PHARMACISTS HELPING PATIENTS MAXIMIZE FUNCTION

FOCUS ON OSTEOARTHRITIS

This resource is designed to support pharmacists' consultations with patients who have osteoarthritis (OA). It provides information about the impact of OA, strategies to engage patients with OA, and an overview of treatment options.

UNDERSTANDING OSTEOARTHRITIS

PREVALENCE

- An estimated one in five adults in the United States has been diagnosed with arthritis.[1]
- OA is the most common form of arthritis and ranks among the top three health conditions causing disability.[2,3]

CLINICAL MANIFESTATIONS OF OA

- OA involves the release of inflammatory mediators by cartilage, bone, and synovium, and has been linked to many health conditions, including increased risk for cardiovascular disease.[4-6]
- Symptoms include pain, swelling, and stiffness in the affected joints.

THE VICIOUS CYCLE OF OA

- Patients with OA often experience reduced mobility and challenges performing activities of daily living.
- Patients often become sedentary and gain weight.
- Worsening mobility impairs patient function and further contributes to undesirable health conditions.
- Physical impacts may include cardiovascular disease, diabetes, and some types of cancer.
- Mental and psychological impairments may include depression, anxiety, and decreasing cognitive function.[7]

CONNECTING PATIENTS WITH TREATMENT

In addition to having difficulty with function and mobility, patients with OA may have challenges with treatment, including:

- Identifying and accessing appropriate treatment options.
- Understanding the risks and benefits of pain medications.
- Adhering to a pain management treatment plan.
- Being at risk for the misuse or abuse of pain medications.

Research has found that involving pharmacists in the care of patients with OA can improve utilization of treatments, function, pain, and quality of life for their patients.[8] Pharmacists can help patients:

- Navigate treatment options.
- Establish and attain functional goals.
- Minimize factors that may lead to poor health outcomes.
- Adhere to treatment recommendations.

IMPROVING THE APPROACH TO PAIN MANAGEMENT IN PATIENTS WITH OA

As a chronic painful condition, OA often requires a multifaceted approach that addresses a range of patient needs to maintain function and mobility. Components of treatment may include:

- Appropriate pain management to attain goals of improved function, health, and quality of life.
- Exercise to help control weight and maintain balance and mobility.
- Weight loss, which is particularly beneficial for patients with OA because it reduces strain on weight-bearing joints, and obesity itself is a cause of inflammation that can contribute to OA.[6]
- Educational programs and ongoing support.[9]

Many tools and resources are available to provide education and support for patients with OA. For example, links to useful resources from the Arthritis Foundation are available at www.arthritis.org/toolkits/arthritis-pain. Additionally, pharmacists can use motivational interviewing (MI) strategies to guide patients toward engaging in behaviors that will help them achieve their treatment goals.

METHODS FOR SUPPORT: MOTIVATIONAL INTERVIEWING

MI uses a patient-centered approach that acknowledges the patient's expertise about his or her problems and empowers the patient to develop intrinsic motivation.[10] Self-motivation is crucial when considering the importance of exercise and weight-loss in care plans for OA. Examples of MI strategies that pharmacists can use are shown in Table 1.

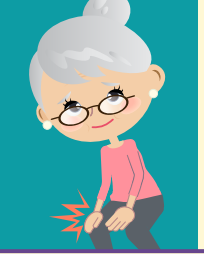

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Table 1. Motivational Interviewing Strategies to Engage Patients with Osteoarthritis

STRATEGY	EXAMPLES
Asking open-ended questions	• How does your pain impact your ability to exercise? • What is something that you would like to be able to do that you can't because of your pain?
Expressing empathy	• It sounds as though your knee pain has been very frustrating for you. • You sound really upset that you haven't been able to exercise as much as you want.
Using affirmative statements	• It sounds as though you are struggling to do things that are important to you, but you want to keep moving and that is why you are taking extra pain medication. Do I have that right?
Supporting self-efficacy	• You have done a great job making it to your physical therapy appointments.
Employing reflections	• I want to make sure I understand what you are saying. I'm hearing that you want to exercise more but you're not sure you will be able to do that without taking more medication.
Summarizing statements	• You are aware of the benefits of exercise for managing your arthritis but also have concerns about the risks associated with taking more pain medications. Is that correct?

