



Neurosurgery Clinic

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Definitions

- EMERGENCY** Proceed to Emergency Department
Please contact the senior clinician for medical advice
24hrs Direct Line 9288 4356 Fax 9288 4368
- URGENT** Appointment within **2 weeks** of receipt of the referral
- SEMI URGENT** Appointment within **8 weeks** of receipt of the referral
- ROUTINE** Next available appointment

Unless otherwise stated on individual referral guidelines



Mandatory Referral Content

Demographic:

- Date of birth
- Contact details (including mobile phone)
- Referring GP details
- Interpreter requirements

Clinical:

- Reason for referral
- Duration of symptoms
- Management to date and response to treatment
- Relevant pathology and imaging reports (please refer to specific guidelines)
- Past medical history
- Current medications (and medication history if relevant)

Preferred Referral Content

- Functional status
- Psychosocial history
- Dietary status
- Family history
- Usual GP



SfVincent's

Continuing the Mission of the Sisters of Charity

Low Back Pain

Patient Presentation

'Red Flags'

- Non-mechanical pain
- Constant, unremitting pain
- Fever, signs of infection
- Neoplastic disease
- Steroid use
- Weight loss
- Widespread neurology
- Localised neurological signs

Simple Low Back Pain

- (Approx 95%)
- Pain in lumbosacral region, buttocks +/- thighs
 - Mechanical pain
 - Patient otherwise well

Nerve Root Pain/ Compression

- Unilateral leg pain > low back pain
- Pain radiates to foot or toes
- Dermatomal numbness or paraesthesia
- SLR produces leg pain/ numbness
- Loss of reflexes
- Loss of power

Caude Equina Syndrome

- Sphincter disturbance
- Saddle anaesthesia

Initial Work Up

- CT scan

Consider:

- FBC/CRP/ESR
- Calcium and phosphate
- Serum protein electrophoresis
- Immunoglobulins
- PSA
- Rheumatoid serology

GP Management

1. Identify psychosocial 'Yellow Flags'

- A belief that back pain is harmful or potentially severely disabling
- Fear avoidance behaviour and reduced activity levels
- Tendency to low mood and withdrawal from social interaction
- Expectation of passive treatments rather than a belief that active participation will help

These factors consistently predict poor outcomes

2. Consider referring for a specialist assessment

If condition does not improve within 6-12 weeks

When to Refer

'RED FLAGS'	ROUTINE	SEMI URGENT	EMERGENCY
<p>Contact the Neurosurgery Registrar to discuss urgency via the switch board</p>	<p>Simple Low Back Pain</p> <ol style="list-style-type: none"> 1. Refer to an appropriate community physiotherapy service 2. Refer to Neurosurgery Clinic Patients will be assessed by either a Neurosurgeon or dedicated Physiotherapist based on specified criteria (see box below) 3. Refer to an interdisciplinary pain management program 	<p>Nerve Root Pain / Compression</p>	<p>Cauda Equina Syndrome</p> <p>Please contact the senior clinician for medical advice 24hrs Direct Line 9288 4356 Fax 9288 4368</p>

Criteria for booking an appointment with the Neurosurgeon or Neurosurgery Clinic Physiotherapist

The source of the referral

Patients referred by another medical specialist will be assessed by a Neurosurgeon

Previous surgery

Patients who have undergone decompressive surgery in the past 6 months will be assessed by a Neurosurgeon

Radiological results

A patient with imaging results indicating severe nerve root compression will be assessed by a Neurosurgeon

Please note that the original results must be attached to the referral

Conservative management

A patient with unsatisfactory improvement in symptoms following a reasonable trial of conservative management may be assessed by a Neurosurgeon

Neck Pain

Patient Presentation

'Red Flags'

- Non-mechanical pain
- Constant, unremitting pain
- Fever, signs of infection
- Neoplastic disease
- Steroid use
- Weight loss
- Widespread neurology
- Localised neurological signs

Simple Neck Pain

- Associated with pain to the upper arm without neurological deficits
- Mechanical pain
- Patient otherwise well

Nerve Root Pain/ Compression

- Unilateral arm > neck pain
- Pain radiates to hand or fingers
- Dermatomal numbness or paraesthesia
- Loss of reflexes
- Loss of power

