuss available treatments
Drink plenty of fluids
Rest in bed
See advice card

PARONYCHIA

Paronychia

Paronychia is a common hand infection, usually caused by staphylococci. It sets in at the nail fold and causes pus-filled painful swelling and sometimes spreading cellulites. However, recurrent infections may be due to herpes simplex infection (herpetic whitlow) or fungus.

Clinical Care Pathway



NB: in a few circumstances – ring blocks may be useful

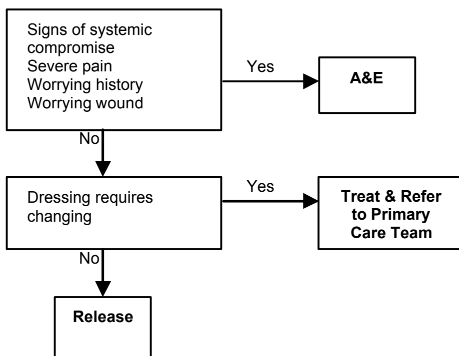
POST OPERATIVE WOUND PROBLEM

Post Operative Wound Problem
The patient has had a recent operation and now is experiencing problems with the wound.

Cause for concern

- Wound greater than 5cm of surrounding redness
- Feels warm to touch
- Underlying tissue visible
- Smelly discharge
- Heavily contaminated
- Or any other concern seek GP advice

Clinical Care Pathway

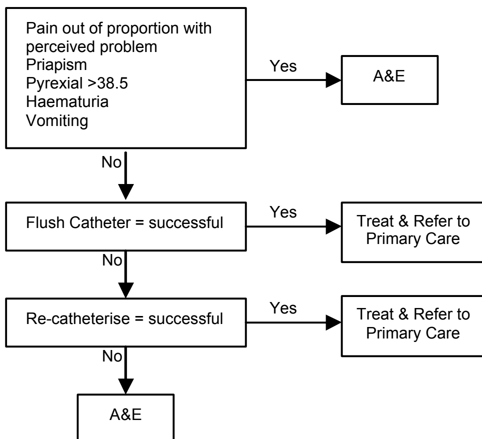


BLOCKED URINARY CATHETER (male)

A urinary catheter may become completely blocked which results in increased abdominal pain associated with no passage of urine when urine would be expected. Urine may also be bypassing the catheter.

Care must be taken to prevent haemodynamic instability resulting from extremely rapid drainage.

Clinical Care Pathway

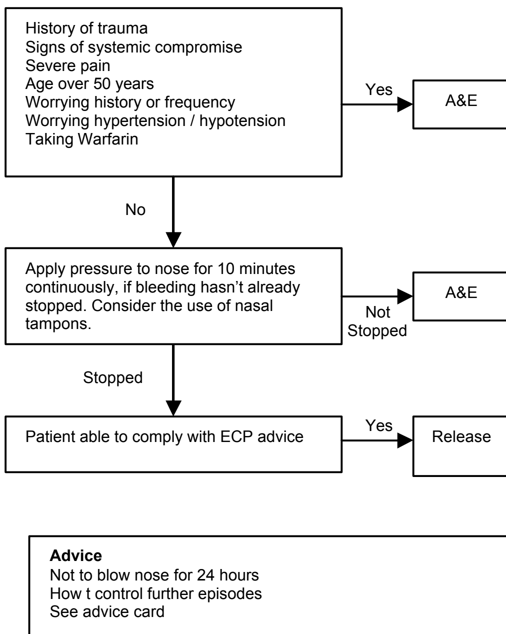


Advice
If successfully treated…
Drink plenty of fluids
Contact NHS Direct or GP if any concerns post ECP interventions.

NON TRAUMATIC EPISTAXIS

Epistaxis
Bleeding from one or both nostrils as a result of a non traumatic cause

Clinical Care Pathway



Advice
Not to blow nose for 24 hours
How t control further episodes
See advice card

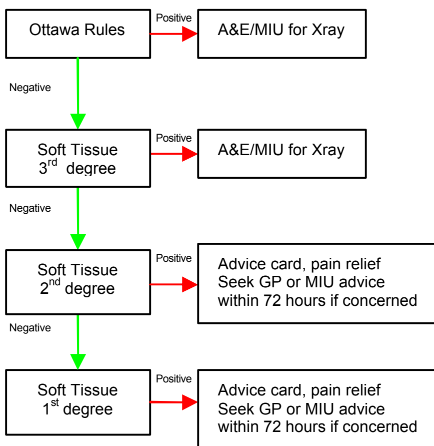
ANKLE INJURY

Mechanism of Injury
Inversion = lateral ligament, base of 5th metatarsal.
Eversion = deltoid (medial) ligament, navicular.
Inversion/eversion/forced dorsiflexion = anterior tibiofibular ligament, navicular
Patients often hear an audible crack, which is the tendon/ligament often mistaken for the sound of "bone breaking".

