

CARE GUIDE for *Osteoarthritis*

| SUGGESTED GUIDELINES | PROCESS | IMPORTANT FINDINGS MEASUREMENTS AND VALUES | INTERVENTION | FOLLOW-UP |
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| Initial Evaluation: Suspected Knee Degenerative Joint Disease (DJD) (1,2) | <ul style="list-style-type: none"> • Diagnosis of osteoarthritis (OA) is mostly clinical: History and Physical point to correct diagnosis. • Disease is progressive and insidious (acute joint presentation is possible but not common). | <ul style="list-style-type: none"> • Physical findings <ul style="list-style-type: none"> ➢ Swelling due to effusion with little synovial thickening, usually with little warmth ➢ Atrophy of the surrounding muscles ➢ Restricted active and passive range of motion ➢ Crepitus ➢ Pain at the extremes of existing range of motion ➢ Joint deformity | <ul style="list-style-type: none"> • Set realistic expectations • Educate patient about the natural history of OA • Management may require interdisciplinary approach • Immediate intervention for those presenting with: <ul style="list-style-type: none"> ➢ Hot, swollen joint, with or without fever and/or feeling ill ➢ Cannot bear weight on leg ➢ Leg or foot is cool and/or blue ➢ Deformity ➢ Severe pain ➢ Locked knee (unable to bend) ➢ Demands to be seen today | <ul style="list-style-type: none"> • If findings are inconclusive for DJD, further work-up indicated. • AP, lateral & patellar films are indicated in: <ul style="list-style-type: none"> ➢ Trauma, significant effusion, loss of range of motion, severe pain, failed conservative treatment |
| Further Evaluation (2,3) | <ul style="list-style-type: none"> • If atypical clinical features are present, or if age is younger than 50 years, pursue additional studies. | <ul style="list-style-type: none"> • Imaging (X-Ray, MRI, CT, Ultrasound, bone scan) • Laboratory studies <ul style="list-style-type: none"> ➢ Erythrocyte Sedimentation Rate (ESR), uric acid ➢ Rheumatoid Factor • Joint tap and other studies as needed <ul style="list-style-type: none"> ➢ Gram stain and bacterial culture ➢ Crystal analysis ➢ Cell count and differential ➢ Glucose, protein, LDH | <ul style="list-style-type: none"> • Findings may indicate need for referral to rheumatologist, orthopedic surgeon, physical medicine and rehabilitation medicine. | <ul style="list-style-type: none"> • Coordinate follow-up care with specialist as needed. |
| General Treatment (1,2, 4-8) | <ul style="list-style-type: none"> • Initiate conservative regimen • Goals of treatment are to: <ul style="list-style-type: none"> ➢ Provide understanding of disease and self-management ➢ Reduce pain | <ul style="list-style-type: none"> • Patient self-care education and local support groups (materials available through the Arthritis Foundation www.arthritis.org/default.asp) • Begin periarticular muscle strengthening exercises, particularly quadriceps muscles • Cold and/or heat therapy • Protective and assistive/adaptive devices • Avoid prolonged kneeling, sitting, walking, climbing | <ul style="list-style-type: none"> • Document any subjective or objective improvements: range of motion, muscle strength, weight reduction • Monitor GI, hematologic, hepatic, and renal function, as well as the GI, BP and fluid | |

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| | <ul style="list-style-type: none"> ➤ Instruct on exercises ➤ Improve overall functioning and safety • Overall treatment should be tailored, taking into account age, comorbidity and the presence of inflammation | <ul style="list-style-type: none"> • Weight loss, minimum of 5% of body weight, especially when BMI > 25 • Low impact, moderate intensity aerobic exercise (150 minutes/week), balance training, and range of motion/flexibility exercises • Evaluate for co-morbidities that can affect choice of pharmacotherapy: Age ≥ 60 years old, CHF, Chronic Kidney Disease, diabetes, history of peptic ulcer disease (PUD) or increased gastrointestinal (GI) bleeding risk. <p>Pharmaceutical Therapies</p> <ul style="list-style-type: none"> • Begin with scheduled doses of Acetaminophen (not to exceed 4 grams/day). If no results after 2-4 weeks and no contraindications, consider non-steroidal anti inflammatory drugs (NSAIDs), or Cyclooxygenase – 2 inhibitors (COX – 2) with gastric protection if at risk for GI toxicity <ul style="list-style-type: none"> ➤ Topicals: NSAIDs/salicylates/capsaicin • Consider concomitant proton pump inhibitor (PPI) high dose therapy for gastric mucosal protection in appropriate at-risk patients on long-term NSAID: <ul style="list-style-type: none"> ➤ High Risk: <ul style="list-style-type: none"> History of a previously complicated ulcer, especially recent > 2 of the Moderate Risk Factors ➤ Moderate Risk (1-2 factors): <ul style="list-style-type: none"> Age > 65 years High dose NSAID therapy A previous history of uncomplicated ulcer Concurrent use of aspirin (including low dose), corticosteroids, or anticoagulants • Non-narcotic analgesics • Injections (see below) | <p>status in all patients on long term NSAID therapy</p> | |
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| <p>Invasive Treatments- Knee Injections, Joint Replacement (1,2,6,8)</p> | | <ul style="list-style-type: none"> • For persistent symptoms, consider single dose of intra-articular corticosteroids, or • Synthetic hyaluronates injections may be effective treatment for pain in selected patients with mild to moderate DJD of the knee. • For severe, disabling disease consider joint replacement | <ul style="list-style-type: none"> • Patients with complex co-morbidities or advanced disease refer to Rheumatologist, Orthopedic surgeon (considering knee replacement), or Physical Medicine specialist. | <ul style="list-style-type: none"> • Coordinate follow-up care as needed |

* The FDA requested that sponsors of all non-steroidal anti-inflammatory drugs (NSAID) make labeling changes to their products. FDA recommended proposed labeling for both the prescription and over-the-counter (OTC) NSAIDs and a medication guide for the entire class of prescription products. All sponsors of marketed prescription NSAIDs, including Celebrex (celecoxib), a COX-2 selective NSAID, have been asked to revise the labeling (package insert) for their products to include a boxed warning, highlighting the potential for increased risk of cardiovascular (CV) events and the well described, serious, potential life-threatening gastrointestinal (GI) bleeding associated with their use. For more information see the FDA web site.

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