

# Big toe joint Osteoarthritis Study



## Exercises

**Participant Name:** \_\_\_\_\_

**This booklet has been prepared by:**

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# Home Exercise Program

## Introduction

This training program is specifically designed for people with osteoarthritis and pain in their big toe joint. The exercises are based on a review of the published evidence for exercises for big toe joint osteoarthritis, and from a large international survey of expert clinicians. The aim of the exercises is to improve the joint range of motion allow the best possible joint movement when performing walking and other tasks.

The way you perform each exercise is critical to the success of the program. In particular, it is important that you follow the instructions provided in this booklet very carefully.

In the enclosed exercise instructions, we refer to the big toe joint that is giving you the most pain and is the focus of the treatment as the 'arthritis big toe joint'. The other side is referred to as the 'good big toe joint'. Similarly the foot that has the big toe joint arthritis is the 'arthritis foot' and the other side is the 'good foot'.

There are 4 exercises in total. Your podiatrist will advise how to perform the exercises, and will give you advice on how to progress them if needed. If you experience difficulty or excessive discomfort with any level of any exercise, please advise your podiatrist on you

next visit, or call Kade Paterson on 8344 0425 or email [kade.paterson@unimelb.edu.au](mailto:kade.paterson@unimelb.edu.au) so that your program can be reviewed and modified if necessary.

### **Safety**

It is important to ensure you don't lose your balance and fall during the exercises. All exercises should be carried out seated, or if advised by your podiatrist to perform them while standing, you should be within reach of something stable such as the back of a chair or sofa, a work bench or a table. It is OK to lightly hold the support for the exercises.

**😊 Please do all your exercises 2 times a day (preferably morning and night).**

This does NOT include the sessions with your podiatrist.

**😊 Always record what you do in your log book.**

## Exercise 1: Big to joint strengthening

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Sit on a chair so your ankle and knee are at approximately 90°.

Slowly push your big toe towards the ground. Try not to curl the big toe, and try not to roll the ankle in or out.

If you can, also try to lift up the other toes while pushing the big toe in to the ground (see picture).



While pushing the big toe down, hold for 10 seconds.

Do 10 repetitions of pushing the toe down for 10 seconds, with a break of around 30 seconds rest between each set.

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## Exercise 2: Big toe joint distraction

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Sit on a chair so your ankle and knee are at approximately 90°.

Grasp your foot just behind the big toe joint with one hand (see picture).

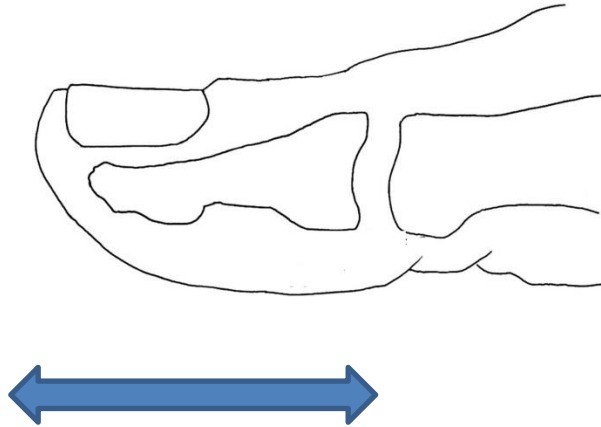
With the other hand, grasp big toe slightly in front of the big toe joint (see picture).

Slowly pull the big toe away from the rest of the foot without flexing or extending the toe over 2 seconds (i.e. bending it up or down).

Relax and release the toe

Repeat pulling and releasing for one minute.

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### Exercise 3: Big toe joint glides

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Sit on a chair so your ankle and knee are at approximately 90°.

Grasp your foot just behind the big toe joint with one hand (see picture).

With the other hand, grasp big toe slightly in front of the big toe joint (see picture).

Slowly pull the big toe away from the rest of the foot over as you did for the previous exercise.



Slowly glide the toe upwards (2 seconds) and downwards (2 seconds) without extending (bending upwards) or flexing (bending downwards).

Repeat the glides for one minute.

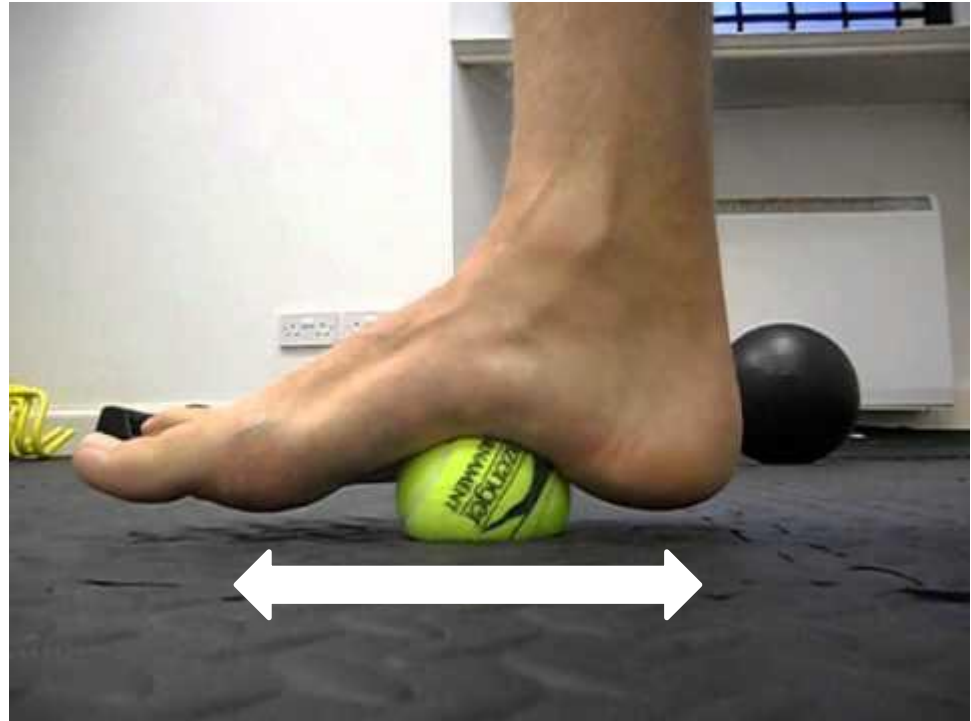
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## Exercise 4: Arch Massage

Sit on a chair so your ankle and knee are at approximately 90°.

Place a ball on the floor and rest your foot on top of the ball so that it sits under the inside of your heel (see picture).

Slowly roll your foot forwards (3 seconds) and backwards (3 seconds) over the ball. You should aim to go all the way from under your heel to under your forefoot.



At the end of each forward and backwards roll of the ball, move the ball slightly towards the outside of your foot so that you end up rolling the ball under your entire foot

As you progress through the exercise gradually add more pressure to the ball.

Repeat the rolling for five minutes.