

# THE ALFRED REFERRAL GUIDELINES: ORTHOPAEDIC SURGERY

## Referral priority guide

### Shoulder:

Rotator cuff tendinitis

Pain/stiffness in the shoulder including frozen shoulder

AC joint problems

Recurrent dislocation of the shoulder

Shoulder instability

### Elbow:

Tennis elbow

Golfer's elbow

Elbow pain / stiffness / locking

### Wrist & Hand

Carpal tunnel

Stenosing tenovaginitis

Basal thumb arthritis

Ganglia

Painful / stiff wrists

### Back

Mechanical low back pain without leg pain

Neck pain without arm pain

Back pain and sciatica or neck pain with arm pain, without neurology

Spinal stenosis with limitation of walking distance

Back pain and sciatica with neurological deficit

Neck pain and radicular arm pain with neurological deficit

Back or neck pain secondary to neoplastic disease or infection

Back pain with neurological bladder involvement (cauda equina syndrome)

Neck pain with myelopathy

### Hip and Knee

Osteoarthritis

Inflammatory Arthritis

Post Traumatic Arthritis

Avascular Necrosis

Previous total hip replacement (THR) – infection, loosening or wear

Ankles & Feet

Arthritis

Pain & Deformity in Forefoot (Including Bunions)

Pain & Instability in Hind Foot

Achilles Tendon Pathology

Heel Pain

Miscellaneous

Nerve entrapment syndromes

Carpal tunnel

Ulnar neuritis

Tarsal tunnel

Bone and/or joint infection

Bone and soft tissue tumours

Bursitis

Pre-patellar bursitis

Trochanteric bursitis

Olecranon bursitis

Apophysitis (eg Osgood-Schlatter's)

Removal of plates, screws and pins

Arthroplasty – including knee, shoulder, elbow, ankle

Fractures

Soft tissue injuries

## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Referral priority guide

<b>Immediate – send to The Alfred Emergency and Trauma Centre:</b> <ul style="list-style-type: none"> <li>• Cauda equina</li> <li>• Foot drop</li> <li>• Cervical myelopathy</li> <li>• Septic arthritis</li> </ul>	Phone the Orthopaedic Surgery Registrar on call on 9076 2000 and/or send to The Alfred Emergency & Trauma Centre.
<b>Urgent</b> <ul style="list-style-type: none"> <li>• Tumours</li> <li>• Sympathetic dystrophia (Refer to Pain Clinic at Caulfield General Medical Centre)</li> <li>• Fractures and ligamentous injuries</li> </ul>	Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618. Likely to receive an appointment within 1-2 weeks.
<b>Soon</b> <ul style="list-style-type: none"> <li>• Avascular necrosis</li> </ul>	Likely to receive an appointment within 2-6 weeks.
<b>Intermediate</b>	Likely to receive and appointment within 6-12 weeks.
<b>Non-urgent</b> <ul style="list-style-type: none"> <li>• Chronic back/neck pain</li> <li>• Symptomatic bunions/foot conditions</li> <li>• Minor orthopaedic problems of the hands, ankles and feet including ganglions, also shoulder pain and non-specific back pain</li> </ul>	Appointment may be delayed.
<b>Not seen</b>	Children under 16 years of age are not seen at the Alfred.

**Please note:** The times to assessment may vary depending on size and staffing of the hospital department. If you are concerned about the delay of the outpatient appointment or if there is any deterioration in the patient's condition, please contact the Orthopaedic Surgery Registrar on call on 9076 2000.

All referrals for hip and knee osteoarthritis attend the Osteoarthritis Hip and Knee Service (OAHKS), which is staffed by physiotherapists. Referrals may also be triaged and allocated to the Physiotherapy Screening Clinic (direct referrals are not accepted.)

