

Notes (Please note!)

- All patients who go into a Polysling should be allowed hand and wrist exercises on day 1 and start elbow mobilization at 2 weeks post injury.
- All patients in Humeral brace should be allowed to mobilize the elbow at 2 weeks post injury and the collar and cuff part of the brace should be removed at 4 weeks post injury to avoid the development of elbow stiffness.
- No shoulder dislocation should be immobilized for >2 weeks (preferably 1 week for comfort) in most cases except exceptional circumstances.

CLAVICLE FRACTURES/DISLOCATIONS

<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management RAH</i>
Lateral clavicle fracture	Undisplaced	Broad arm sling	Refer to VFC	Generic fracture clinic at 2 weeks <ul style="list-style-type: none">• Sling for 4 weeks• Pendular exercises at 2 weeks• XR at 6 weeks• Refer to shoulder team if no signs of healing at 12 weeks
	Displaced or comminuted with no skin compromise	Broad arm sling	Refer to VFC	Follow up in shoulder fracture clinic at 1 week
	Displaced or comminuted with skin compromise or open	Manage as per open fracture pathway	Refer to ortho on call	

	fracture	Broad arm sling		
Mid shaft fracture	Undisplaced	Broad arm sling	Refer to VFC	<p>Generic fracture clinic within 2 weeks first available</p> <ul style="list-style-type: none"> • Sling for 4 weeks • Pendular exercises at 2 weeks • XR at 6 weeks • Refer to shoulder team if no signs of healing at 12 weeks
	Displaced /comminuted with no skin compromise	Broad arm sling	Refer to VFC	<p>Follow up in generic fracture clinic at 1 week</p> <ul style="list-style-type: none"> • Sling for 4 weeks • Start pendular exercises at 2-4 weeks • Refer to shoulder fracture clinic at 6 weeks if no sign of healing <p>If patient is a candidate for surgical management at the time of presentation please refer on to shoulder team.</p> <p>Criteria include</p> <ul style="list-style-type: none"> • Shortening >2cms • High demand individual i.e heavy manual labour, athletic individual etc • Patient requesting surgical management
	Open fracture, skin compromise, associated SCJ dislocation	Manage as per open fracture pathway Broad arm sling	Refer to ortho on call	
Medial third clavicle	All fractures	Broad arm sling	Refer to VFC	Generic fracture clinic within 2 weeks

fracture				<ul style="list-style-type: none"> • Conservative management for most • Sling for 4 weeks • Pendular exercises at 2 weeks • XR at 6 weeks <p>Refer to on call team if associated with SCJ dislocation</p>
ACJ dislocation	Grade 1 &2	Broad arm sling	Discharge with patient information leaflet Broad arm sling for comfort for 1-2 weeks	
	Grade 3	Broad arm sling	Refer to VFC	<p>Follow up in generic fracture clinic at 1-2 weeks</p> <ul style="list-style-type: none"> • Conservative management in most patients • Sling 1-2 weeks for comfort <p>If high demand occupation of keen to discuss surgery refer to the shoulder fracture clinic</p>
	Grade 4-6 with intact skin	Broad arm sling	Refer to VFC	Follow up in shoulder fracture clinic within 1 week
	Grade 4-6 with skin compromised	Broad arm sling	Refer to on call team	
SCJ Dislocation	Anterior or posterior dislocation	Broad arm sling	Refer to oncall team	

GLENOHUMERAL DISLOCATION				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Shoulder dislocation	First time dislocator <25 (Or high demand e.g. athlete)	Reduce in resus Broad arm sling	Refer to VFC	Follow up in shoulder fracture clinic within 2 weeks after injury
	First time dislocator 25-40	Reduce in resus Broad arm sling	Refer to VFC	Follow up in generic fracture clinic 1-2 weeks <ul style="list-style-type: none"> • Examination to ensure rotator cuff intact (USS if signs of cuff tear) • Repeat xray to ensure GHJ reduced and no fractures • Sling for comfort 2-3 weeks • Refer to physio
	First time dislocator >40	Reduce in resus Broad arm sling	Refer to VFC	Refer to physio Follow up in generic fracture clinic within 2 weeks <ul style="list-style-type: none"> • USS rotator cuff • Repeat xray to ensure GHJ reduced and no fractures • Sling for comfort 2-3 weeks • Refer to physio <p>Refer for urgent management to the shoulder team if there is a:</p>