Examination
Knee – fibula head – check down tibia and fibula – medical and lateral malleolus – navicular – mid foot – base of 5th metatarsal – calcaneum – toes.

These Guidelines do not apply if <16 years, >55 years, injury >10 days old, impaired sensorium (alcohol/paraplegia/multiple injuries)

Clinical Care Pathway



Ottawa Ankle Injury Rules

Lateral view

(A) Posterior edge or tip of lateral malleolus

6cm

(C) Bass of fifth metatarsal

Malleolar zone

Midfoot zone

Medial view

(B) Posterior edge or tip of medial malleolus

6cm

(D) Navicular

An ankle radiographic series is only required if there is any pain in the malleolar zone and any of these findings:

- Bone tenderness at A or
- Bone tenderness at B or
- Inability to bear weight both immediately and in A&E

A foot radiographic series is only required if there is any pain in the midfoot zone and any of these findings:

- Bone tenderness at C or
- Bone tenderness at D or
- Inability to bear weight both immediately and in A&E

(Steill *et al* 1995, by permission of BMJ Publishing Group)

Classification of Ankle Soft Tissue Injuries

Evans P. (1980) The healing process at cellular level: a review.

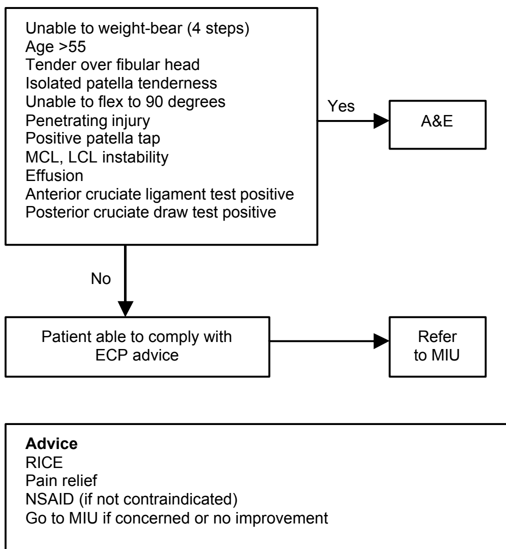
Physiotherapy. 66 (8): 256–259.

A soft tissue injury is an acute connective tissue injury that may involve muscle, ligament, tendon, capsular structures and/or cartilaginous structures. These injuries can be categorised into three grades or degrees of severity of injury.
First degree (mild): The result of a mild stretch of ligament or capsular structures, or over-stretch or direct blow to muscle. There is minimal swelling and bruising but mild pain is felt at the end of range of movement or on stretch or contraction of muscle. There is no joint instability, minimal muscle spasm and no loss of function.
Second degree (moderate): The result of moderate stretch of ligament or capsular structures, or excessive stretch or direct blow to muscle, causing tearing of some fibres. There is moderate swelling and bruising, with moderate pain felt on any movement which interferes with the ability of the muscle to contract or lengthen. There may be some joint instability with ligament /capsular injuries. Moderate muscle spasm may result as a reflex response to ligamentous/capsular injuries and muscle injuries. Due to the tearing of some fibres, there is a decrease in the tensile strength of ligament /capsule or a decrease in the contractile strength of muscle, both of which cause interference with function.
Third degree (severe): The result of a severe over-stretch of ligament, or excessive stretch or direct blow to muscle, causing a complete tear of the injured structure. There is significant swelling and bruising with severe pain even at rest which significantly interferes with function Ligament injuries result in gross instability and significant decrease in tensile strength, with muscle injuries causing severe muscle spasm and ‘splinting’, while the injured muscle is incapable of exerting force. Function is severely impaired.

KNEE INJURIES

Assessment
Early examination in acutely swollen knee is often unreliable.
History – Mechanism of injury, location of pain – Assess motor and sensory function of whole leg, always consider hip and spine problems when assessing a painful knee.

Clinical Care Pathway

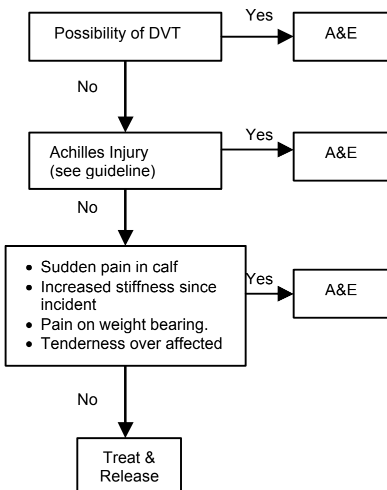


Advice
RICE
Pain relief
NSAID (if not contraindicated)
Go to MIU if concerned or no improvement

CALF PROBLEMS

Acute tears of the calf muscles may occur during sports, alternatively they may occur following relatively minor injuries e.g. stepping from a bus or kerb or following sudden movement.