Cervical Myelopathy

- Gait disturbance
- Evidence of lower limb spasticity

Initial Work Up

- CT scan

Consider:

- FBC/CRP/ESR
- Calcium and phosphate
- Serum protein electrophoresis
- Immunoglobulins
- PSA
- Rheumatoid serology

GP Management

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Brain

Initial Work Up

- CT scan
- MRI if available
- Hormone levels including prolactin (for suspected pituitary tumour)

When to Refer

CONSIDER URGENT REFERRAL	EMERGENCY	URGENT
<p>Suspected brain tumour</p> <ul style="list-style-type: none"> - Patients with non-migrainous headaches of recent onset accompanied by features suggestive of raised ICP e.g. <ul style="list-style-type: none"> • Woken by headache (posture-related) • Vomiting • Drowsiness - Unexplained cognitive impairment or behavioural disturbance - Confirmed personality changes for which there is no reasonable explanation 	<ul style="list-style-type: none"> - Mass lesion (suspected or visible on CT) with: <ul style="list-style-type: none"> • Increasing drowsiness • Weakness • Vomiting - Benign or malignant tumours associated with: <ul style="list-style-type: none"> • Midline shift • Hydrocephalus • Severe deficits - Blocked or infected VP shunt - Subarachnoid haemorrhage <p style="color: red;">Please contact the senior clinician for medical advice 24hrs Direct Line 9288 4356 Fax 9288 4368</p>	<p>Suspected brain tumour</p> <ul style="list-style-type: none"> - Progressive neurological deficit developing over days to weeks e.g. <ul style="list-style-type: none"> • Weakness • Dysphasia • Ataxia - New onset seizures characterized by at least one of the following: <ul style="list-style-type: none"> • Focal seizures • Prolonged post-ictal focal deficit (>1hr) • Status epilepticus • Associated inter-ictal focal deficit - Patients with headache, vomiting and <i>papilloedema</i> - Cranial nerve palsy e.g. <ul style="list-style-type: none"> • Diplopia • Defined visual field loss • Unilateral sensorineural deafness <p>Vascular disorders</p> <ul style="list-style-type: none"> - Aneurysm - Arteriovenous malformation - Other <p>Hydrocephalus</p>

Endocrinology Pituitary Review Clinic

When to Refer

URGENT	SEMI URGENT	ROUTINE
<p>Immediate assessment by Emergency Department or Endocrine Registrar</p> <ul style="list-style-type: none"> - Any pituitary or sellar mass causing significant visual field defect (bitemporal hemianopia or more extensive visual loss) - Pituitary apoplexy - Hypopituitarism with haemodynamic compromise - Diabetes insipidus with plasma Na >150mmol/L - Hyponatraemia secondary to SIADH with plasma Na <120mmol/L 	<p>2-4 WEEKS</p> <ul style="list-style-type: none"> - Marked hyperprolactinaemia >5000miU/L - Pituitary macro adenoma with tumour encroaching on optic chiasm but no major visual field defect - Known functioning pituitary adenoma (acromegaly, Cushing's, TSH-oma) - Hypopituitarism without haemodynamic compromise - Other sellar lesions including craniopharyngioma, meningioma, and Rathke's cleft cyst without major visual field defect - New onset diabetes insipidus 	<p>Next available / within 8 weeks</p> <ul style="list-style-type: none"> - Hyperprolactinaemia <5000miU/L - Incidentally discovered pituitary adenoma, normal pituitary function, normal visual fields

Cranial Nerve Abnormalities

Patient Presentation

- Trigeminal Neuralgia
- Acoustic Neuroma
- Other

Initial Work Up

- CT scan
- MRI if available

When to Refer

Urgency of referral depends on severity of pain and other symptoms

Peripheral Nerve Disorders

Patient Presentation

- Carpal Tunnel Syndrome
- Peripheral Nerve Compressive Syndromes:
 - Brachial plexus lesion
 - Tarsal tunnel
 - Thoracic outlet
 - Ulnar nerve

When to Refer

SEMI URGENT

Carpal Tunnel Syndrome

Referral to Hand Surgery Clinic OR Neurosurgery Clinic

Peripheral Nerve Compressive Syndromes

Referral to Neurosurgery Clinic