

**THE PHILIPPINE RHEUMATOLOGY ASSOCIATION  
CLINICAL PRACTICE GUIDELINES FOR THE  
MEDICAL MANAGEMENT OF KNEE  
OSTEOARTHRITIS (OA)**

**CONVENTIONAL THERAPY**

**NON-PHARMACOLOGIC**

**Recommendations for Education**

1. There is insufficient evidence to recommend structured arthritis self-management programmes over the usual clinic practice for the control of pain in knee OA.

Level of Evidence: High

2. Patient education consisting of physician advice and educational/reading materials (usual clinic practice) is recommended in the control of pain in knee OA.

Level of evidence: Low (Expert Panel recommendation)

**Recommendation for Weight Reduction**

3. Weight loss is recommended as a core treatment for obese and overweight adults with knee OA. Five percent weight loss significantly improves pain and function in knee OA.

Level of evidence: High

**PHARMACOLOGIC**

**Recommendations for Analgesics**

4. Paracetamol is recommended as first line drug therapy for reduction of mild knee OA pain using a maximum dose of 4 grams daily. However, close monitoring for upper GI adverse events should be done for doses greater than 2 grams per day.

Level of evidence: High

5. Tramadol is recommended for the control of moderate pain and improvement of function in knee OA. It is further recommended that patients be warned of adverse events like dizziness and vomiting.

Level of evidence: High

**Recommendation for NSAIDs**

6. Oral NSAIDs and COXIBs up to 2 weeks duration are recommended for their small to moderate effect in reducing exacerbations of knee OA pain and improving function with no significant adverse events among patients with no known renal, cardiovascular and gastrointestinal risk factors.

Level of evidence: High

7. Exercise caution in the use of these drugs among patients who are:

- elderly
- those at high risk for renal, cardiovascular and gastrointestinal complications.

8. Topical NSAIDs are recommended for the control of symptomatic or acute exacerbation of knee OA and improvement of function and has less systemic side effects compared to oral preparations.

Level of evidence: High

**Recommendations for Intra-articular (IA) Steroids**

9. IA steroids, administered by experts, is recommended as effective and safe in the treatment of moderate symptomatic exacerbations of knee OA and improvement of function, with effects of up to 1-3 weeks.

Level of evidence: High

10. Further injections in case of recurrence should not exceed 3 times per year in the same joint.

Level of evidence: Low (Expert Panel recommendation)

11. There is no data to support the role of oral steroids in the treatment of knee OA.

**Recommendations for IA Hyaluronic acid (IAHA)**

12. IAHA, administered by experts in 3-5 weekly injections is recommended for moderate pain reduction and improvement of function in patients with moderate knee OA.

IAHA is more effective than IA steroids for its longer duration of pain control and improved function of up to 5 - 13 weeks.

Level of Evidence: Moderate

13. IAHA may be considered for subsets of patients with moderate knee OA while awaiting more definitive treatment (surgery).

Level of evidence: Low (Expert Panel recommendation)

**Recommendations for Glucosamine and Chondroitin**

*Glucosamine*

14. The use of pharmaceutical grade of glucosamine sulfate is recommended for its small benefit on pain reduction and improvement of function in patients with knee OA.

Level of evidence: High

15. The use of glucosamine hydrochloride is not recommended for knee OA.

Level of evidence: Low (Expert Panel recommendation)

16. Data from trials involving the pharmaceutical grade form of the drug cannot be extrapolated to the nutraceutical preparations or other non-bioequivalent formulation.

Level of evidence: Low (Expert Panel recommendation)

### *Chondroitin*

17. Chondroitin sulfate is not recommended for knee osteoarthritis.

Level of evidence: High

### *Combination glucosamine and chondroitin sulfate*

18. In general, the combination of glucosamine hydrochloride and chondroitin sulfate is not recommended for knee osteoarthritis.

Level of evidence: Moderate

Addendum: There is no literature available on the combination glucosamine sulphate and chondroitin sulphate for knee OA.

## COMPLEMENTARY AND ALTERNATIVE THERAPY

### Recommendation for Complementary and Alternative Medicine (CAM)

#### *Spa or balneotherapy*

19. There is insufficient evidence to recommend spa treatment for the control of pain and improvement of function in knee OA.

Level of evidence: Low

#### *Tai Ch'i*

20. There is insufficient evidence to recommend Tai ch'i for the control of pain and improvement of function in knee OA.

Level of evidence: Low

#### *Yoga*

21. There is insufficient data to recommend yoga to control pain and improve function in knee OA.

Level of evidence: Low

### *Acupuncture*

22. Manual or electroacupuncture is recommended as additional therapy to achieve pain relief lasting a few weeks in patients with moderate knee pain due to OA.

The procedure must be adequate and performed by a trained and experienced acupuncturist.

Level of evidence: High

### *Herbal preparations*

23. The use of concentrated standardized ginger preparation is recommended for its moderate effect in the control of pain and improvement of function in knee OA. Patients should be warned of gastrointestinal adverse reactions that can occur with this preparation.

Level of evidence: Moderate

24. There is insufficient data on comfrey, Chinese herbal recipe, Chinese pills, rose hip, devil's claw, to recommend their use in knee OA.

### *Massage*

25. There is insufficient evidence to recommend massage (standard Swedish) for the treatment of knee OA.

Level of evidence: Low

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## THE PHILIPPINE RHEUMATOLOGY ASSOCIATION CLINICAL PRACTICE GUIDELINES FOR THE MEDICAL MANAGEMENT OF KNEE OSTEOARTHRITIS (OA)

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Osteoarthritis is the most common joint disease worldwide. In the Philippines, its prevalence is 0.5% in individuals aged 20 years and above and increases to 11% in the population aged 60 years and above (NNHeS, 2003). These figures are similar to foreign data. We are therefore looking at roughly 10 million Filipinos with the disease. This number is expected to double in the next 25 years (Summary Demographic Data for the Philippines, US Census Bureau, International Database July, 2003). This staggering projection compels us to look into our treatment strategies for osteoarthritis.

There are several important guidelines for the treatment of knee OA, including the American Rheumatology Association (ACR) Guidelines for the Management of Osteoarthritis of the knees and hips, the European League of Associations for Rheumatology (EULAR) Treatment Guidelines for OA (with several and on -going amendments to date), Singapore, and other individual countries. Within countries, specialties like Orthopedic Surgery, Family Physicians, Pain, etc., have likewise developed guidelines for the treatment of OA. All these guidelines agree on two important interventions and indications: physical measures as "cornerstone" of treatment and surgery for cases refractory to medical management.

The Philippine Rheumatology Association created a Technical Working Committee tasked with identifying gaps in the existing guidelines and formulating evidence-based recommendations for the medical management of knee OA.

Methods: The Technical Working Committee listed specific treatment modalities for review, including those already in existing recommendations and those which are not, and in the process, identified the lack of evidence -based recommendations for the use of complementary or alternative medicine for knee OA. All randomized clinical trials, meta-analyses, systematic reviews of treatments for knee OA with outcomes for pain, function and adverse events measured by WOMAC, Lequesne, SF 36, AIMS, HAQ, VAS, Likert scales were included. A search strategy was defined and MEDLINE search of Pubmed, OVID, Cochrane databases as well as Herdin and local links to the Department of Science and Technology (DOST), and hand search for publications in the Department of Pharmacology Library, UP College of Medicine was done for articles published up to June, 2008. Twenty- five recommendations were formulated, presented to a Panel of Experts, reviewed and hereby submitted.