Best Practice Guidelines

Getting a Grip on Arthritis — Best Practice Guidelines
- Patient knows what kind of arthritis he or she has.
- Patients receive education about self-management strategies and contacts for further information (e.g., The Arthritis Society information line, Arthritis Self-Management Program, education and support groups, local programs).
- Patients receive a recommendation for exercise and/or a referral to an exercise program or physiotherapist.
- Patients receive information on joint protection and energy conservation techniques (e.g., splints, assistive devices) or a referral to an occupational therapist.
- Where appropriate, patients receive referral to an appropriate provider for foot orthoses or orthopedic shoes.
- Obese patients receive a recommendation for weight loss and/or a referral to a weight loss group or dietitian.
- Social support and coping is discussed with patients. Referrals made as needed.
- Acetaminophen (up to 1,000 mg four times/day) as initial therapy for pain.
- May progress to NSAIDs, advancing to higher doses as necessary. Consider NSAID contraindications, risk factors and alternatives such as cytoprotection or Cox2 agents.
- Consider intra-articular corticosteroids or hyaluronans for an OA painful knee.
- Discuss surgical referral with patient if optimal medical therapy not effective.

Red Flags for Musculoskeletal Complaints
- history of significant trauma
- significant constitutional signs & symptoms
- acute severe pain (e.g., fever, weight loss, malaise)
- focal or diffuse muscle weakness
- hot and swollen joint

Inflammatory vs. Non-Inflammatory Disorders

<table>
<thead>
<tr>
<th>Feature</th>
<th>Inflammatory</th>
<th>Non-Inflammatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint pain</td>
<td>yes—with activity and rest</td>
<td>yes—with activity</td>
</tr>
<tr>
<td>Joint swelling</td>
<td>soft tissue</td>
<td>bony (if present)</td>
</tr>
<tr>
<td>Local erythema</td>
<td>sometimes</td>
<td>absent</td>
</tr>
<tr>
<td>Local warmth</td>
<td>sometimes</td>
<td>absent</td>
</tr>
<tr>
<td>Morning stiffness</td>
<td>prolonged (&gt;60 mins)</td>
<td>variable (&lt;60 mins)</td>
</tr>
<tr>
<td>Systemic symptoms</td>
<td>common</td>
<td>rare</td>
</tr>
<tr>
<td>ESR, CRP</td>
<td>increased</td>
<td>normal for age</td>
</tr>
<tr>
<td>Haemoglobin</td>
<td>normal or low</td>
<td>normal</td>
</tr>
<tr>
<td>Serum albumin</td>
<td>normal or low</td>
<td>normal</td>
</tr>
<tr>
<td>Synovial fluid WBC/mm$^3$</td>
<td>&gt;2,000</td>
<td>&lt;2,000</td>
</tr>
<tr>
<td>Synovial fluid %PMN</td>
<td>&gt;75%</td>
<td>&lt;75%</td>
</tr>
</tbody>
</table>

Pharmacologic Treatment for OA

Analgesics:
- Acetaminophen
  - analgesia comparable to NSAIDs for mild to moderate OA knee
  - hepatotoxicity in overdose (>10 g single dose)
  -FULL dose is 1,000 mg 4x/day. Use lower dose if mild to moderate OA knee

Topical Capsaicin
- may help pain of OA but burning sensation may not be tolerable

Combination Analgesics
- enhanced short term analgesia but increased adverse side effects

Anti-inflammatories

Oral NSAIDs
- Risk factors for GI toxicity (e.g., dyspepsia, hemorrhage, perforation, death) include:
  - prior ulcer disease
  - warfarin
  - co-morbid illness (e.g., BP, CHF, RF, HF)
  - excessive ethanol or phenytoin may increase hepatotoxicity
- Topical Corticosteroids
  - may help pain of OA but burning sensation may not be tolerable

Risk factors for increased renal toxicity include:
- pre-existing renal disease
- hypoperfusion (low output cardiac disease, liver disease, hypovolemia, sodium depletion, hypoaalbuminemia, BP, diuretics, extreme exercise)
- concomitant drug therapy (e.g., diuretics, beta blockers, ACE inhibitors, CYA)
- Risk of drug interactions
  - do not use COX-2 NSAIDs with triamterene
  - decrease celecoxib levels with carbamazepine and phenytoin (p450 inducers)
- dose adjustment may be required with:
  - digoxin
  - phenytoin
  - lithium

Baseline Screening Lab
- Patients over 65 or with comorbid conditions affecting renal function should have:
  - Serum creatinine and electrolytes
  - Calculate creatinine clearance using Cockcroft-Gault formula creatinine clearance (mL/min) = 140 - (age in years) X (weight in kg) / (serum creatinine in umol/L) X 1.2 (males only)