				<ul style="list-style-type: none"> • Rotator cuff tear • Redislocation • Glenoid fracture
	Recurrent dislocator	Reduce in resus Broad arm sling	Refer to VFC	Refer to shoulder fracture clinic before next 4 weeks
	Elderly recurrent dislocator	Reduce in resus Broad arm sling	Refer to VFC	<p>Generic fracture clinic 1-2 weeks</p> <ul style="list-style-type: none"> • Repeat xray to ensure GHJ reduced • Sling 2-3 weeks <p>If candidate for surgical stabilisation refer to shoulder fracture clinic before next 4 weeks</p>

SCAPULA FRACTURES				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Isolated extraarticular	Undisplaced	Broad arm sling	Refer VFC	Shoulder fracture clinic 1-2 weeks
Isolated extraarticular	Displaced	Broad arm sling	Refer VFC	Shoulder fracture clinic 1 week
Isolated intraarticular	Glenohumeral joint reduced	Broad arm sling	Refer VFC	Shoulder fracture clinic 1 week
Associated other injuries		Broad arm sling	Refer on call team	

PROXIMAL HUMERUS FRACTURES				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Greater tuberosity	Undisplaced	Broad arm sling	Refer to VFC	Review Generic Fracture Clinic at 2 weeks with XROA <ul style="list-style-type: none"> • Sling for 4 weeks • Start pendular exercises at 4 weeks If displaces discuss with shoulder team/on call
	Displaced >5mm	Broad arm sling	Refer to VFC	Follow up in shoulder fracture clinic within 1-2 weeks of injury
2-4 part proximal humerus fractures	Undisplaced	Collar and cuff	Refer to VFC	Follow up in generic fracture clinic within 1-2 weeks with XOA If displaced* on repeat views organise CT scan and refer to shoulder team If position remains satisfactory continue non-op management <ul style="list-style-type: none"> • Collar and cuff/ Polysling for 4 weeks • Make physio referral • Start pendular exercises at 4 weeks progressing to active-assisted with physio • Subsequent review at 4 weeks with XROA
	Displaced* and low demand/not candidate	Collar and cuff	Refer to VFC	Follow up in generic fracture clinic 1-2 weeks <ul style="list-style-type: none"> • Collar and cuff/Polysling for 4 weeks

	for surgery			<ul style="list-style-type: none"> • XROA at 4 weeks • Start pendular exercises at 4 weeks
	Displaced* and candidate for surgery	Collar and cuff	Refer to VFC	Follow up in shoulder fracture clinic within a week
<p>*Displacement to consider surgical intervention (Also consider functional demands of patient and can accept greater degree of displacement in lower demand patient)</p> <ul style="list-style-type: none"> • Tuberosity fracture with > 5mm displacement (Particularly GT fracture displaced into subacromial space) • Surgical neck fracture with complete disengagement from the shaft or extensive metaphyseal/calcar comminution • Any Varus malalignment of articular surface or Valgus malalignment >160 degrees (Normal neck shaft angle 135 degrees) • Articular surface involvement or head splitting fracture 				
Fracture dislocation shoulder	Reduced and low demand/not candidate for surgery	Broad arm sling	Refer to VFC	<p>Follow up in generic fracture clinic in 1-2 weeks</p> <ul style="list-style-type: none"> • With XOA to ensure that shoulder stays reduced • Collar and cuff/Polysling for 4 weeks • XROA at 4 weeks • Start pendular exercises at 4 weeks
	Reduced and candidate for surgery [WA1][HS2]	Broad arm sling	Refer to VFC	Follow up in shoulder fracture clinic within one week
	Unreduced	Broad arm sling	Refer to on call	