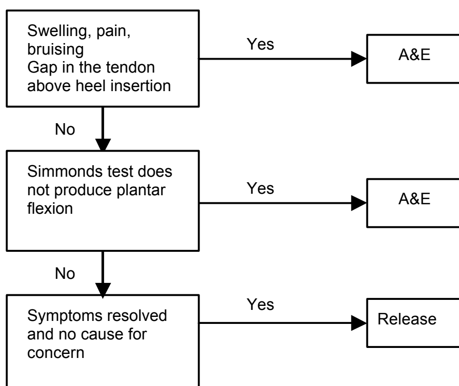
Clinical Care Pathway



ACHILLES TENDON RUPTURE

Rupture of the Achilles tendon typically occurs during sporting activities although it may also occur after falling or performing sudden movements. Patients will often present with a history of very sudden severe pain with or without an audible or palpable bang. This pain is so severe that patients often feel that they have been struck from behind or shot in the back of the leg.

Clinical Care Pathway



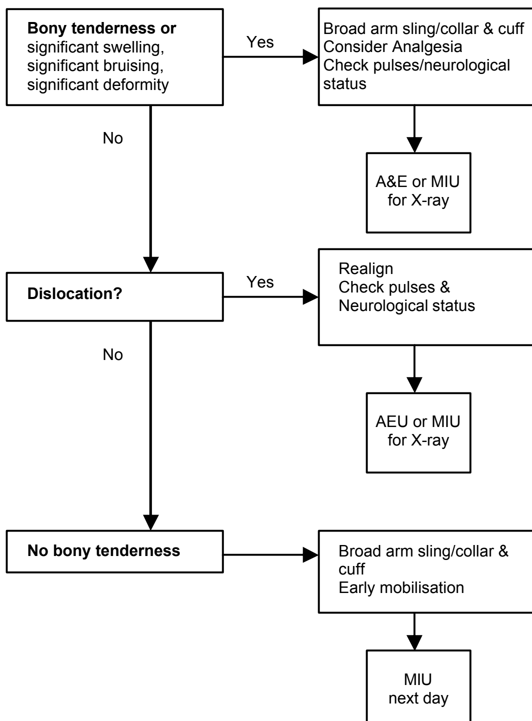
PRE-TIBIAL LACERATIONS

Management

1. Suturing should be avoided.
2. Close with self-adhesive strips and cover with non-adherent dressing.
3. A double layer of elasticised tubular bandage (tubigrip) should be applied, if no contraindications, from toe to knee. The patient must be advised to remove this at night.
1. Advise patient not to stand for long periods, to rest with the limb elevated and to perform regular ankle and leg exercises.
5. A follow-up appointment for redressing at the patient's GP surgery or with the District Nurse should be arranged for 5-7 days.

ELBOW
(see also Pulled Elbow)

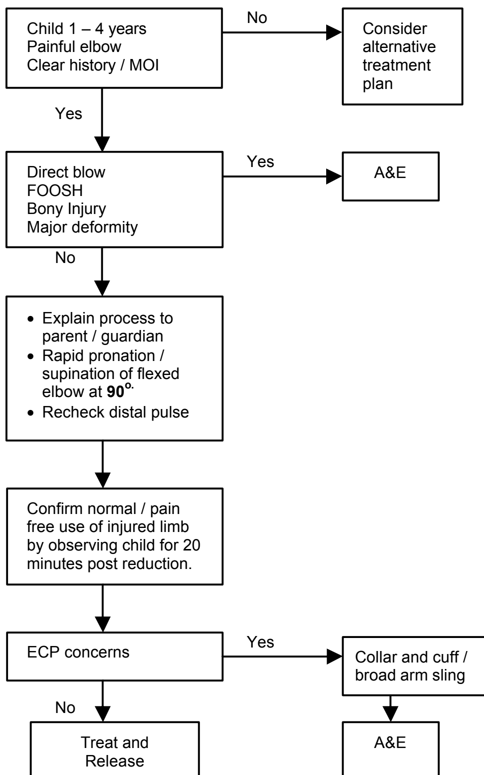
Clinical Care Pathway



PULLED ELBOW
(Subluxation of Radial Head)

The Emergency Care Practitioner can treat and release a patient with a pulled elbow provided that there is a clear history (MOI) of traction injury and the elbow is reduced at first attempt.