Monitoring Patients on NSAIDs
- Recheck INR frequently after initiation if on anticoagulants
- Hypertensives: check BP 1–2 weeks after initiation of COX-2 NSAID
- Reassess need for continuing therapy Q 3-4 months
- Monitor renal function in those at risk of renal toxicity
Topical NSAIDs—Pereenaid

Intra-Articular Injections
- IA corticosteroids may provide acute pain relief for OA knee with effusion and local inflammation—benefit wanes after 4-6 weeks
- Consider IA hyaluronan for mild to moderate OA knee (expensive)

Glucosamine (mild–moderate OA of the knee)
Improved pain and mobility and delay in radiologic progression—unregulated quality of supply

Non-pharmacologic Treatment of OA
Electro-acupuncture (moderate–severe OA of the knee)

Criteria for Diagnosis of Rheumatoid Arthritis
At least 4 of the following present for at least 6 weeks:
- Morning stiffness in and around joints for 1 hour or more
- Arthritis of 3 or more joint areas (soft tissue swelling or fluid)
- Arthritis of hand joints (swell, MCP,PIP)
- Symmetric arthritis. Bilateral involvement PIP, MCP or MTP joints
- Rheumatoid nodules
- Serum rheumatoid factor abnormally elevated
- Radiographic changes on hand and wrist views (erosions, decalcification)

Pharmacologic Treatment for RA

DMARDs (disease-modifying anti-rheumatic drugs)
- improve symptoms and reduce long-term disability
- combination DMARD therapy is indicated in early RA

NSAIDs provide symptom relief but do not alter course of RA.

Urgent referral to a rheumatologist is recommended for the following:
- diagnostic uncertainty or confirmation
- management uncertainty
- medication complications
- organ involvement or life-threatening disease
- *Always call or indicate degree of urgency on referral letter*

Referral to an orthopedic surgeon is recommended for the following:
- joint infection
- diagnostic procedures such as arthroscopy or synovial biopsy

Referral to a physiotherapist or occupational therapist is recommended for the following:
- range of motion and functional use
- assist with braces, splints, mobility devices or equipment to improve function
- education and support

Referral to a rheumatologist is recommended for the following:
- organ involvement or life-threatening disease
- management of complications
- organ involvement or life-threatening disease
- *Always call or indicate degree of urgency on referral letter*

Commonly Used DMARDs and Biologic Response Modifiers and Suggested Lab Monitoring

**DRUG** | **COMMON S/E** | **UNCOMMON S/E** | **MONITORING**
--- | --- | --- | ---
**DMARDs**
Hydroxychloroquine | GI | Fundoscopy, visual fields | CBC, platelets, LFTs
Plaquenil (e.g., Plaquenil) 200-400 PO qd PO/MC weekly | GI, rash | CBC, platelets, LFTs
| | | 25 mg-50 mg daily
Methotrexate | GI, respiratory tract | CBC, platelets, LFTs
15-25 mg PO/MC weekly folate supplement benefits begin in 1-2 months
| | | 50 mg PO/MC weekly
Sulfasalazine | GI, respiratory tract | CBC, platelets, LFTs
150-250 mg PO qd benefits begin in 1-3 months
| | | 500-1000 mg PO qd
Gold, injectable | RESISTANT | CBC, platelets, LFTs
| | | 25 mg PO/SC 2X/wk
Cyclosporine | GI, respiratory tract | CBC, platelets, LFTs
250-500 mg PO/SC 2X/wk | | 25 mg PO/SC 2X/wk
Azathioprine | GI, respiratory tract | CBC, platelets, LFTs
50-100 mg PO qd benefits begin in 2-4 months
| | | 50-100 mg PO qd
Leflunomide | GI, respiratory tract | CBC, platelets, LFTs
| | | 10-20 mg PO daily benefits begin in 2-3 months
**BILOGIC RESPONSE MODIFIERS**
Infliximab (Remicade) 3-5 mg/m2 IV Q4-6weeks benefits begin in 0-4 months
| Infusion reaction: Hypersensitivity, CHF | CBC, platelets, LFTs, albumin (4-8 weeks)
Etanercept (Enbrel) 25 mg SC 2X/wk
| Redness, pain, and swelling at injection site | CBC, platelets, LFTs, albumin (4-8 weeks)
| | | 25 mg SC 2X/wk
Anakinra (Kineret) 100 mg SC daily benefits begin in 0-4 months
| Redness, swelling, bruising, itching, and stinging at injection site | CBC, platelets, LFTs, albumin (4-8 weeks)

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For more information contact
The Arthritis Society at 1.800.321.1433 or www.arthritis.ca

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