SHAFT OF HUMERUS FRACTURES				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Midshaft fracture	Displaced and undisplaced	Humeral brace	Refer to VFC NB: If absolute indication for surgery refer to oncall team (see below)	Follow up in generic fracture clinic within 2 weeks <ul style="list-style-type: none"> • Tightening of brace/brace management • Repeat xray • Continue in brace if alignment acceptable • Refer to shoulder team if relative indication for surgery (see below) <p>If no healing at 3 months refer to shoulder fracture clinic</p>
<p>Absolute indication for surgery:</p> <ul style="list-style-type: none"> • Open fracture • Neurovascular injury • Floating elbow (ipsilateral forearm fracture) • Compartment syndrome <p>Relative indications for surgical management (If patient is a surgical candidate)</p> <ul style="list-style-type: none"> • Distraction at fracture site • > 20 degrees AP or >30 degrees Varus/Valgus angulation in brace • > 3cm shortening • Bilateral humeral shaft fractures 				

• Pathological fracture

Distal 1/3 fracture	Undisplaced	Above elbow cast	Refer to VFC	<p>Follow up in generic fracture clinic within 2 weeks</p> <ul style="list-style-type: none"> • Repeat xray • Continue in cast if alignment acceptable • Refer to shoulder team if relative indication for surgery (see above) <p>If no healing at 3 months refer to shoulder fracture clinic</p>
	Displaced (See above)	Above elbow backslab	Refer to ortho on call	
Periprosthetic fractures	Undisplaced	Above elbow backslab for distal third/Beagle brace for middle and proximal third of the shaft	Refer to VFC	Follow up in shoulder fracture clinic within 1 week first available
	Displaced	Above elbow backslab for distal third/Beagle brace for middle and proximal third of the shaft	Refer to ortho on call	

FRACTURES AT THE ELBOW				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Peri-articular Distal humerus	Undisplaced	Above elbow cast	Refer to VFC	Follow up in generic fracture clinic 1-2 weeks <ul style="list-style-type: none"> • Repeat xray +/- CT to assess displacement if indicated • Continue management in above elbow cast 4 weeks
	Displaced /candidate for surgery	Above elbow backslab	Refer ortho on call	CT scan Discussion at trauma meeting <ul style="list-style-type: none"> • ORIF • Referral to Mr Paul Jenkins at GRI for consideration of arthroplasty if not reconstructable
	Displaced but Low demand/Elderly and not candidate for surgery	Above elbow cast	Refer to VFC	Follow up in generic fracture clinic 1-2 weeks <ul style="list-style-type: none"> • Repeat xray • Continue conservative/"bag of bones" management in above elbow cast 4 weeks
Olecranon fracture	Undisplaced	Above elbow backslab	Refer to VFC	Generic fracture clinic 1 week <ul style="list-style-type: none"> • Conservative management with a sling or backslab for 2 weeks • XROA at 1 and 2 weeks

				<ul style="list-style-type: none"> D/W upper limb/on call team if displaced at 1 or 2 weeks
	Displaced +/- associated elbow joint incongruence	Above elbow backslab	Refer to on call team	
	Displaced low demand/elderly with congruent elbow joint	Above elbow backslab	Refer VFC	<p>Generic fracture clinic 1 week</p> <ul style="list-style-type: none"> XROA to ensure elbow remains congruent (specifically radiocapitellar joint congruent) Conservative management with a sling or backslab for 2 weeks <p>D/W upper limb/on call team if elbow joint incongruence</p>
Radial head fracture	Comminuted or displaced	Broad arm sling	Refer to VFC	<p>Refer to shoulder fracture clinic within 1 week if the elbow is not congruent/ 1-2 weeks if the elbow is well reduced</p> <p>May need arthrolysis if no improvement in ROM in 3-4 months post injury</p>

ELBOW DISLOCATIONS				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Simple dislocation	No associated fractures	Reduce in A+E Above elbow backslab	Refer VFC	Generic fracture clinic 1 week Conservative management with a sling or backslab for 2 weeks then mobilise as comfort dictates XROA at 1 and 2 weeks D/W upper limb/on call team if re-dislocated at 1 or 2 weeks
Complex dislocation	Associated fracture	Reduce in A+E Above elbow backslab	Refer to on call team	

BICEPS TENDON RUPTURE				
<i>Injury</i>	<i>Fracture pattern/displacement</i>	<i>ED management</i>	<i>ED Discharge Plan</i>	<i>Notes/Suggested Management</i>
Distal biceps tendon rupture	Active patient	Collar and cuff	Refer VFC	Shoulder fracture clinic within 1 week to discuss management options
	Low demand/Old patient	Collar and cuff	Refer VFC	Generic fracture clinic 1 week for assessment Conservative Mx