

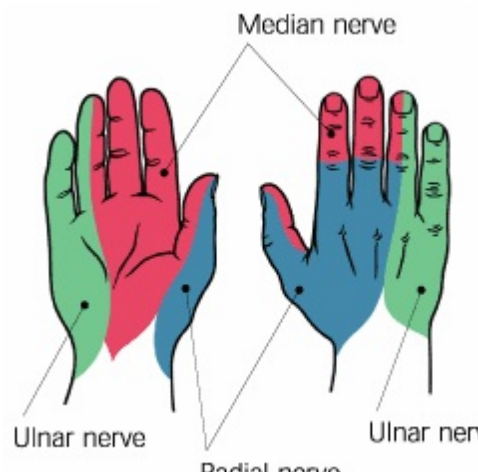
UPPER LIMB INJURY

SESLHDPR/393

<p>Aim:</p> <ul style="list-style-type: none"> • Early identification and treatment of life threatening conditions e.g. uncontrolled haemorrhage, or dislocation • Early identification of limb at risk ie compartment syndrome • Early initiation of treatment/clinical care and symptom management within benchmark time. 																									
<p>Assessment Criteria: On assessment the patient should have one or more of the following signs / symptoms:</p> <table border="0"> <tr> <td>Ⓜ Swelling to limb</td> <td>Ⓜ Pain associated with the injury</td> <td>Ⓜ Obvious deformity</td> </tr> <tr> <td>Ⓜ Point tenderness over bone</td> <td>Ⓜ Loss of function to part of that limb</td> <td></td> </tr> </table>		Ⓜ Swelling to limb	Ⓜ Pain associated with the injury	Ⓜ Obvious deformity	Ⓜ Point tenderness over bone	Ⓜ Loss of function to part of that limb																			
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<p>Notify CNUM and SMO if any of the following red flags is identified from Primary Survey and Between the Flags criteria.¹</p> <table border="0"> <tr> <td>Ⓜ Airway – at risk</td> <td>Ⓜ Breathing – respiratory distress</td> <td>Ⓜ Circulation – shock / altered perfusion</td> </tr> <tr> <td>• <i>Partial / full obstruction</i></td> <td>• <i>RR < 5 or >30 /min</i></td> <td>• <i>HR < 40bpm or > 140bpm</i></td> </tr> <tr> <td></td> <td>• <i>SpO₂ <90%</i></td> <td>• <i>BP < 90mmHg or > 200 mmHg</i></td> </tr> <tr> <td>Ⓜ Disability – decreased conscious level</td> <td>Ⓜ Exposure</td> <td>• <i>Capillary return > 2 sec</i></td> </tr> <tr> <td>• <i>GCS ≤ 14 or any fall in GCS by 2 points</i></td> <td>• <i>Temperature < 35.5°C or > 38.5°C</i></td> <td>• <i>Postural Drop >20mmHg</i></td> </tr> <tr> <td>Ⓜ Fluids</td> <td>Ⓜ Glucose</td> <td></td> </tr> <tr> <td>• Hydration status- In/Out</td> <td>• <i>BGL < 4mmol/L or > 20mmol/L</i></td> <td></td> </tr> <tr> <td>• Urinary symptoms</td> <td></td> <td></td> </tr> </table>		Ⓜ Airway – at risk	Ⓜ Breathing – respiratory distress	Ⓜ Circulation – shock / altered perfusion	• <i>Partial / full obstruction</i>	• <i>RR < 5 or >30 /min</i>	• <i>HR < 40bpm or > 140bpm</i>		• <i>SpO₂ <90%</i>	• <i>BP < 90mmHg or > 200 mmHg</i>	Ⓜ Disability – decreased conscious level	Ⓜ Exposure	• <i>Capillary return > 2 sec</i>	• <i>GCS ≤ 14 or any fall in GCS by 2 points</i>	• <i>Temperature < 35.5°C or > 38.5°C</i>	• <i>Postural Drop >20mmHg</i>	Ⓜ Fluids	Ⓜ Glucose		• Hydration status- In/Out	• <i>BGL < 4mmol/L or > 20mmol/L</i>		• Urinary symptoms		
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<p>History:</p> <ul style="list-style-type: none"> • Presenting complaint • Allergies • Medications: Warfarin, Aspirin, Anti-hypertensives, Diabetic meds, Analgesics, Inhalers, Chemotherapy, Non-prescription meds, any recent change to meds • Past medical history e.g. arthritis, osteoporosis, prosthetic joint or surgical pins etc. • Last menstrual period, last ate • Events leading to presentation e.g. recent trauma, mechanism of injury, timing, associated Sx. • Onset of symptoms • Pain history (pain scale, PQRST) • Associated symptoms e.g. pop / click / snap heard with injury, locking / giving way of joint, ability to weight bear. 																									
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Pain <ul style="list-style-type: none"> Location of pain (PQRST) 		
Notify CNUM and SMO if any of the following red flags is identified from History or Systems Assessment.		
<ul style="list-style-type: none"> Mechanism of major trauma 	<ul style="list-style-type: none"> Severe pain 	<ul style="list-style-type: none"> Neurovascular compromise
<ul style="list-style-type: none"> Gross deformity / Open Fracture 	<ul style="list-style-type: none"> Acutely absent pulse 	<ul style="list-style-type: none"> Uncontrollable bleeding
Investigations / Diagnostics:		
Laboratory / Radiology: <ul style="list-style-type: none"> Pathology: Not generally indicated unless surgery Refer to local nurse initiated STOP Radiology: Refer to local nurse initiated STOP Urine βHCG if suspected pregnancy prior to X-ray 		
Nursing Interventions / Management Plan:		
Resuscitation / Stabilisation: <ul style="list-style-type: none"> Oxygen therapy and cardiac monitor (as indicated) IV cannulation (<i>if IV analgesia required</i>) Hourly neurovascular observations 		Symptomatic Treatment: <ul style="list-style-type: none"> RICE / Splinting / X-ray Analgesia: as per district standing order Antiemetic: as per district standing order
Supportive Treatment: <ul style="list-style-type: none"> Nil By Mouth (NBM) if for OT Monitor vital signs as clinically indicated (BP, HR, T, RR, SpO₂) Monitor neurovascular status (<i>hourly or as clinically indicated</i>) Monitor pain assessment / score Splint or apply back-slab to limb (as indicated) 		
Practice Tips / Hints: <i>Google Images – Nerve Assessment</i>		
		