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## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Shoulders

Evaluation	Management	Referral Guidelines
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#### Rotator cuff tendinitis

#### Pain/stiffness in the shoulder including frozen shoulder

#### AC joint problems

<ul style="list-style-type: none"> <li>• Standard history and examination including neurological examination</li> <li>• X-rays (AP &amp; lat shoulder)</li> <li>• U/S scan</li> <li><a href="#">The Alfred Radiology request form</a></li> <li>• Consider FBE, ESR &amp; CRP</li> </ul>	<ul style="list-style-type: none"> <li>• Anti inflammatories</li> <li>• Physiotherapy</li> <li>• Consider Cortisone injection</li> </ul>	<ul style="list-style-type: none"> <li>• Refer if patient fails to respond to treatment.</li> <li>• Evidence of weakness and a history of significant trauma suggestive of an acute (rather than degenerative) rotator cuff tear is more urgent and should be seen soon.</li> </ul> <p style="text-align: right;"><a href="#">Return to contents page</a></p>
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#### Recurrent dislocation of shoulder

#### Shoulder instability

<ul style="list-style-type: none"> <li>• Standard history and examination particularly neurological examination</li> <li>• X-rays (AP &amp; lateral shoulder):</li> <li><a href="#">The Alfred Radiology request form</a></li> </ul>	<ul style="list-style-type: none"> <li>• Advice to avoid dislocation</li> <li>• Shoulder rehabilitation program (physiotherapy)</li> </ul>	<p>Refer if recurrent functional instability and/or pain and has not responded to the rehabilitation program.</p> <p style="text-align: right;"><a href="#">Return to contents page</a></p>
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### Elbows

#### Tennis/Golfer's Elbow

<p>Standard history and examination</p>	<ul style="list-style-type: none"> <li>• Bands</li> <li>• Anti inflammatories</li> <li>• Modify activity (eg patient with tennis elbow to use wrist in supination as much as possible)</li> <li>• Physiotherapy</li> <li>• Consider Cortisone injection</li> </ul>	<p>Refer if fails to respond to treatment.</p> <p style="text-align: right;"><a href="#">Return to contents page</a></p>
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#### Elbow painful/stiff/locking

<ul style="list-style-type: none"> <li>• Standard history and examination</li> <li>• Consider FBE, ESR &amp; CRP if inflammation suspected</li> </ul>	<ul style="list-style-type: none"> <li>• Anti inflammatories</li> <li>• Physiotherapy</li> </ul>	<p>Refer if not responding to treatment or loose bodies seen on XR.</p> <p style="text-align: right;"><a href="#">Return to contents page</a></p>
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## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Wrist and hand

Evaluation	Management	Referral Guidelines
<b>Carpal Tunnel Syndrome</b>		
Nerve conduction studies can be performed at The Alfred; phone 9076 2058, Fax 9076 6075.	<ul style="list-style-type: none"> <li>• Consider one steroid injection</li> <li>• Splintage</li> </ul>	Refer URGENTLY-CAT 1 if muscle wasting or associated with pregnancy. May also be referred to Plastic Surgery, Neurosurgery or General Surgery Clinics. <a href="#">Return to contents page</a>
<b>Stenosing Tenovaginitis</b>		
Standard history and examination	Consider injection with steroids	Refer if functional impairment or if unresponsive to treatment after injection. <a href="#">Return to contents page</a>
<b>Basal Thumb Arthritis</b>		
<ul style="list-style-type: none"> <li>• Standard history and examination</li> <li>• X-rays (AP &amp; lateral): <a href="#">The Alfred Radiology request form</a></li> </ul>	<ul style="list-style-type: none"> <li>• Anti inflammatories</li> <li>• Activity modification</li> <li>• Consider steroid injection</li> <li>• Splinting/Physiotherapy</li> </ul>	Refer if fails to respond to treatment. <a href="#">Return to contents page</a>
<b>Ganglia</b>		
Standard history and examination	Consider aspiration (18g needle) and multiple puncture	Refer if ganglia symptomatic - cosmesis alone is not a reason for referral. <a href="#">Return to contents page</a>
<b>Painful/Stiff Wrists</b>		
<ul style="list-style-type: none"> <li>• Standard history and examination</li> <li>• X-ray (AP &amp; lateral wrist): <a href="#">The Alfred Radiology request form</a></li> <li>• FBE, ESR &amp; CRP if inflammation suspected</li> </ul>	Anti inflammatories Trial of wrist splint Physiotherapy	Refer if X-ray abnormal or if does not respond to adequate conservative treatment. <a href="#">Return to contents page</a>

## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

**Back**

Evaluation

Management

Referral Guidelines

**Mechanical low back pain without leg pain**

**Neck pain without arm pain**

**Back pain and sciatica or neck pain with arm pain, without neurology**

**Spinal stenosis with limitation of walking distance**

Standard history and examination including key points:

- Duration of symptoms
- Presence of neurological symptoms and signs
- Functional impairment
- Time off work
- Weight loss, loss of appetite and lethargy
- Fever and sweats
- Treatment to date
- Previous spinal surgery
- Previous malignant disease
- General medical condition and medication