MI takes practice. The following resources provide additional guidance on this impactful method of communication:
Motivational Interviewing for Health Care Professionals: A Sensible Approach, by Bruce A. Berger and William A. Villaume http://www.pharmacist.com/current-apha-ebooks,
Motivational Interviewing: Empowering Patients to Change Behaviors, by Anita Sharma, Ashley Crowl, Chrystian Pereira, and Jean Moon, http://elearning.pharmacist.com/Files/Org/891a6284d25f43edab1443c43926d07c/LearningProduct/083_NE_08.pdf

TREATMENT OPTIONS FOR OA

OA should be managed through a holistic approach that considers patient comorbidities, medications, and risk factors. Early recognition and treatment with nonpharmacologic approaches can slow disease progression and lessen the need for long-term medications. The most appropriate interventions will depend on the joints affected, symptom severity, and other individual patient factors. Evidence-based nonpharmacologic recommendations include:[11-17]

- Self-management programs and education
- Weight loss, if body mass index ≥25
- Joint protection (splinting)
- Range of motion exercises
- Low-impact aerobic exercise, including aquatic exercise
- Strength training
- Appropriate footwear
- Physical therapy
- Walking aids/assistive devices
- Balneotherapy/thermal agents
- Acupuncture

If nonpharmacologic treatments alone do not provide sufficient efficacy, pharmacologic treatments may be appropriate to help reduce pain and enable patients to maintain mobility, engage in physical activity, and break the vicious cycle of worsening pain and declining function. Table 2 provides guidance on pharmacologic treatments for OA, including their role in therapy, important counseling points, and which treatments should be used with increased caution.

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Table 2. Pharmacologic Options for Osteoarthritis

TREATMENT	ROLE IN THERAPY	COUNSELING POINTS
Topical therapies		
Capsaicin	• Only topical OTC product proven effective for OA. • Safer for high-risk patients.	• A burning sensation is expected and diminishes with time and use. • Wash hands after applying the product. • Warm water may be perceived as burning sensation where product was applied; this diminishes with time and use. • No drug interactions.
Topical NSAIDs	• May be appropriate if acetaminophen or other first-line strategies are not sufficient. • Similar efficacy and reduced risk compared with oral NSAIDs.	Risks associated with oral NSAIDs are reduced but not eliminated.
Oral therapies		
Acetaminophen	First-line treatment for mild-to-moderate pain due to safety profile and lack of association with CVD and GI complications.	• Avoid all other products with acetaminophen, including OTC cold medications and opioid combinations. • Risk of hepatotoxicity with overdosage and concurrent alcohol intake.
Glucosamine and chondroitin	• Some benefits seen with some formulations of these products. • Minimal risk.	• Mixed evidence of efficacy. Benefit is not expected immediately. • Should be taken for 3 months to determine if there is any benefit.
Oral NSAIDs	• May be appropriate if acetaminophen or other first-line strategies are not sufficient. • Should be used at lowest effective dose for shortest period of time. • Improved efficacy but use is limited by risks.	• Increased risk for CVD and GI bleeding. • Should be avoided in patients with renal impairment. • Consider PPI for gastroprotection, but chronic use highly discouraged due to adverse events and association with CVD.
Duloxetine	• Approved for the management of chronic musculoskeletal pain. May reduce pain and improve function in patients with knee OA. • Reserved for those with knee OA who do not respond well to or cannot tolerate other therapies.	• GI and CNS adverse events are common. • May cause a modest increase in blood pressure or may cause hypotension during treatment initiation. • Closely monitor blood glucose in patients with diabetes.
Opioids	• May be used with caution in patients who have failed other therapies and are not candidates for surgery. • Tramadol is usually used as the first option before progressing to other opioids.	• Hyperalgesia (heightened sensitivity to pain) can occur with long-term use. • Risks for respiratory depression and constipation. • Risks for misuse, abuse, and diversion must be carefully managed. • High risk for falls in elderly patients.
Intra-articular medications		
Corticosteroids	Option for patients unable to attain relief from acetaminophen or other first-line therapies. Faster onset than hyaluronic acid.	Intra-articular corticosteroids provide short-term relief (4 to 8 weeks) for the management of knee OA.
Hyaluronic acid (viscosupplementation)	Option for patients needing pain relief from knee OA and improved mobility for longer periods of time than provided with intra-articular corticosteroids.	• Safer option for many patients. • No known risk of drug interactions.

☐ Pharmacologic options with lower risk. ☐ Pharmacologic options with higher risk.

BP = blood pressure; CNS = central nervous system; CVD = cardiovascular disease; GI = gastrointestinal; NSAID = nonsteroidal anti-inflammatory drug; OA = osteoarthritis; OTC = over-the-counter; PPI = proton pump inhibitor.

Source: *References 13, 18, and 19.*

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ACKNOWLEDGMENTS

APhA gratefully acknowledges the financial support from Sanofi US Services, Inc., for the development of this resource, Focus on Osteoarthritis: Pharmacists Helping Patients Maximize Function. The following individuals served as APhA content developers and pharmacy practice advisors: **Leticia A. Shea, PharmD, BCACP; Kelly Brock, PharmD; and Theodore Pikoulas, PharmD, BCPP**.

Supported by SANOFI

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