Orthopaedic referral guidelines

When considering an orthopaedic referral, particularly when surgery is the likely outcome, it is important to consider some basic issues such as:

1. Firstly, does the patient want an operation?
2. Have all other options been exhausted prior to referral to an orthopaedic surgeon?
3. Are their symptoms intrusive enough to warrant an operation?
4. Is the patient fit for surgery and have any chronic health issues been optimised?
5. Lastly, is the patient available for surgery?

Minimum information required in all orthopaedic referrals

The clinical information and pre-requisite investigations requirements are currently found on GP referral templates for all GP software programs, the latest of which can be found at http://www.gpgc.com.au/cmsItem.aspx?CK=187.

Clinical information

To safely categorise/prioritise your patient, the orthopaedic department needs the following information as a minimum to be clearly provided in every referral:

1. Reason for referral (e.g. right hip osteoarthritis as per x-ray)
2. Has the patient been seen by a GCHHS consultant in this specialty in the past?
   a. If yes, provide GCHHS consultant’s name
3. Duration of problem (e.g. days, weeks etc.)
4. Examination findings (e.g. look, feel, move findings)
5. Impact on the patient’s activities of daily living and / or employment (very important to determine urgency)
6. Treatment to date (e.g. analgesia, physiotherapy – please provide details from the treating clinician if possible)

Pre-requisite investigations required

Please provide the pre-requisite investigations otherwise the referral could be returned to the referring GP asking for more information resulting in considerable time for both GP staff and those at the hospital referral centre.

- Bone/Joint pain (including shoulders):
  - Plain X-ray – 2 planes AP & lateral
- Soft tissue swelling:
  - Ultrasound if diagnosis uncertain
- Nerve entrapment:
  - Nerve conduction studies
- Inflammatory disease:
  - FBC, ESR, CRP, Rheumatoid Factor, ANA

## Condition specific guidelines

### Hip

<table>
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<tr>
<th>Diagnosis</th>
<th>Evaluation</th>
<th>Management</th>
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</table>
| HIP ARTHRITIS  
(Osteoarthritis/Inflammatory Arthritis/Post traumatic Arthritis)/Avascular Necrosis | **Key Points:** Walking distance, Rest pain & disturbance of sleep, Ability to put on shoes, Use of walking aids, Treatment including NSAID’s and analgesics, General medical conditions and medication, Examination of range of movement, **Investigations** X-ray (AP pelvis, AP affected hip showing proximal 2/3 femur and lateral affected hip) | **Anti inflammatories/Analgesic/physiotherapy** Activity modification including the use of a walking stick, Weight reduction, **Further Resources for Conservative Management:**  
- RACGP algorithm for non-surgical management | Refer if significant pain, Disability, sleep disturbance and unresponsive to therapy.  
- X-ray report  
- Osteoarthritis Hip Questionnaire (Not currently required, may be used in the future) |
| Previous Total Hip replacement (THR)  
Infection, Loosening, Wear | **Key Points:** New pain, Limp, Peri Prosthetic radiolucency on XR **Investigations:** FBC, ESR, CRP, X-Ray AP pelvis + upper femora, Lat view affected hip | Pain in a previous well-functioning arthroplasty should be referred.  
If infection suspected make urgent referral to ED (do not start antibiotics)  
Refer to same orthopaedic surgeon if known from your records |
### Ankles and feet

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| Arthritis                                      | X-rays     | Analgesics/anti inflammatory, Physiotherapy, Activity modification, Walking aids / shoe inserts, Consider steroid injection | Refer if functional impairment despite conservative treatment  
  * X-ray report                                      |
| Pain & deformity in Forefoot (including Bunions and Morton's Neuroma) | X-rays (WBing) | Modification footwear, Orthoses                                           | Refer if conservative treatment fails  
  * X-ray report                                      |
| Pain & Instability in Hind Foot                | X-rays     | Check Tibialis, Posterior function, Modification footwear, Orthoses, Physiotherapy | Refer if conservative treatment fails  
  * X-ray report                                      |
| Achilles Tendon Pathology                      |            | Physiotherapy, Avoid steroid injections, Heel cups/raise                  | Refer if conservative treatment fails  
  * Refer urgently if rupture suspected               |
| Heel Pain                                      | X-rays (allow exclusion of some diagnoses), NOTE: Plantar spur on an X-ray does not imply plantar fasciitis | Physiotherapy, Steroid injections for plantar fasciitis, Heel cups/raise | Refer if conservative treatment fails  
  * X-ray report                                      |