Clinical Care Pathway



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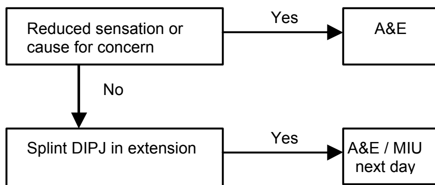
MALLET FINGER

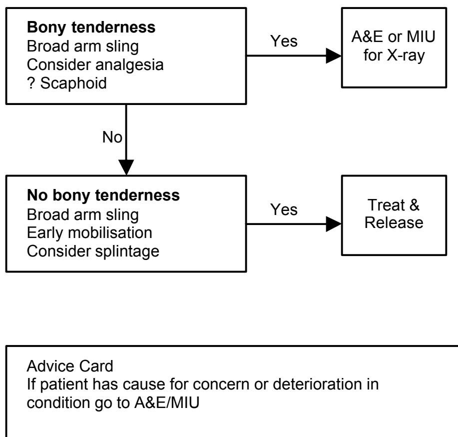
A forced flexion at the DIP joint as a result of a fall or direct blow may result in injury to the extensor mechanism distal to the interphalangeal joint.

Clinical Care Pathway



WRIST

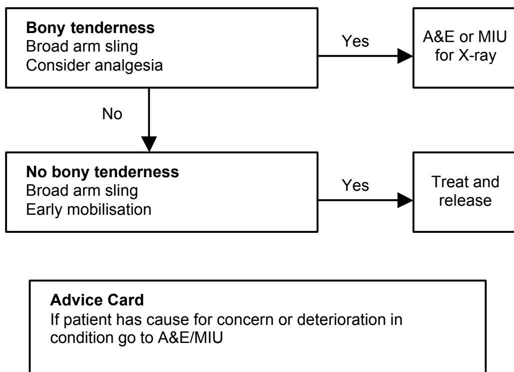
Clinical Care Pathway



Advice Card
If patient has cause for concern or deterioration in condition go to A&E/MIU

HUMERUS

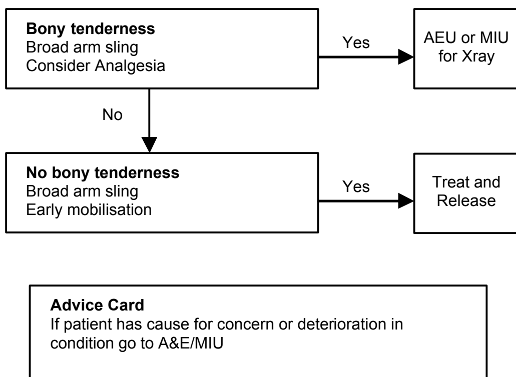
Clinical Care Pathway



Advice Card
If patient has cause for concern or deterioration in condition go to A&E/MIU

CLAVICLE

Clinical Care Pathway

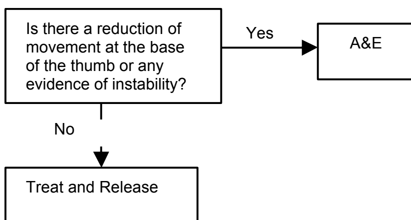


Advice Card
If patient has cause for concern or deterioration in condition go to A&E/MIU

GAMEKEEPERS THUMB

Gamekeepers thumb is the rupture of the ulnar collateral ligament of the thumb metacarpophalangeal joint. There is the potential for long term reduction in the 'pinch grip' if diagnosis and treatment is not dealt with as a matter of urgency.

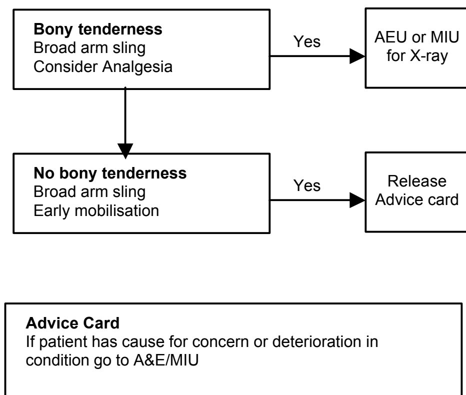
Clinical Care Pathway



Advice Card
If patient has cause for concern or deterioration in condition go to A&E/MIU

FOREARM

Clinical Care Pathway



Advice Card
If patient has cause for concern or deterioration in condition go to A&E/MIU

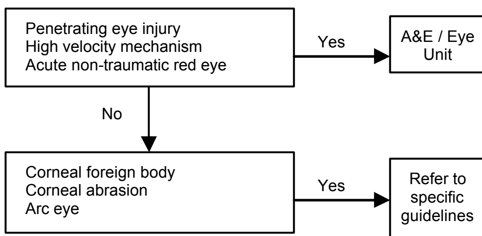
EYE INJURIES (general)

Eye injuries
The following are suitable injuries for ECP assessment:
Corneal foreign body
Corneal Abrasions
Arc eye

Assessment
Exact mechanism of injury
Visual acuity test recorded
Current symptoms
Refer to specific guidelines

Below is a basic flowchart for clinical care pathway for eye injuries. See also specific eye injury pathways in the next few pages.