Further Reading / References: <ol style="list-style-type: none"> Deteriorating Patient - CERS for the Management of Adult and Maternity Patients Purcell, D., <i>Minor injuries: a clinical guide</i>. 3rd ed. 2016, London: Churchill Livingstons. 		
Acknowledgements: <i>SESLHD Adult Emergency Nurse Protocols were developed and adapted with permission from:</i> <ul style="list-style-type: none"> Murphy, M (2007) Emergency Department Toolkits. Westmead Hospital, SWAHS Hodge, A (2011) Emergency Department, Clinical Pathways. Prince of Wales Hospital SESLHD. 		
Revision and Approval History		
Date	Revision No.	Author and Approval
September 2013	0	Developed by Wayne Varndell - Clinical Nurse Consultant, Emergency Prince of Wales Hospital
December 2013	1	Edited by Leanne Horvat - Clinical Stream Nurse Manager, Emergency / Critical Care & Emergency Stream CNC/ NE Working Group SESLHD
February 2014	2	Endorsed by SESLHD Emergency Clinical Stream Committee on 20 February 2014
May 2014	3	Endorsed by SESLHD District Clinical & Quality Council meeting on 14 May 2014
September 2014	4	Endorsed by: SESLHD District Drug & QUM Committee meeting on 11 September 2014
December 2017	5	Updated by: Wayne Varndell, Clinical Nurse Consultant, Prince of Wales Hospital Emergency Department
January 2018	5	Processed by Executive Services prior to progression to SESLHD DQUM.

Adult Emergency Nurse Protocol



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February 2018	5	Endorsed by: SESLHD Drug & Quality Use of Medicine Committee
April 2021	6	Reviewed by Rochelle Cummins, Clinical Nurse Consultant, Emergency St George Hospital
May 2021	6	Approved by Executive Sponsor.
June 2021	6	Endorsed by: SESLHD Quality Use of Medicine Committee