### Knees

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| KNEE CONDITION or COMPLAINT (WITHOUT ARTHRITIS)  
  ***Pre-Teen or Early Adolescent with knee pain of unknown mechanism and no radiographical knee findings should have a Hip X-ray on the affected side to rule out SUFE*** | Key Points:  
  * History of injury  
  * Haemarthrosis / effusion  
  * Pain  
  * Locking  
  * Instability  
  * Response to conservative Rx  
  * Recurrence  
  * X-ray - routine knee\ | Analgesics, Anti inflammatory, Splint, Physiotherapy, Maintain quads, Maintain ROM | Refer if persisting symptoms  
  * >6 weeks - especially with  
  * Pain  
  * Instability  
  * Locking  
  * Recurrent effusion  
  * Refer urgently if 'locked knee' suspected.  
  * X-ray |
### Knee Arthritis
- **Osteoarthritis**
- **Inflammatory Arthritis**
- **Post Traumatic Arthritis**
- **Avascular Necrosis**

#### Key Points:
- Walking distance
- Rest pain & disturbance of sleep
- Use of walking aids
- Treatment including NSAID's and analgesics
- General medical conditions and medication,
- Examination for ‘look, feel, move’

#### Investigations:
- X-ray routine knee X-rays (AP of both knees standing and lateral affected knee) - skyline / rosenberg views

#### Treatment including:
- Anti inflammatory / Analgesics / physiotherapy
- Activity modification including the use of a walking stick
- Weight reduction

#### Further Resources for Conservative Management:
- [RACGP algorithm for non-surgical management](#)

Refer if significant pain, disability, sleep disturbance and unresponsive to therapy.

#### Osteoarthritis Knee Questionnaire
(Not currently required, may be used in the future)

| Possible Ligament physical tests - McMurry Test, Lachman's Test, Anterior Drawer |

<table>
<thead>
<tr>
<th>Knee Arthritis</th>
<th>Key Points:</th>
<th>Investigations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osteoarthritis</td>
<td>Walking distance</td>
<td>X-ray routine knee X-rays (AP of both knees standing and lateral affected knee) - skyline / rosenberg views</td>
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<tr>
<td>Inflammatory Arthritis</td>
<td>Rest pain &amp; disturbance of sleep</td>
<td></td>
</tr>
<tr>
<td>Post Traumatic Arthritis</td>
<td>Use of walking aids</td>
<td></td>
</tr>
<tr>
<td>Avascular Necrosis</td>
<td>Treatment including NSAID's and analgesics</td>
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</tr>
<tr>
<td></td>
<td>General medical conditions and medication,</td>
<td></td>
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<tr>
<td></td>
<td>Examination for ‘look, feel, move’</td>
<td></td>
</tr>
</tbody>
</table>

#### Previous total knee replacement (TKR)
- **Infection**
- **Loosening**
- **Wear**

#### Key Points:
- New pain
- Limp
- Grating
- Peri Prosthetic radiolucency on X-Rays including AP of both knees standing and lateral affected side

#### Pain in a previous arthroplasty should be referred.
If infection suspected make urgent referral (do not start antibiotics) Refer to same orthopaedic surgeon if known from your records

<table>
<thead>
<tr>
<th>Previous total knee replacement (TKR)</th>
<th>Key Points:</th>
<th>Management</th>
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<tbody>
<tr>
<td>Infection</td>
<td>New pain, Limp, Grating, Peri Prosthetic radiolucency on X-Rays including AP of both knees standing and lateral affected side</td>
<td>Analgesic Activity Modification</td>
</tr>
</tbody>
</table>

#### Ulna nerve symptoms

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</thead>
<tbody>
<tr>
<td>Ulna Nerve Symptoms</td>
<td>Elbow X-ray</td>
<td>Analgesic Activity Modification</td>
<td>Refer if established permanent paraesthesia and/or motor loss in ulnar nerve distribution greater than a few weeks</td>
</tr>
</tbody>
</table>
## Elbows

<table>
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</table>
| **Tennis/Golfer’s Elbow**          | X-ray      | Forearm Bands                                   | Refer if fail to respond to treatment. Natural history of resolution in most cases  
|                                    |            | Anti inflammatories                              | • X-ray report                                             |
| **Painful/stiffness in Elbow Locking Arthritis** | Consider FBC & ESR X-ray | Anti inflammatories Physiotherapy | Refer if not responding to treatment/willing to consider surgery  
|                                    |            |                                                  | • X-ray report                                             |

