NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Fracture Management Guideline, Emergency Department, GRI

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

Version Number:	6
Does this version include changes to clinical advice:	No
Date Approved:	19th April 2022
Date of Next Review:	19th April 2023
Lead Author:	Stephen Boyce
Approval Group:	Glasgow Emergency Medicine Clinical Governance Group

Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Fracture Management Guidelines

Specific Fracture Management in ED / MIU

Options

- Admit to ward - inform Trauma Co-ordinator /junior doctor page no: 13681. Complete SBAR handover on Trakcare
- Allow home - inform Trauma Co-ordinator /junior doctor page no: 13681 - to be discussed at 8.00am trauma meeting
- Discharge with Virtual Clinic follow-up
- Discharge

Routinely use tubigrip / wool and crepe / splints for support
(POP slab only for unstable injuries / specific indications)

** Patients being discharged with Lower Limb POP slab / Achilles Rupture consider need for VTE prophylaxis **

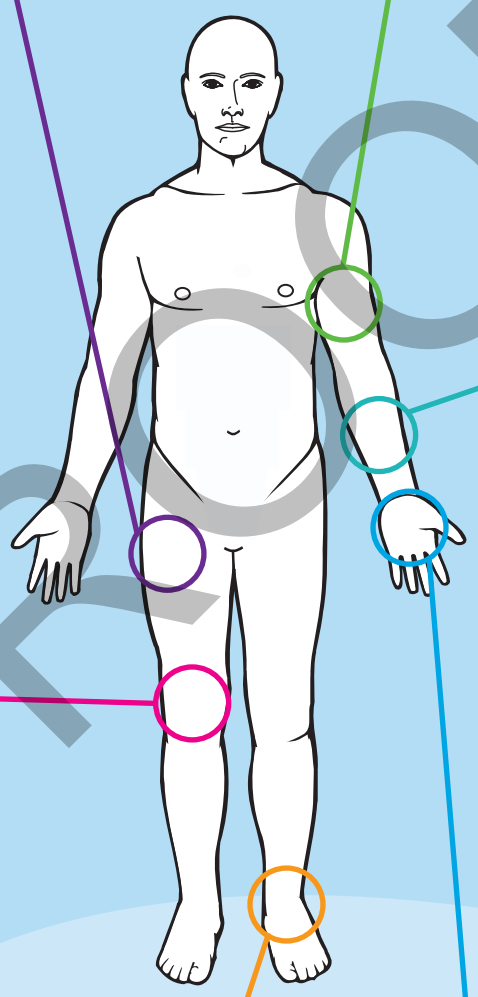
DIAGNOSIS	INITIAL TREATMENT	MANAGEMENT
Septic Arthritis – Prosthetic Joint	Bloods	Refer Ortho
Septic Arthritis – Native Joint	Bloods	Refer Medicine / Rheumatology
Prosthetic Joint – problems requiring urgent clinic review	Bloods	Virtual clinic
Post-operative complications	Manage as required	Consider discussion with Ortho Virtual clinic if required

Lower Limb Trauma

# pelvis	treat hypovolaemia if req'd major disruption pelvic splint	Admit
# pubic ramus	Analgesia	Admit If nursing home resident - discharge
# neck of femur	Analgesia, IV access & fluids, ECG Exclude compounding problems e.g. pneumonia etc	Admit
Hip pain after trauma	non-weight bearing with negative x-rays & hip pain	Admit Ortho for MRI (if medical cause e.g.syncope, collapse admit Medicine and inform Ortho)
Dislocated THR	Reduce in ED, Check X-ray	Admit
# femur shaft	Manage hypovolaemia, Crossmatch, femoral nerve block, IV analgesia, Thomas splint, X-ray in Thomas Splint	Admit
Intra articular # distal femur / femoral condyle	Splint	Admit
# patella (Be aware of normal variants)	Splint	Undisplaced– Virtual Clinic Record if patient can straight leg raise / consider aspiration haemarthrosis/ local anaesthetic Displaced – Admit
intercondylar tibial avulsion #	Splint	Admit
# tibial condyle - undisplaced	Splint	Virtual clinic
# tibial condyle - displaced	Splint	Admit
# tibial plateau	Above knee POP slab	CT scan (if possible) Admit
# tibial shaft - closed, undisplaced	Above knee POP backslab	Admit – (for elevation ±fixation)

Upper Limb Trauma

Forearm fracture / Monteggia # dislocation / Galeazzi # dislocation	Above elbow POP slab	Admit
Isolated ulna shaft fracture	Above elbow POP slab	Virtual clinic
# olecranon	Above Elbow POP slab / Polysling	Admit
# head/neck of radius undisplaced/minimally displaced	Polysling	Discharge/leaflet
# head/neck of radius - marginal #/comminuted	Polysling	Virtual clinic
dislocated elbow	Reduce, Above Elbow POP backslab / sling / X-ray	Virtual clinic
supracondylar # humerus (children) undisplaced	above elbow POP backslab	Virtual clinic
supracondylar # humerus (children) displaced	backslab in extension	Refer Ortho – RHC
# shaft of humerus	Brace, collar and cuff	Virtual clinic
# neck of humerus	Polysling – NO BRACE	Virtual clinic No functional use: eg. Dementia, paralysis, spasticity - Discharge / leaflet Consider virtual clinic if clinical concerns
# humeral head	Polysling	Virtual clinic
# greater tuberosity	Polysling	Virtual clinic
dislocated shoulder	Reduce, polysling, X-ray	Virtual clinic
AC joint subluxation / dislocation	Polysling	Virtual clinic
# clavicle - adults	Polysling	Virtual clinic
# clavicle - children	Polysling	Discharge / leaflet