Clinical Care Pathway



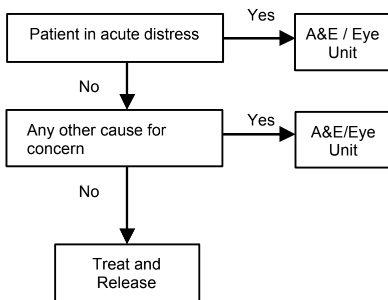
CORNEAL ABRASION

This often occurs as a result of a scratching to the eye such as a fingernail, paper or most commonly a foreign body. Patient often complains of irritation therefore early administration of local anaesthesia is advised.

Corneal abrasion is normally diagnosed following;
Local anaesthesia
Fluoroscein administration.
If a Foreign body is in situ refer to FB guidelines.

Assessment
See general guidelines

Clinical Care Pathway



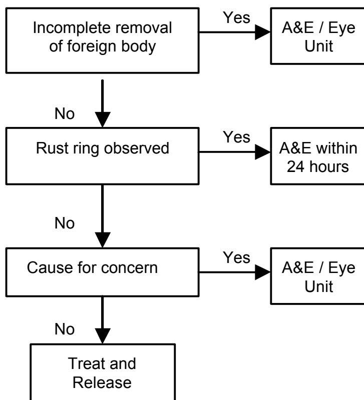
Advice
Do not use machinery or drive for 20 minutes per drop of local anaesthetic used.
If condition no better after 24 hours to attend MIU/A&E
Advice cards on eye drops, eye patches, and corneal abrasion. When anaesthesia wears off pain may return – take simple analgesia
Administer Fucithalmic ointment and give to patient as TTA.

CORNEAL FOREIGN BODY

Clinical Care Pathway Guideline

Management
Local anaesthetic
Removal of foreign body with cotton bud
Check for corneal abrasion (see 'corneal abrasion')

Clinical Care Pathway



Advice
Do not use machinery or drive for 20 minutes per drop of local anaesthetic used. If amethecaine wait 2 hours.
If condition no better after 24 hours to attend MIU/A&E
Advice cards on eye drops, eye patches and corneal abrasion

ARC (welder's) EYE "snowblindness"

Exposure to ultraviolet light can cause superficial keratitis. Climbers/skiers, welders, and those under sunbeds who have not used protective goggles develop pain, watering, and blepharospasm several hours later.

Management.

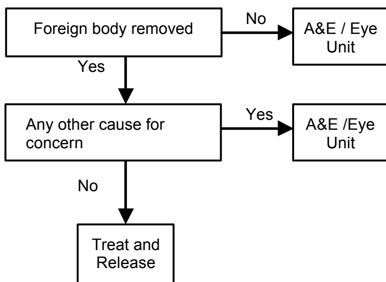
1. Local anaesthetic drops to allow examination.
2. Fluorescein staining may reveal multiple punctate corneal lesions.
3. Do not discharge with local anaesthetic drops.
4. Advise patient that anaesthetic drops last for at least 20 minutes (or more, depending on the pigmentation of the eye).
5. Discharge with eye pad, if required, and oral analgesia.
6. Offer patient Health Education advice i.e. eye protection.

SUB-TARSAL FOREIGN BODY

If the foreign body cannot be found in the lower fornix the other most common place to find it is in the stuck under the upper eyelid. The patient will often report of pain on blinking.

Clinical Care Pathway

Management
Local anaesthesia
White light inspection
Sub tarsal
Remove FB with cotton bud
Check for corneal abrasion (see 'corneal abrasion')



Advice
Do not use machinery or drive for 20 minutes per drop of local anaesthetic used. If Amethecaine wait 2 hours.
If condition no better after 24 hours attend MIU/A&E

CHEMICAL EYE BURNS

Assessment and Management.

