

THE HONG KONG COLLEGE OF ORTHOPAEDIC SURGEONS

POSITION STATEMENT

IN MANAGEMENT OF OSTEOARTHRITIS OF KNEE

Endorsed by: The Hong Kong College of Orthopaedic Surgeons

[Cite this Position Statement](#)

(I) NON-SURGICAL MANAGEMENT

a. Non-pharmaceutical management

(i) **Education and Exercise**

Patient education

We RECOMMEND patients suffering from osteoarthritis of knee to receive education program for symptoms relief.

Land-based Exercise

We RECOMMEND land-based exercise (both supervised and unsupervised exercise) for pain relief and functional improvement in patients suffering from osteoarthritis of knee.

Water-based Exercise

We RECOMMEND water-based exercise as a treatment for patients suffering from osteoarthritis of knee.

Self-management program

We RECOMMEND patients suffering from osteoarthritis of knee to receive self-management program for pain relief and functional improvement.

Weight reduction

We RECOMMEND patients with high body mass index (BMI) to achieve effective and sustainable weight control for pain relief and functional improvement.

(ii) **Physical treatment**

Thermotherapy

We ARE NOT ABLE TO ADVOCATE for or against the use of thermotherapy in the management in knee osteoarthritis.

Transcutaneous electrical nerve stimulation

We ARE NOT ABLE TO ADVOCATE for or against the use of transcutaneous electrical nerve stimulation as a treatment for patients suffering from osteoarthritis of knee.

Percutaneous electrical nerve stimulation and pulsed electromagnetic wave therapy

We ARE NOT ABLE TO ADVOCATE for or against the use of percutaneous electrical nerve stimulation and pulsed electromagnetic field therapy in management of osteoarthritis of knee.

Acupuncture

We ARE NOT ABLE TO ADVOCATE for or against the use of acupuncture in management of osteoarthritis of knee.

(iii) ***Orthosis and braces***

Cane

We RECOMMEND the use of cane to improve pain and function of patients suffering from osteoarthritis of knee.

Valgus off-loading Knee brace

We ARE NOT ABLE TO ADVOCATE for or against the use of brace to improve pain, function and quality of life of patients suffering from osteoarthritis of knee.

Knee sleeve

We ARE NOT ABLE TO ADVOCATE for or against the use of knee sleeve to improve pain and function of patients suffering from osteoarthritis of knee.

Lateral wedge insole

We DO NOT RECOMMEND the use of lateral wedge insole for patient with knee osteoarthritis.

b. Pharmaceutical management

(i) ***Analgesics and anti-inflammatory agent***

Paracetamol

We RECOMMEND the use of paracetamol as a first-line analgesic for patients suffering from osteoarthritis of the knee.

Topical non-steroidal inflammatory drug

We RECOMMEND the use of topical NSAIDs as first-line treatment for patients suffering from osteoarthritis of knee.

Oral non-steroidal inflammatory drug (NSAID)

We RECOMMEND the use of oral NSAIDs (in conjunction with a proton-pump inhibitor) as a second-line treatment for patients suffering from osteoarthritis of knee. However, the patients should not have contraindications to this type of medication and have had a poor response to the first line agents.

Opioid

We ARE NOT ABLE TO ADVOCATE for or against the use of opioid analgesics in the treatment of pain associated with osteoarthritis of knee.

(ii) *Intra-articular injections*

Intra-articular steroid injection

We ARE NOT ABLE TO ADVOCATE for or against the use of intra-articular steroid injection in management of osteoarthritis of the knee for short-term pain relief of symptomatic osteoarthritis of knee. There is a concern of increased risk of peri-prosthesis infection if the patients are potential candidates of total knee arthroplasty.

Intra-articular hyaluronic acid injection

We ARE NOT ABLE TO ADVOCATE for or against the use of intra-articular hyaluronic acid injections as a treatment of symptomatic osteoarthritis of knee.

Intra-articular platelet rich plasma injection

We ARE NOT ABLE TO ADVOCATE for or against the use of intra-articular platelet rich plasma injection in management of osteoarthritis of knee.

c. Oral supplements (glucosamine, chondroitin and vitamin D)

We ARE NOT ABLE TO ADVOCATE for or against the use of oral supplements as a treatment for patients suffering from osteoarthritis of knee.

d. Denervation therapy

We DO NOT RECOMMEND the use of denervation therapy as a treatment for patients suffering from osteoarthritis of knee.

(II) SURGICAL MANAGEMENT

a. Non-arthroplasty surgery

(i) *Arthroscopic lavage and debridement*

We DO NOT RECOMMEND arthroscopic lavage as a treatment for patients suffering from osteoarthritis of knee.

(ii) *Partial meniscectomy*

We ARE NOT ABLE TO ADVOCATE for or against arthroscopic partial meniscectomy as a standard treatment for patients suffering from osteoarthritis of knee. However, there may be a role in selected patients who present with symptoms of locking, and fail to respond to an initial trial of non-operative treatment.

(iii) High tibial osteotomy

We RECOMMEND performing high tibial osteotomy in selected patients who suffer from symptomatic osteoarthritis of medial compartment of knee.

b. Knee arthroplasty

We RECOMMEND performing knee arthroplasty for patients suffering from symptomatic end-stage osteoarthritis of knee after failure of initial attempt of non-operative management.

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