Investigations if symptoms persist:

- X-ray (AP & lateral spine including standing views)
- CT scan/MRI (NB: MRI is the preferred imaging modality for spinal conditions)

[The Alfred Radiology request form](#)

- FBE, ESR, & CRP if inflammation is suspected

- Biochemistry

Consider according to clinical suspicion:

- Calcium and phosphate
- Protein electrophoresis
- Immunoglobulins
- PSA
- Rheumatoid serology

- Physiotherapy
- Activity modification
- Analgesics and NSAIDs (see ACC guidelines booklet)

Refer if significant symptoms persisting >6/52.

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## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Back

Evaluation

Management

Referral Guidelines

### Back pain and sciatica with neurological deficit

### Neck pain and radicular arm pain with neurological deficit

Standard history and examination including key points:

- Duration of symptoms
- Presence of neurological symptoms and signs
- Functional impairment
- Time off work
- Weight loss, loss of appetite and lethargy
- Fever and sweats
- Treatment to date
- Previous spinal surgery
- Previous malignant disease
- General medical condition and medication

Investigations if symptoms persist:

- X-ray (AP & lateral spine including standing views)
- CT scan/MRI

**NB: MRI is the preferred imaging modality for spinal conditions**

[The Alfred Radiology request form](#)

- FBE, ESR, & CRP if inflammation is suspected
  - Biochemistry
- Consider according to clinical suspicion:
- Calcium and phosphate
  - Protein electrophoresis
  - Immunoglobulins
  - PSA
  - Rheumatoid serology

If cauda equina, foot drop or cervical myelopathy – refer **IMMEDIATELY** – phone Orthopaedic Registrar on 9076 2000.  
Acute sciatica with radicular muscle power deficit refer Priority 1 – Urgent.  
Acute sciatica with radicular sensory deficit only refer Priority 2-3 - soon -intermediate.

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### Back or neck pain secondary to neoplastic disease or infection

Refer **IMMEDIATELY** – phone Orthopaedic Registrar on 9076 2000

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### Back pain with neurological bladder involvement (cauda equina syndrome)

### Neck pain with myelopathy

Refer **IMMEDIATELY** – phone Orthopaedic Registrar on call on 9076 2000 and/or send to The Alfred Emergency and Trauma Centre

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# THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

Evaluation	Management	Referral Guidelines
<b>Hip and knee</b>		
<b>Osteoarthritis</b>		
<b>Inflammatory Arthritis</b>		
<b>Post Traumatic Arthritis</b>		
<b>Avascular Necrosis</b>		
<p>Standard history and examination including key points:</p> <ul style="list-style-type: none"> <li>• Walking distance</li> <li>• Rest pain &amp; disturbance of sleep</li> <li>• Ability to put on shoes</li> <li>• Use of walking aids</li> <li>• Treatment including NSAIDs and analgesics</li> <li>• General medical conditions and medication</li> <li>• History of recurrent infections and prostatism</li> <li>• Examination for range of movement and fixed deformity</li> </ul> <p><b>Investigations:</b></p> <ul style="list-style-type: none"> <li>• X-ray (AP pelvis and lateral hip including weight bearing/standing views)</li> </ul> <p><a href="#">The Alfred Radiology request form</a></p>	<ul style="list-style-type: none"> <li>• Anti inflammatories/ analgesics/physiotherapy</li> <li>• Activity modification including the use of a walking stick</li> <li>• Weight reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Refer if significant pain, disability, sleep disturbance, unresponsive to therapy and the patient is a surgical candidate.</li> <li>• If infection suspected, contact Orthopaedic registrar immediately on 9076 2000, particularly if there are symptoms of septic arthritis (do not commence antibiotics).</li> </ul> <p>All referrals for hip and knee osteoarthritis attend the Osteoarthritis Hip and Knee Service (OAHKS), which is staffed by physiotherapists. <a href="#">OAHKS information</a></p> <p style="text-align: right;"><a href="#">Return to contents page</a></p>
<b>Previous Total Hip replacement (THR):</b>		
<b>• Infection</b>		
<b>• Loosening</b>		
<b>• Wear</b>		
<p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>• New pain</li> <li>• Limp</li> <li>• Translucency on XR</li> </ul> <p><b>Investigations:</b></p> <ul style="list-style-type: none"> <li>• X-ray (AP pelvis and lateral hip including weight bearing/standing views)</li> </ul> <p><a href="#">The Alfred Radiology request form</a></p>		<ul style="list-style-type: none"> <li>• Pain in a previous arthroplasty should be referred fairly urgently.</li> <li>• If infection suspected, contact Orthopaedic registrar immediately on 9076 2000, particularly if there are symptoms of septic arthritis (do not commence antibiotics).</li> </ul> <p style="text-align: right;"><a href="#">Return to contents page</a></p>

## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Ankles and feet

Evaluation	Management	Referral Guidelines
<b>Arthritis</b>		
Standard history and examination X-ray (AP and lateral ankle/foot including weight bearing/standing views) <a href="#">The Alfred Radiology request form</a>	Analgesics/anti inflammatories Physiotherapy Activity modification Walking aids Consider steroid injection	Refer if functional impairment despite conservative treatment  <a href="#">Return to contents page</a>
<b>Pain &amp; Deformity In Forefoot (Including Bunions)</b>		
Standard history and examination X-ray (AP and lateral foot including weight bearing/standing views) Check Tibialis Posterior <a href="#">The Alfred Radiology request form</a>	Modification footwear Orthoses Consider steroid injections for intermetatarsal bursa/ neuroma	Refer if conservative treatment fails  <a href="#">Return to contents page</a>
<b>Pain &amp; Instability In Hind Foot</b>		
Standard history and examination X-ray (AP and lateral foot including weight bearing/standing views) <a href="#">The Alfred Radiology request form</a>	Check Tibialis Posterior Modification footwear Orthoses Physiotherapy	Refer if conservative treatment fails  <a href="#">Return to contents page</a>
<b>Achilles Tendon Pathology</b>		
Standard history and examination X-ray (AP and lateral ankle/foot including weight bearing/standing views) <a href="#">The Alfred Radiology request form</a>	Physiotherapy Avoid steroid injections Heel cups/raise	Refer if conservative treatment fails  <a href="#">Return to contents page</a>
<b>Heel Pain</b>		
Standard history and examination X-ray (AP and lateral ankle/foot including weight bearing/standing views) NB: X-rays allow exclusion of some diagnoses <b>NOTE:</b> Plantar spur on an X-ray does not imply plantar fasciitis <a href="#">The Alfred Radiology request form</a>	Physiotherapy Steroid injections for plantar fasciitis Heel cups/raise	Refer if conservative treatment fails  <a href="#">Return to contents page</a>

# THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

## Miscellaneous

Evaluation

Management

Referral Guidelines

### Nerve Entrapment Syndromes :

#### • Carpal Tunnel Syndrome

#### • Ulnar Neuritis

#### • Tarsal Tunnel

Standard history and examination  
Nerve conduction studies – can be performed at The Alfred; phone 9076 2058, Fax 9076 6075.

- Consider one steroid injection for carpal tunnel
- Splintage

Refer URGENTLY-CAT 1 if muscle wasting or associated with pregnancy.  
Carpal tunnel syndrome ,may also be referred directly to Plastic Surgery, Neurosurgery or General Surgery Clinics.

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### Bone And/Or Joint Infection

Standard history and examination

- FBE
- ESR
- CRP

Do not commence antibiotics

Refer URGENTLY – phone Orthopaedic Registrar on call on 9076 2000

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### Bone & Soft Tissue Tumours

Standard history and examination

Do not needle biopsy

Refer URGENTLY to St Vincent's Hospital for further management

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### Bursitis:

#### • Pre-Patellar bursitis

#### • Trochanteric bursitis

#### • Olecranon bursitis

Standard history and examination  
Acute/inflammatory, consider aspirating for diagnosis. Will either be traumatic, gouty or infected

- FBE
- ESR
- CRP

If acute consider aspirating for relief of symptoms  
If chronic consider steroid injection

Refer if non responsive to treatment

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### Apophysitis (eg Osgood Schlatters)

Standard history and examination  
Consider X-rays:  
[The Alfred Radiology request form](#)

Activity modification, reassurance

Refer if does not settle

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### Removal of plates, screws & pins

Pain  
Ulceration  
X-ray  
[The Alfred Radiology request form](#)

- Most metal implants are not removed.
- Consider referral if painful or risk refracture.
- Consider removal if under 40 years.
- Refer back to original provider if possible.