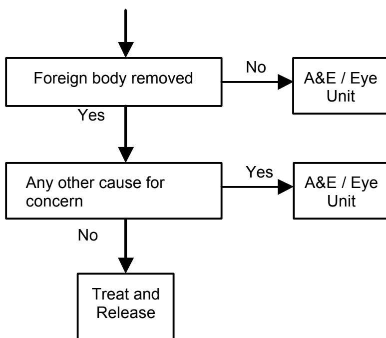
1. Treat all burns with immediate irrigation of the eye with lukewarm normal saline for at least 20 mins, or until the pH of tears has returned to normal 7.4 (a 1L bag of 0.9% saline with standard IV tubing is ideal).
2. Remove particulate foreign material with a cotton bud.
3. Identify the substance involved and contact Poisons Unit.
4. Refer all chemical burns to the nearest A&E/DGH or Eye Hospital as appropriate.

CONJUCTIVAL FOREIGN BODY

The typical history is dust or grit blown into eye by wind. The foreign body usually gravitates into lower fornix.

Clinical Care Pathway

Management
Local anaesthesia
Sub-tarsal inspection
White light inspection
Remove FB with cotton wool swab from conjuctiva
Check for corneal abrasion (see 'corneal abrasion)

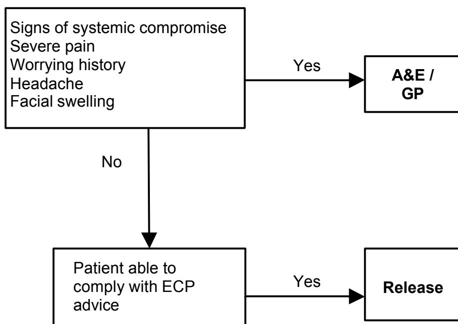


Advice
Do not use machinery or drive for 20 minutes per drop of local anaesthetic used. If Amethecaine wait 2 hours
If condition no better after 24 hours, attend MIU/A&E

TOOTHACHE

Toothache
Pain and tenderness located only in a well localised area of the jaw.

Clinical Care Pathway

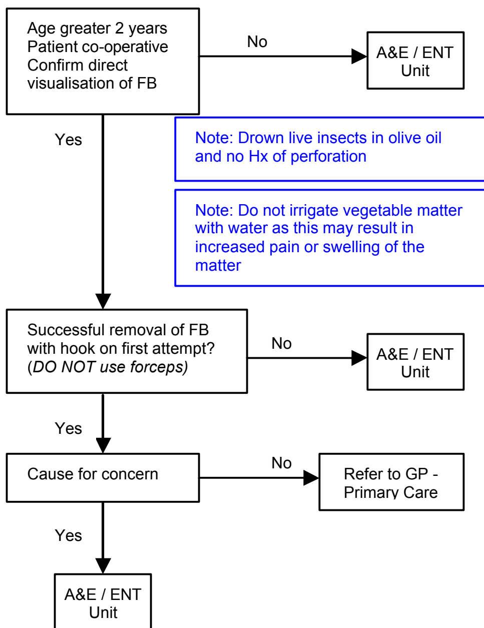


Dental Review
All patients should be advised to contact their dentist the next day for further advice. If the symptoms are severe then contact emergency dentist. Contact dental help line if available.
Advice
To see pharmacist to discuss further treatments
To suggest analgesics the patient is able to take
Contact dentist as soon as possible
See advice card

REMOVAL OF FOREIGN BODIES IN THE EAR

All sorts of foreign bodies (FBs) may become lodged in the external auditory canal, including insects, vegetable matter, and various inert objects. The patient may present with pain, deafness, discharge, or in the case of live insects, an irritating buzzing in one ear.

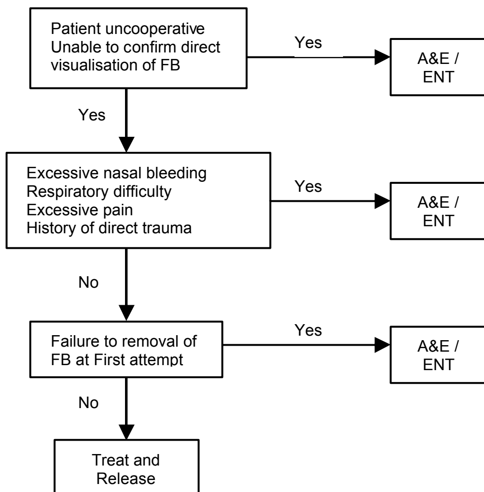
Clinical Care Pathway



REMOVAL OF FOREIGN BODY IN THE NOSE

Note: In children undiagnosed FB in the nose commonly presents as unexplained unilateral rhinitis.

Clinical Care Pathway



- The patient should be positioned in a clear, bright light
- The foreign body should be removed using a Thudicums Speculum and a right-angled probe.
- The foreign body should be carefully inspected to make sure that it is intact (If not intact liaise with ENT Department).
- Document all findings.
- The examination and removal of a foreign body should be documented.
- The patient should be given written discharge instructions and health education advice.

