## Julie Dass Injury Clinic

108 Milton Road Clapham Bedford MK416as

#### Phone: 01234349464 Email: stablestherapycentre@gmail.com

Exercise plan: **ACL Rupture/Recontruction** 

Patient: **Mrs Julie Dass** 

**Knee flexion supine** 

Date: 03rd Apr 2017



Slide your heel towards your bottom. Go as far as feels comfortable, and then return to the start position (with the leg straight). This is a good way to improve mobility to a stiff knee joint.

Video: http://youtu.be/skOauZ54MLU



## Knee flexion prone

Lie face down, and bend your knee bringing your heel towards your bottom. You will feel a gentle stretch to the quadricep muscles at the front of your thigh. Make sure you bend the leg in a controlled way, trying not to judder or cog-wheel your foot to ensure good quality movement of the hamstring. Return to the start position slowly and using the same level of control.

Video: http://youtu.be/z2YP70zLpbs



## Quadriceps stretch side-lying

Lie on your side, and pull your heel towards your bottom to feel a stretch to thee quadricep muscle group at the front of your thigh. You may want to hold on to your knee of your bottom leg to give you extra support (especially useful if you are prone to back pain).

Video: http://youtu.be/EhEnpCeq4rM



## Knee swing high chair

Sit on a high chair or table (slightly on the edge) and let your leg dangle. Bend your knee as far as feels comfortable, then relax. Keep the movement controlled, not too fast. You can also straighten the leg as well. This exercise is especially useful for increasing mobility to a stiff knee. If you don't have a high chair, sit on a sturdy table.

Video: http://youtu.be/sLZAJGnggEg

### **Knee flexion passive**

Sit down on the floor, and place a towel around your foot. Gently pull the towel to bend your knee. Try to keep your knee relaxed at all times. Straighten your knee to return to the start position. This is a good exercise to improve mobility in a stiff knee joint.

Video: http://youtu.be/yzgdhSGhNCY



# Knee flexion with ball/foam roller

Sit on a chair or Swiss ball, and place the sole of your foot on a medicine ball or foam roller. Roll the ball/roller in front of you and back again. If you don't have a foam roller or medicine ball, you can use a football or other small ball.

Video: http://youtu.be/uDXiVZG2G8k

# Alternate heel kicks

Standing, kick the heel towards the bottom of one leg and then go back to your start position, and then repeat with the other leg. Heel kicks are useful for warming up the hamstring muscle group (located at the back of the thigh).

Video: http://youtu.be/wHdwnGiYbps



#### Hamstring curl with band

Tie an exercise band around your ankle, and attach the other end to a fixed object (e.g. under a weight, or around the leg of a table). Lie face down. Bend your knee creating a resistance in the band. This is a strengthening exercise for the hamstring muscle group (located at the back of the thigh).

Video: http://youtu.be/Szqs9oL6QVU



#### 1/4 squat SB

Place a Swiss ball behind your lower back, and place your feet two foot (0.5m) from the wall. Open your legs slightly wider than shoulder width. Bend your knees to the 1/4 squat position. Make sure you keep the middle of your kneecap in line with the middle toes of your foot.

Video: http://youtu.be/PvyLLBqwG6o



## **Box Step front**

Step onto a box or step, placing both feet on the step, and then step down using the same leg that you lead with.

Video: http://youtu.be/EI739iJbGUU



## Box step side

Step onto a box or step to your side, placing both feet on the step, and then step down. You can step off the same side, or step off the other side of the box.

Video: http://youtu.be/7QR\_lew1f7Y

### **Mountain climber**

Start in a press-up position, and bring one leg in so your left knee is close to your left hand. Straight away, take it back out and then bring your right knee in towards your right hand, and repeat. This exercise is great for strength-endurance and works the whole body.

Video: http://youtu.be/GIEr1JgtdiU

# Knee extension supine 2

Lie flat on your back and bend your knees towards your chest, then slowly straighten your legs and lower them to the start position. This exercise strengthens the hip flexor, core and quadricep muscle group.

#### Video: http://youtu.be/NRj0V2LEwhE



#### Hamstring stretch 8

Sit down on the floor, and place a towel or band around the sole of your foot. Pull the toes towards you while straightening the leg. You will feel a stretch in the calves and Hamstrings (at the back of your legs).

Video: http://youtu.be/J1JIAchodcE



#### Active knee extension on towel

Lie on your back or sit on the floor, and place a rolled up towel under your knee. Straighten your leg against the towel. This exercise helps to straighten your leg if your knee is stiff, and also strengthens the quadricep muscle group (at the front of your thigh).

Video: http://youtu.be/3f1k1huhRgI

# **Ball knee control**

Sitting on a chair or Swiss ball, place the sole of your foot onto a ball. Move the ball around in different directions, out in front of you, round in circles, to the sides. This exercise helps to improve co-ordination and proprioception in your hip, knee and ankle.

Video: http://youtu.be/6aVh23IEwQs



## Single leg stand on tip-toes

Stand on one leg. When you feel completely balanced, raise up and stand on your tip-toes/forefoot. This is a difficult exercise, so make sure you hold on to a table if you are unbalanced or do not have the adequate strength in your leg. You will feel the leg working, especially in the calf muscle, and will likely get some muscle aching all over the leg and buttock if you hold it for an extended period of time.

Video: http://youtu.be/ak3sZPQq-ag



#### Patella mobilisation

Sit with your knee straight, and your leg relaxed. Grasp your knee cap (patella) with your fingers and thumb, and wiggle your knee cap from side to side and up and down. You can also hold the patella to one side, and to the other side. It may be stiff to start, but once mobile the patella should move freely. This is a great exercise for anyone with a stiff patella.

Video: http://youtu.be/mV4rslt7C10

#### **Hip flexion side-lying**

Lie on your side, and bend your hip as close to your chest as feels comfortable. Use your hand to help you. Hold the stretch. This exercise will mobilise and strengthen your hip joint.



Video: http://youtu.be/BBLVOyYj4Gc



vpatient.com

#### Hip extension with band

With an exercise band secured around your ankle, and the other end anchored to a fixed object in front of you, move the leg backwards to create resistance in the band. This exercise strengthens your gluteal (buttock) muscles, but also improves stability and balance of the opposite leg.

Video: http://youtu.be/UHQt49fxraQ



## VMO strengthening standing

First, identify your VMO - it's the inside part of the front of your thigh, and makes up part of the quadriceps muscles. Stand with good posture, with one leg in front of your other leg and knees slightly bent. On your front leg, press your heel into the floor and pull your toes towards you. Keeping some pressure through the heel, slide your heel away from you and straighten your leg. Try to use the VMO to control the contraction rather than any other part of your body (e.g. your glutes, or Hamstrings).

Video: http://youtu.be/oiAPjaW7Ae0

Page: 7 / 7