## Clinical Guidelines for Nonsurgical Management of Osteoarthritis

### Osteoarthritis management core treatment

#### Nonpharmacologic

- **Exercise:** low-impact aerobic, aquatic, strength training, neuromuscular education
- **Weight loss** (if BMI > 25)
- **Self-management program** (Arthritis Foundation)
- **Thermal agents** (heat/cold)
- **Tai chi**

#### Pharmacologic

- **Oral NSAID** +/- **PPI**
- **Oral Cox2**
- **Topical capsaicin** (OTC) or NSAID, e.g., Voltaren gel
- **Acetaminophen** (not to exceed 3000mg/day)
- **Tramadol**
- **Chondroitin Sulfate** and/or **Glucosamine**
  (If no help d/c after 3-month trial)

### Location

<table>
<thead>
<tr>
<th>Hand</th>
<th>Knee</th>
<th>Hip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate ADLs</td>
<td>Effusion</td>
<td>Use mobility aids</td>
</tr>
<tr>
<td>Instruct in joint protection</td>
<td>Cold therapy</td>
<td>as needed</td>
</tr>
<tr>
<td>Provide assistive devices</td>
<td>+/- aspiration</td>
<td>(e.g., cane, crutches, or walker)</td>
</tr>
<tr>
<td>Heat modalities</td>
<td>Corticosteroid intraarticular injection</td>
<td></td>
</tr>
<tr>
<td>Splint (MCPJ/TMCJ)</td>
<td>Viscous supplementation injection *** (refer to orthopedic surgeon)</td>
<td></td>
</tr>
</tbody>
</table>

**Refer for medial wedge shoe insoles for valgus knee OA, subtalar strapped lateral insoles for varus knee, medially directed patellar taping (ACR recommends/AAOS does not)**

### Referral

Failed conservative treatment with significant functional loss and pain

- Refer to orthopedic surgeon:
  - Send documentation of failed conservative treatment modalities
  - Anemia work up, dental evaluation, sleep apnea study, PT for core strengthening
  - Standing AP, lateral and sunrise views of the knee; AP pelvis and frog leg lateral views of the hip

### Refuses Referral or Unable to be Cleared for Surgery

Opioids (Follow American Pain Society/American Academy of Pain Medicine guidelines regarding opioid analgesics)

Refer to pain clinic

**Comorbid pharmacologic management:** NSAIDs: use lowest dose for the shortest duration

- **Cardiovascular on ASA:** Ok to use most NSAIDs but add proton pump inhibitor (PPI): Do not use Ibuprofen (reduces effectiveness of ASA): Do not use Cox-2 inhibitors (C2Is) (celecoxib [Celebrex])
- **Renal stage IV and V (eGFR <30 mL/min)** do not use NSAIDs; evaluate Stage III (eGFR between 30–59 mL/min) for benefits vs risk

*Upper GI*: Upper GI bleed within 1 year use C2I with PPI; history of symptomatic or uncomplicated ulcer use NSAID or C2I with PPI

***Viscous supplementation not recommended by AAOS or ACR guidelines based on lack of efficacy not potential harm.

Adapted from American Academy of Orthopaedic Surgeons (AAOS) 2013 and the American College of Rheumatologist (ACR) 2012 guidelines.