MINOR HEAD INJURIES

Clinical Care Pathway

NICE Guidelines

Are any of the following present?

- Glasgow Coma Scale < 15 at any time since injury.
- Any loss of consciousness as a result of the injury.
- Any focal neurological deficit since the injury (examples include problems understanding, speaking, reading or writing; decreased sensation; loss of balance; general weakness; visual changes; abnormal reflexes ad problems walking).
- Any suspicion of a skull fracture or penetrating head injury (for example, clear fluid running from the ears or nose, black eye with no associated trauma around the eye, bleeding from one or more ears, new deafness in one or more ears, bruising behind one or more ears, penetrating injury signs, visible trauma to the scalp or skull of concern to the professional).
- Amnesia for events before or after the injury (the assessment of amnesia will not be possible in pre-verbal children and is unlikely to be possible in any child aged less than five years).
- Persistent headaches since the injury.
- Any vomiting episodes since the injury (clinical judgement should be used regarding the cause of vomiting in those aged < 12 years, and whether referral is necessary).
- Any seizure since the injury.
- Any previous cranial neurosurgical interventions.
- A high-energy head injury (for example, pedestrian struck by motor vehicle, occupant ejected from motor vehicle, a fall from a height of greater than 1 metre or more than 5 stairs, diving accident, high-speed motor vehicle collision, rollover motor accident, accident involving motorised recreational vehicles, bicycle collision, or any other potential high-energy mechanism). A lower threshold for height of falls should be used when dealing with infants and young children (i.e. < 5 years).
- History of bleeding or clotting disorder
- Current anticoagulant therapy such as Warfarin.
- Current drug or alcohol intoxication.
- Age > 65 years. ***(unless minor laceration only)***
- Suspicion of non-accidental injury.
- Continuing concern by the professional about diagnosis.

Yes → A&E

No ↓

Are many of the following present and sufficiently severe in the judgement of the clinician?

- Irritability or altered behaviour, particularly in infants and young children (i.e. < 5 years)
- Visible trauma to the head not covered above but still of concern to the professional
- Adverse social factors (for example, no one able to supervise the patient at home).
- Continuing concern by the patient or carer about the diagnosis

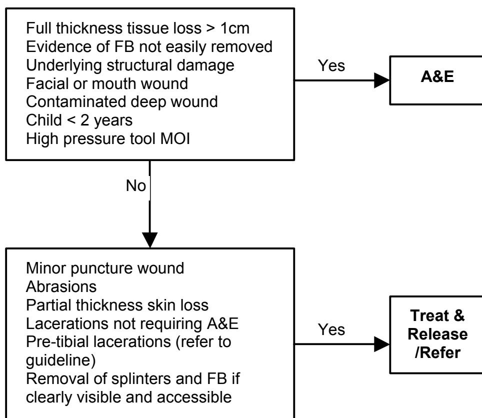
Yes → A&E

No ↓

Treat & Release with Advice Card

WOUNDS

Clinical Care Pathway



Type of Wound Closure
This is a clinical decision which should be made by the ECP and will depend on the competency of the ECP and the anatomical site and type of wound. Options at this time are:

- *Wound closure strips*
- *Tissue adhesive*
- *Sutures*

INGESTED FOREIGN BODIES

A wide variety of foreign bodies both radio-opaque, e.g. coins, rings, batteries and non radio-opaque e.g. plastic pen tops, Lego bricks etc, are frequently swallowed by patients most commonly children or adults with psychiatric disorders. Provided that the foreign body reaches the stomach it is likely to pass through the remainder of the gastointestinal tract without incident. A common exception is button battery ingestion.

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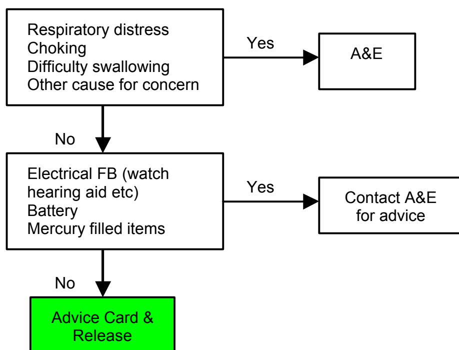

Advice

Patients who are completely asymptomatic require no specific follow-up but should be advised to return if they develop any symptoms. Unless the swallowed item is of value or sentimental worth (jewellery, rings etc) then there is no indication to search the stools to prove that the foreign body has passed.

INSECT BITES AND STINGS

Insect Bite or Stings
Usually simple, but occasional multiple areas of insect bite or sting resulting in surrounding redness to the skin.