Soft Tissue Knee Injury – Haemarthrosis, no fracture seen on X-ray

Minor sprains, ACL and other significant ligamentous injuries Meniscal injuries Patellar dislocation PFJ injuries	Splint (Use splint if knee swollen or difficulty WB)	Virtual Clinic
Osteoarthritis	Analgesia Splint (if knee swollen or difficulty WB)	D/C to physiotherapy / GP
No trauma, acute swollen knee	Bloods, aspirate – if required	Review by Rheumatology / General Medicine
Minor trauma with OA on X-Ray	Advice	D/C to physiotherapy / GP
Quadriceps / Patella tendon rupture	MSK U/S if possible. Splint	Refer Ortho

Distal Radius Fractures (MUS only needed in ED if neurovascular compromise / significant displacement)

Children - undisplaced/ minimally displaced greenstick #'s	Splint	Virtual clinic
Children - "torus/buckle" #'s	Splint	Discharge / leaflet
Children (< 16 yrs) with displaced #'s requiring manipulation	Analgesia / POP slab	Refer Ortho – RHC
Adult undisplaced /minimally displaced #'s	Splint	Virtual clinic No functional use: eg. Dementia, paralysis, spasticity - Discharge / leaflet Consider virtual clinic if clinical concerns
Displaced #'s Without features below	Splint / POP slab	Refer Ortho.(Trauma Co-ordinator) – Patient usually discharged home, presented at next day's 8.00 am trauma meeting and will be contacted by phone re admission (Leaflet)
high energy injury open # neurological deficit # off ended grossly unstable # of distal radius and ulna	POP slab	Admit

Foot and Ankle Trauma

Avulsions from tarsal bones	Velcro boot / analgesia / FWB	Virtual clinic
Avulsions from malleoli	Velcro boot / Tubigrip / FWB	Discharge with leaflet / Exercise sheet
Talus fracture	BK Backslab	CT scan (if possible) Admit
Calcaneal fracture	Elevation / analgesia	CT scan (if possible) Admit
Displaced / Unstable Ankle Fracture	Reduce / BK backslab then X-ray	Admit
Lateral malleolus fracture, no talar shift (document medial findings)	Velcro boot, FWB	Virtual Clinic
Isolated Medial Malleolus Fracture (Assess for proximal fibula fracture)	Velcro boot, FWB	Virtual Clinic
Achilles Tendon Rupture (calf squeeze test)	MSK U/S if possible EQUINUS BK backslab (or dorsal slab) VTE prophylaxis (1/52 until clinic)	Virtual Clinic
Intra-articular distal tibial fracture (Pilon #)	Above Knee Backslab	CT scan (if possible) Admit
High energy, multiple fracture / crushed foot	Elevation / Analgesia	Admit for elevation +/- CT scan
Multiple metatarsal fractures	Velcro boot	Virtual clinic
Isolated metatarsal fractures	Velcro boot / Tubigrip / FWB	Discharge with leaflet
Dislocated toes	Reduce +/- buddy strapping	Discharge
Big toe phalanx fractures		Undisplaced - Discharge Intra articular / Displaced – Virtual clinic
Lesser toe fractures		Discharge

Hand and Wrist Trauma (NB Acute Hand Admissions refer Plastics)

crush # terminal phalanx	Closed - ? Trephine Open - wound washout ± nail bed repair in ED Non adherent dressing/antibiotic if contaminated	STC 3-4 days then GP
mallet finger	Mallet splint	Discharge / leaflet
dislocated IP joints	reduce, buddy strap	Virtual clinic
undisplaced prox/middle phalangeal #s	buddy strap	Virtual clinic
displaced / rotated proximal/ middle phalangeal #s		Refer hand surgeon on-call
# base / shaft 1st metacarpal	Splint	Virtual clinic
# 5th metacarpal neck	Buddy strap	Discharge / leaflet
# metacarpal shaft/base – un-displaced/ minimally displaced	Splint	Discharge / leaflet
# metacarpal shaft/base - dis-placed	Splint	Refer Hand surgeon on-call
MCPJ dislocation	Attempt reduction	Reduced – Splint, VFC Unsuccessful – Refer Hand surgeon on-call
Acute Carpal / CMC joint dislocation / fracture dislocation	POP slab	Refer Ortho
Scaphoid #	Splint	Virtual clinic
? Scaphoid #	Splint / MRI - protocol	Virtual clinic

S. Boyce (ED Consultant) • J.Madley (Ortho Consultant) • Reviewed April 2022. Review Date April 2023

mi • 304884