



Walking cane: knee osteoarthritis

Intervention

Daily use of a walking cane or stick to decrease the load transmitted through the affected knee(s) and improve pain and function.

Indication

People with knee osteoarthritis (OA) who have pain and difficulty with walking.

Use of a cane is one of a number of non-drug treatments for knee OA, which include weight reduction, exercise and taping.

Precautions

Osteoarthritis Research International (OARSI) guidelines recommend that people with bilateral disease should use frames or wheeled walkers rather than canes.

A cane is not recommended if people have pre-existing wrist, elbow or shoulder pain on the contralateral side.

Canes have a maximum weight limit so an appropriate cane needs to be selected.

Availability

A wide range of canes is available and can be purchased from most pharmacies. In the study on which this leaflet is based, wooden canes with a T-shaped handle were cut to size for each patient.

Description

Customising the cane

The patient stands comfortably erect (in low-heeled shoes), with arms relaxed alongside the body. The cane is then placed with the tip on the floor, 10 cm from the lateral margin of the ankle (in line with the metatarsals). To achieve an elbow flexion angle between 20° and 30°, the stick height adjusted to reach the distal fold of the wrist (wooden canes are marked to this height and cut).

Cane training

Patients are offered a 5-minute training session on using the cane on the contralateral side. They are instructed to place the tip of the cane on the ground at the same time as the foot of the symptomatic side (knee) is placed on the ground. Without instruction, patients tend to take weight off the knee later in the stance phase, which reduces the benefit. Thus patients should be advised to place more weight through the cane at the start of the stance phase.



Tips and Challenges

Patients should be advised that, initially, walking with a cane feels harder and they will tend to walk more slowly. However, after 1–2 months of regular use, they will become accustomed to walking with a cane, and it will become easier and quicker.

Grading

NHMRC Level 2 evidence.

Training

[Walking stick tutorial video](https://dl.dropboxusercontent.com/u/4760404/Melb%20Uni%20Walking%20Stick%20Tutorial%20HD%201080p%20161215.mov) — 427Mb download (<https://dl.dropboxusercontent.com/u/4760404/Melb Uni Walking Stick Tutorial HD 1080p 161215.mov>)

References

Jones A, Silva PG, Colucci M, Tuffanin A, Jardim JR, Natour J. [Impact of cane use on pain, function, general health and energy expenditure during gait in patients with knee osteoarthritis: a randomised controlled trial](#). *Ann Rheum Dis*. 2012;71:172–79. (<http://www.ncbi.nlm.nih.gov/pubmed/22128081>)

Consumer Resources

Arthritis Australia information sheet: [Tips for osteoarthritis of the hip or knee](#) (http://www.arthritisaustralia.com.au/images/stories/documents/info_sheets/2014/Body/Tipsforosteoarthritishipknee.pdf)

BMJ Best Practice: [Osteoarthritis](#) (<http://bestpractice.bmj.com/best-practice/pdf/patient-summaries/532610.pdf>)

Arthritis Foundation: [How to choose the right cane](#) (<http://www.arthritis.org/living-with-arthritis/pain-management/joint-protection/cane-tips.php>)

Patient.co.uk: [Osteoarthritis](#) (<http://patient.info/health/osteoarthritis-leaflet>)

Arthritis Research UK: [Osteoarthritis of the knee](#) (download the information booklet). (<http://www.arthritisresearchuk.org/arthritis-information/conditions/osteoarthritis-of-the-knee.aspx>)