

LOWER LIMB INJURY

SESLHDPR/390

<p>Aim:</p> <ul style="list-style-type: none"> • Early identification and treatment of life threatening conditions e.g. uncontrolled haemorrhage, 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>Escalation Criteria: Immediate life-threatening presentations that require escalation and referral to a Senior Medical Officer (SMO):</p> <table border="0"> <tr> <td>☒ Presentation meets trauma criteria</td> <td>☒ Patients in whom a pain scale cannot be accurately determined</td> <td>☒ Intoxicated or drug affected patients</td> </tr> <tr> <td>☒ Altered sensation/loss of movement</td> <td>☒ Compound fracture</td> <td></td> </tr> </table>		☒ Presentation meets trauma criteria	☒ Patients in whom a pain scale cannot be accurately determined	☒ Intoxicated or drug affected patients	☒ Altered sensation/loss of movement	☒ Compound fracture																			
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<p>History:</p> <ul style="list-style-type: none"> • Presenting complaint • Allergies • Medications: Anticoagulant Therapy, 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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(deep peroneal nerve)

Pain Location of pain (PQRST)

Notify CNUM and SMO if any of the following red flags is identified from History or Systems Assessment

- | | | |
|--|---|---|
| <input type="checkbox"/> Mechanism of major trauma | <input type="checkbox"/> Severe pain | <input type="checkbox"/> Neurovascular compromise |
| <input type="checkbox"/> Gross deformity / Open Fracture | <input type="checkbox"/> Acutely absent pulse | <input type="checkbox"/> Uncontrollable bleeding |

Investigations / Diagnostics:

Laboratory / Radiology:

- Pathology:** Not generally indicated unless surgery
Refer to local nurse initiated **STOP**
- Radiology:** Refer to local nurse initiated **STOP**
- Urine β HCG if suspected pregnancy prior to X-ray

Nursing Interventions / Management Plan:

Resuscitation / Stabilisation:

- Oxygen therapy and cardiac monitor [as indicated]
- IV cannulation [if IV analgesia required]
- Hourly neurovascular observations

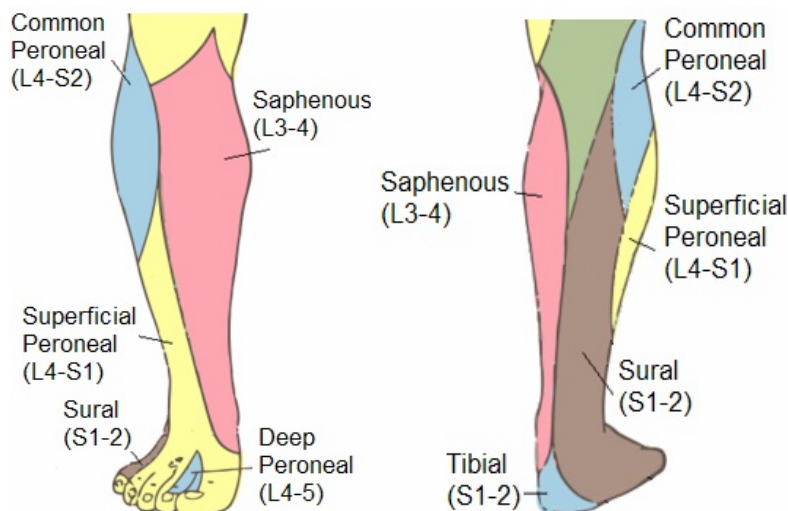
Symptomatic Treatment:

- RICE / Splinting / X-ray
- Analgesia:** as per district standing order
- Antiemetic:** as per district standing order

Supportive Treatment:

- Nil By Mouth (NBM) if for OT
- Monitor vital signs as clinically indicated (BP, HR, T, RR, SpO₂)
- Monitor neurovascular status (hourly or as clinically indicated)
- Monitor pain assessment / score
- Splinting – Backslab (as clinically indicated)

Practice Tips / Hints: *Peripheral Nerves of the Lower Limb*



<http://www.orthopaedicsone.com/display/Clerkship/Peripheral+Nerves+and+Arteries+of+the+Lower+Extremity>

Further Reading / References:

- [Deteriorating Patient - CERS for the Management of Adult and Maternity Patients](#)
- Purcell, D., *Minor injuries: a clinical guide*. 2nd ed. 2010, London: Churchill Livingstone.
- <http://www.orthopaedicsone.com/display/Clerkship/Peripheral+Nerves+and+Arteries+of+the+Lower+Extremity>

Acknowledgements: *SESLHD Adult Emergency Nurse Protocols were developed and adapted with permission from:*

- 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	Revised 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 (T14/36288)

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September 2014	4	Endorsed by: SESLHD District Drug & QUM Committee meeting on 11 September 2014
December 2017	5	Updated by Wayne Vardell – Clinical Nurse Consultant, Emergency, Prince of Wales Hospital
January 2018	5	Processed by Executive Services prior to submission to SESLHD DQUM
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