## Wrist and hand

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| **Carpal Tunnel Syndrome**         | Consider Nerve Conduction Studies Tinnels Sign Phalens Test | Splint Steroid Injection Activity Modification | Refer especially if established permanent paraesthesia and motor loss  
|                                    |                                                  |                                                  | • Permanent, Persistent or Intermittent Paraesthesia localised to Median Nerve territory  
|                                    |                                                  |                                                  | • Acute or Chronic                                         |
|                                    |                                                  |                                                  | • Dominant or non-dominant hand                           |
|                                    |                                                  |                                                  | • Any evidence of Muscle Wasting                         |
| **Stenosing Tenosynovitis DeQuervains** | Consider injection with steroids Splint |                                                  | Refer if functional Impairment or if Unresponsive to treatment after injection |
| **Basal thumb arthritis** or small joint arthritis | X-ray | Anti inflammatories Activity modification Consider steroid injections Splinting/Physio | Refer if fails to respond  
|                                    |                                                  |                                                  | • X-ray                                                   |
| **Ganglia**                        | Wrist X-ray +/- ultrasound                       | Consider aspiration (18g needle)                | Refer if ganglia symptomatic                              |

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And multiple puncture

Cosmesis will receive low categorisation if sole condition Wrist X-ray +/- ultrasound

Painful/Stiff Wrists
X-ray
Anti inflammatories Trial of wrist splint Physiotherapy

Refer if X-ray abnormal or if does not respond to adequate conservative treatment
- X-ray
- Acute or Chronic

### Shoulders

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</table>
| **Rotator Cuff**
Tendinitis/Tears
Pain/stiffness in shoulder including Frozen shoulder A/C joint problems | X-rays (standard views)
Consider FBC & ESR | Anti-inflammatory Physiotherapy
Consider Cortisone injections | Age & expectations. Refer if patient fails to Respond to treatment. Evidence of weakness Suggestive of Acute rotator cuff tear in young patient is more urgent
- X-ray
- Acute or Chronic
- Mechanism of Injury if applicable |
| **Arthritis**                  | X-rays (standard views)           | Physiotherapy
Consider Cortisone injections | **X-ray**                                                                                     |
| **Recurrent dislocation of shoulder**
Shoulder instability | X-rays (standard views)           | Advise to avoid dislocation through activity modification Shoulder rehabilitation programme (physiotherapy) | Refer if recurrent functional instability and/or pain and has not responded to the rehab programme
- X-ray
- Confirm if Acute or Chronic |

### Paediatric conditions

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</tr>
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</table>
| DDH / Perthes Disease/ SCFE    | X-rays of Pelvis & AP + ‘Frog leg’ lateral |                                                    | Refer immediately if suspicious
- X-ray                                                                                     |
### APOPHYSITIS  e.g. Osgood Schlatters-Severs Disease
- Standard history and examination
- Consider X-rays
- Activity modification, Reassurance
- Splints
- Heel Raise
- Refer if does not settle

### Miscellaneous

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Bone and/or Joint Infection</td>
<td>FBC, ESR, CRP Blood Cultures</td>
<td><em><strong>Do not start antibiotics</strong></em></td>
<td>Urgent referral Contact registrar on call X-ray of the affected area</td>
</tr>
<tr>
<td></td>
<td>X-ray of the affected area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone and Soft Tissue Tumours</td>
<td>X-ray of the affected area</td>
<td></td>
<td>Refer urgently to hospital</td>
</tr>
<tr>
<td></td>
<td>Chest X-ray</td>
<td></td>
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<tr>
<td></td>
<td>FBC, U&amp;E’s, LFT’s, ESR, CRP</td>
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<td></td>
<td>Do not needle biopsy</td>
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<tr>
<td>Bursitis (Pre-Patellar, Trochanteric, Olecranon)</td>
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<tr>
<td></td>
<td>NSAID’s or NSAIDs + Antibiotics if infected</td>
<td>If acute: inflammation consider aspirating for relief of symptoms If chronic: non-infective consider steroid injection</td>
<td>Refer urgently if septic arthritis suspected or not resolving • Confirm if acute or Chronic</td>
</tr>
<tr>
<td>Presence of metal work</td>
<td>Pain Ulceration X-ray of the affected area</td>
<td>Most metal implants are not removed. Consider referral if painful or risk of re-fracture. Consider removal if under 16 years. If infection, refer same day. Do not start antibiotics • X-ray • TENS Nail @ 3-6 months</td>
<td></td>
</tr>
</tbody>
</table>