Generalised rash or swelling
Any rash or swelling which involves more that one limb or a limb and the trunk. The rash will generally be itchy.

Facial or intraoral swelling
Any swelling from the neck upwards?
Visualisation of the mouth is importation.
Less than 1 hour since start.
Where speed of onset suggests a more serious condition.
Previous severe reaction
Any previous allergic reactions which required hospital based treatment more than oral antihistamines.

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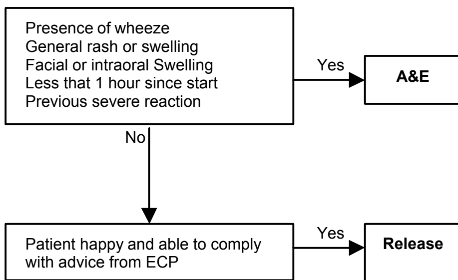

Advice
Apply ice pack or frozen vegetables
Rest with effected limb elevated as for swollen injury
Take a simple painkiller which suits patient
Antihistamine which may be obtained from the chemist

BURNS

Burns

The ECP may treat superficial or partial thickness burns.

Mertens, D.M., Jenkins, M.E., and Warden, G.D. (1997) Outpatient burns management. *Nursing Clinics of North America* **32**, 343-364

http://www.prodigy.nhs.uk/Clinical%20Guidance/ReleasedGuidance/crs/burns.htm#3

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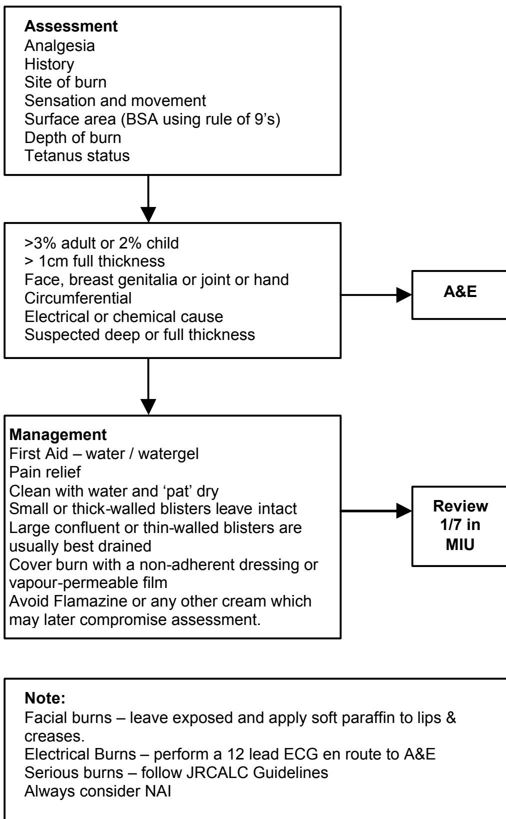

Note:

Facial burns – leave exposed and apply soft paraffin to lips & creases.

Electrical Burns – perform a 12 lead ECG en route to A&E

Serious burns – follow JRCALC Guidelines

Always consider NAI

EMOTIONAL OR HYSTERICAL REACTION

Emotional or hysterical reaction

The patient becomes upset or panicky in response to mild stimulus. The patient will often be hyperventilating with a feeling of being able to take full inspiration of air. The patient may complain of tingling or stiffness to the fingers.

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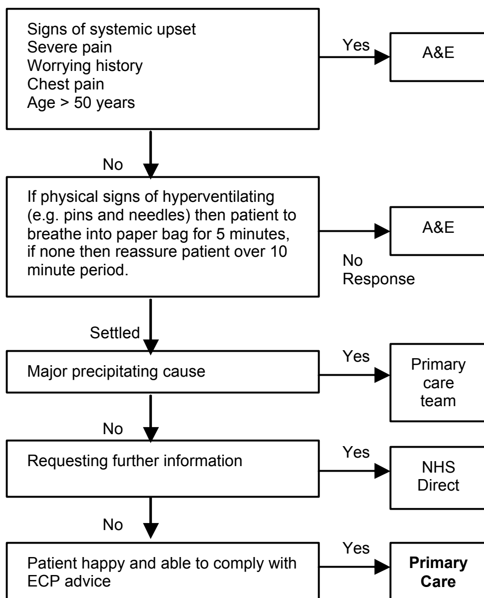

Advice
Stay with carer
Patients who continue to have symptoms should contact their GP surgery or NHS direct for advice
See advice sheet

PSYCHIATRIC PROBLEMS

A medical practitioner or specialist in psychiatry must appropriately assess any patient presenting with an apparent or potential psychiatric problem.

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