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### Arthroplasty – including knee, shoulder, elbow, ankle

Key Points:

- New pain
- Translucency on XR

Investigations:

- X-ray  
[The Alfred Radiology request form](#)

- New or increasing pain in a previously well-functioning arthroplasty should be referred fairly urgently.
- If infection suspected, contact Orthopaedic registrar immediately on 9076 2000, particularly if there are symptoms of septic arthritis (do not commence antibiotics).

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## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Fractures

<p><b>Immediate – send to The Alfred Emergency and Trauma Centre:</b></p> <ul style="list-style-type: none"> <li>• Unstable fractures with gross deformity</li> <li>• Displaced and/or angulated fractures</li> <li>• Open fractures</li> <li>• Fractures with abnormal neurology</li> <li>• Fractures requiring reduction</li> </ul>	<p>Phone the Orthopaedic Surgery Registrar on call on 9076 2000 and/or send to The Alfred Emergency &amp; Trauma Centre.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>
<p><b>Orthopaedic clinic review within 1-3 days:</b></p> <ul style="list-style-type: none"> <li>• Grossly swollen or comminuted fractures, including those requiring a POP to be split on day of application or at first POP check</li> <li>• Fractures involving joint surfaces</li> </ul>	<p>Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>
<p><b>Orthopaedic clinic review within 5-7 days:</b></p> <ul style="list-style-type: none"> <li>• Any fractures that have not had a definitive diagnosis made eg scaphoid, radial head, distal fibula</li> <li>• Undisplaced fractures</li> </ul>	<p>Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>
<p><b>Orthopaedic clinic review within 7-10 days:</b></p> <ul style="list-style-type: none"> <li>• Fractures that have been reduced satisfactorily</li> <li>• All other fractures</li> </ul>	<p>Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>

## THE ALFRED REFERRAL GUIDELINES ORTHOPAEDIC SURGERY

### Soft tissue injuries

<p><b>Immediate – send to The Alfred Emergency and Trauma Centre:</b></p> <ul style="list-style-type: none"> <li>• Suspected grossly unstable joint</li> <li>• Knee dislocation</li> <li>• Injury to more than one knee ligament</li> <li>• Acute traumatic tendon ruptures:             <ul style="list-style-type: none"> <li>➤ Biceps</li> <li>➤ Achilles</li> <li>➤ Quadriceps</li> <li>➤ Rotator cuff in younger patients with significant trauma that may be associated with upper limb fractures</li> </ul> </li> </ul>	<p>Phone the Orthopaedic Surgery Registrar on call on 9076 2000 and/or send to The Alfred Emergency &amp; Trauma Centre.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>
<p><b>Orthopaedic clinic review within 1-3 days:</b> Any soft tissue injury that may require early specialised intervention (bracing/early surgery) :</p> <ul style="list-style-type: none"> <li>• Unstable ligament injuries:             <ul style="list-style-type: none"> <li>➤ Lateral collateral ankle ligament tear</li> <li>➤ Medial collateral knee ligament tear</li> <li>➤ Acromioclavicular joint</li> <li>➤ Gamekeeper's thumb</li> </ul> </li> <li>• Locked knee (inability to fully extend) - jammed bucket handle tear of meniscus</li> <li>• Shoulder dislocation age &lt;25 years (first occurrence)</li> <li>• Scaphoid-lunate dissociations</li> </ul>	<p>Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>
<p><b>Orthopaedic clinic review within 5-7 days:</b></p> <ul style="list-style-type: none"> <li>• Any soft tissue injury that requires a decision regarding early mobilization:             <ul style="list-style-type: none"> <li>➤ Cruciate ligament ruptures</li> <li>➤ All other shoulder dislocations</li> <li>➤ Elbow dislocations</li> </ul> </li> </ul>	<p>Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>
<p><b>Orthopaedic clinic review within 7-10 days:</b></p> <ul style="list-style-type: none"> <li>• Any soft tissue injury that is treated by immobilization:             <ul style="list-style-type: none"> <li>➤ Patella dislocation</li> <li>➤ Other immobilized ligamentous injuries (grade 2 or 3)</li> </ul> </li> </ul>	<p>Urgent cases must be discussed with the Orthopaedic Surgery Registrar on call to obtain appropriate prioritisation and then a referral letter faxed to 9076 2618.</p> <p style="text-align: right;"><a href="#"><u>Return to contents page</u></a></p>