## PRE-OPERATIVE STRETCHES

to prepare your legs before the leg-lengthening surgery



**Attention please:** These are general stretching exercises prepared to increase the flexibility of muscles and tendons before the surgery.

- ➤ It is advised that you start the recommended exercises at least 3-4 weeks before the surgery.
- ➤ Each exercise can be done in a minimum of 3 and a maximum of 6 sets.
- > 1 set consists of 15 repetitions.
- First, you can start with 3 sets for each exercise and gradually increase the number of sets.
- ➤ These exercises are not recommended for postoperative period. Please consult your doctor and physical therapist.

#### **TFL Stretch-1**

(WITH THERABAND)



In the supine position, the theraband is placed under the foot.

## TFL Stretch-2 (WITH THERABAND)



With the knee in a straight position, the foot is moved up and inward.

#### **QUADRICEPS Stretch-1**

(Manuel)



In the prone position, the knee is brought to 90 degrees.

#### **QUADRICEPS Strecth-2**

(Manuel)



Then, with the help of the hand, stretching is done as the heel moves toward the hip. Hold for 5 to 10 seconds and release.

#### **INTERNAL ROTATION Stretch-1**

(WITH THERABAND)



In a sitting position, when the knee is bent 90 degrees, the theraband is passed through the outer side of the foot.

#### **INTERNAL ROTATRR Stretch-2**

(WITH THERABAND)



And the foot is pulled towards the torso.

#### **EXTERNAL ROTATOR Stretch-1**

(With Theraband)



In a sitting position, the knee is bent 90 degrees, while the theraband is passed through the inner side of the foot.

#### **EXTERNAL ROTATOR Stretch-2**

(With Theraband)



And the foot is pulled outwards.

#### **GASTROCNEMIUS and ACHILLES Stretch-1**

(With Theraband)



In a semi-seated position, the theraband is passed under the foot while the knee is stretched.

## GASTROCNEMIUS and ACHILLES Stretch-2

(With Theraband)



And the foot is pulled towards the torso.

## GASTROCNEMIUS and ACHILLES Stretch-1

(Manuel)



In the standing position, the leg to be stretched is positioned backwards and the other leg forward.

# GASTROCNEMIUS and ACHILLES Stretch-2 (Manuel)



Without bending the knee at the back and lifting the heel, the front knee is bent forward.

#### **HAMSTRING Stretch-1**

(With Theraband)



In the supine position, the theraband is passed under the foot with the leg and knee straight.

#### **HAMSTRING Stretch-2**

(With Theraband)



Without bending both knees, the leg on the side to be stretched is lifted into the air and the foot is pulled towards the torso.

#### **EXTERNAL ROTATOR Strech-1**

(Manuel)



In a semi-seated position, the hip and knee on the side to be stretched are bent, placed on the outer side of the other leg.

#### **EXTERNAL ROTATOR Stretch-2**

(Manuel)



The knee on the side to be stretched is held from the outer side and pushed inwards.

#### **TFL Stretch-1**

(Manuel)



By supporting the pelvis in the side supine position, the leg on the side to be stretched is extended without bending the knee.

### TFL Stretch-2 (Manuel)



The leg to be stretched is supported by the hand and moved first forward and then backward.

#### **GASTROCNEMIUS Stretch-1**



Find a stair and step on it. Make sure to stay in a standing position by attaching both feet closer.

#### **GASTROCNEMIUS Stretch-2**



Apply pressure from the fingertips to the ground without bending the knees.

## ADDUCTOR LONGUS Stretch - 1



In a standing position, both legs open to the sides.

Without bending the knee on the side to be stretched, the knee on the other side is bent and moved in the diagonal direction.

## ADDUCTOR LONGUS Stretch - 2



#### **HAMSTRING Stretch-1**

(Manuel)



In a semi-seated position, the knees are kept straight.

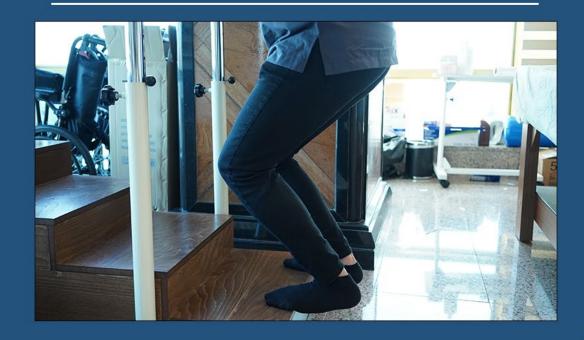
#### **HAMSTRING Stretch-2**

(Manuel)



Then, without spoiling the position, the hands are reached towards the tips of the feet without knees bent.

#### **GASTROSOLEUS** Stretch-1



When on the step in a standing position, the knees are bent.

#### **GASTROSOLEUS Stretch-2**



Heels are pressed against the ground.

#### **QUADRICEPS Stretch-1**

(With Theraband)



In the prone position, the knee is bent 90 degrees, and pressure is applied to the foot with the help of thereband.

#### **QUADRICEPS Stretch-2**

(With Theraband)



Then, the heel is stretched towards the hip with the help of the thereband.