



Michigan Quality Improvement Consortium Guideline

Medical Management of Adults with Osteoarthritis

The following guideline recommends initial evaluation, nonpharmacologic and pharmacologic interventions for the management of osteoarthritis.

Eligible Population	Key Components	Recommendation and Level of Evidence		
Adults with clinical suspicion or confirmed diagnosis of osteoarthritis	Initial evaluation	<ul style="list-style-type: none"> ◆ Detailed history (aspirin use, pain control with over-the-counter medications, activity tolerance and limitations) ◆ Physical examination ◆ <u>Assess gastrointestinal (GI) risk:</u> <ul style="list-style-type: none"> ◆ History of GI bleeding ◆ History of peptic ulcer disease and/or non-steroidal induced GI symptoms ◆ Concomitant use of corticosteroids and/or warfarin [A] ◆ High dose, chronic, or multiple NSAIDs including aspirin ◆ Age > 60 yrs 		
	Nonpharmacologic modalities	Treatment plan should include: <ul style="list-style-type: none"> ◆ education and counseling regarding weight reduction and joint protection ◆ range-of-motion [B], aerobic and muscle strengthening exercises ◆ for patients with functional limitations, consider physical and occupational therapy ◆ self-management resources (e.g., American Arthritis Foundation self help course and book) For select patients: <ul style="list-style-type: none"> ◆ assistive devices for ambulation and activities of daily living ◆ appropriate footwear, orthotics (e.g., wedged insoles) 		
	Pharmacologic Therapy			
	Therapies other than NSAIDs	<ul style="list-style-type: none"> ◆ Initial drug of choice: Acetaminophen at maximum recommended dose, modify dose for patients at risk for toxicity (note patients with hepatic toxicity risk factors, especially those on aspirin, or warfarin). Warn patients that many over the counter products contain acetaminophen and to monitor dose carefully. Reassess and taper as tolerated. ◆ Topical capsaicin 		
	NSAID analgesics:	No or low NSAID GI risk	NSAID GI risk	
	<ul style="list-style-type: none"> ◆ No cardiovascular risk ◆ Cardiovascular risk 	<ul style="list-style-type: none"> ◆ NSAID ◆ Add PPI¹ if on aspirin, plus risk warrants GI protection 	<ul style="list-style-type: none"> ◆ NSAID plus PPI¹ ◆ If NSAID not tolerated, Cyclo-oxygenase-2 (COX-2) selective inhibitor ◆ For those with prior GI bleed avoid all NSAIDs/COX-2, if must use, then COX-2 plus PPI¹[D] 	
	<ul style="list-style-type: none"> ◆ Naproxen^{2,3} ◆ Add PPI¹ if GI risk of aspirin/NSAID combination warrants GI protection 	<ul style="list-style-type: none"> ◆ Naproxen^{2,3} plus PPI¹ if cardiovascular risk > GI risk ◆ COX-2 plus PPI¹ if GI risk > cardiovascular risk 		
Other pharmacologic agents	<ul style="list-style-type: none"> ◆ Nonacetylated salicylate, tramadol, opioids, intra-articular glucocorticoids or hyaluronate, lidoderm or methylsalicylate 			

¹ Misoprostol at full dose (200 µg four times a day) may be substituted for PPI.

² Naproxen probably has lowest cardiovascular risk of NSAID/COX-2 class.

³ If aspirin is used daily, COX-2 offers no advantage over NSAID.

Levels of Evidence for the most significant recommendations: A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline lists core management steps and is based on the following sources: The ICSI Diagnosis and Treatment of Adult Degenerative Joint Disease (DJD)/Osteoarthritis (OA) of the Knee, Institute for Clinical Systems Improvement, 2007 ([icsi.org](http://www.icsi.org)) and Scheiman JM. Summing the Risk of NSAID Therapy. *Lancet* 2007; 369:1580-1. Individual patient considerations and advances in medical science may supersede or modify these recommendations.