

<b>Exercise plan:</b> <b>VMO Strengthening Exercises</b>	<b>Patient:</b> <b>Mrs Julie Dass</b>	<b>Date:</b> <b>31st Mar 2017</b>
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### Inner range quadriceps lying

Lie flat on your back, and place a rolled up towel under your knee. Tighten your thigh (quadriceps) muscle and lift your heel. You should be pressing your knee against the towel. As your leg straightens, it does not fully lift off the floor (only your foot lifts off the floor). Slowly return to the start position.



Video: <http://youtu.be/jpbu0gPii6Q>

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### Inner range quadriceps sitting

Sit on the floor, and place a rolled up towel under your knee. Tighten your thigh (quadriceps) muscle and lift your heel. You should be pressing your knee against the towel. As your leg straightens, it does not fully lift off the floor (only your foot lifts off the floor). Slowly return to the start position.



Video: <http://youtu.be/ZPt0HPDgNDw>

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### Single leg inner range quadriceps with band

Stand up, and tie an exercise band around a table leg and the other end around the back of your knee. Your feet should be facing forwards, knee slightly bent, and make sure the band is taut. Keeping your hips knees and feet in line, straighten your leg against the resistance of the band, and slowly return to the starting position.



Video: <http://youtu.be/cxN01SEa8aM>

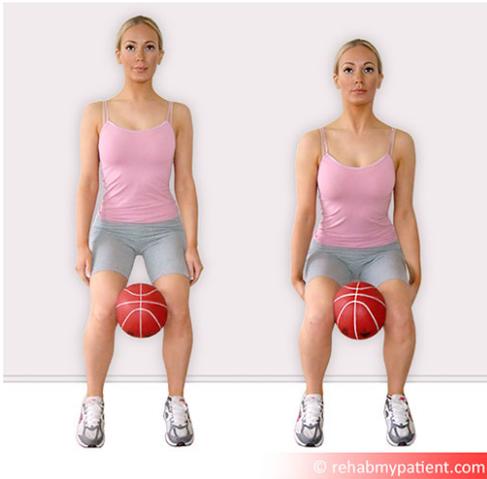
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## Double leg inner range quadriceps with band

Stand up, and tie an exercise band around a table leg and the other end around the back of your knees. Your feet should be facing forwards, knees slightly bent, and make sure the band is taut. Keeping your hips knees and feet in line, straighten your legs against the resistance of the band, and slowly return to the starting position.

Video: [http://youtu.be/lo2QBv\\_FE0o](http://youtu.be/lo2QBv_FE0o)



## VMO strengthening squat

Rest your back against a wall, and place a medicine ball, goof ball or other round ball between your knees, and squeeze your knees together. Go into a squat position, but only go as far as you feel comfortable. Then come back up to the start position. Make sure the hips, knees and feet are all in-line.

Video: <http://youtu.be/K2yNBYhbnPw>



## VMO strengthening squat 2

Rest your back against a Swiss ball placed on the wall, and place a small ball (e.g. a medicine ball or goof ball) between your legs. Squeeze the ball as you slowly squat, making sure your hips knees and feet are in-line. Only go as far as you feel comfortable. Then come back up to the start position.

Video: <http://youtu.be/cbX2olc1XdM>



## VMO strengthening squat 3

Rest your back against a Swiss ball placed on the wall, and place a small ball (e.g. a medicine ball or goof ball) between your legs. Squeeze the ball as you slowly squat, making sure your hips knees and feet are in-line, but allowing your thighs to come forwards of your knees (this is to load the quadricep muscle group more). Only go as far as you feel comfortable. Then come back up to the start position.

Video: <http://youtu.be/PXrcD8FI7YE>



## VMO strengthening sitting

First, identify your VMO - it's the inside part of the front of your thigh, and makes up part of the quadriceps muscles. Sit down with good posture, and press your heel into the floor. 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/lmjunlmW5gY>



## 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>



## VMO strengthening lying 1 with hip flexion

First, identify your VMO - it's the inside part of the front of your thigh, and makes up part of the quadriceps muscles. Contract your VMO by squeezing your inside thigh muscle, and slowly lift your leg off the floor/bed.

Video: <http://youtu.be/lX8d4T-rcgw>



## VMO strengthening lying 2 with hip flexion

First, identify your VMO - it's the inside part of the front of your thigh, and makes up part of the quadriceps muscles. Contract your VMO by squeezing your inside thigh muscle, and slowly lift your leg off the floor/bed. When your leg is a few inches off the ground, rotate your leg outwards so your foot is pointing at a 45 degree angle to the side. You will feel a pull on the inside of the thigh muscle, from your groin to your knee.

Video: <http://youtu.be/TIGimtnzacs>

## Split squat with VMO and glute contraction

Take a step forwards (as if you were going into a lunge). Make sure your knee is directly over the second ray of your foot and in good alignment (your knee should never drop inwards). Contract your VMO (the inside of the front of your thigh muscle group) and your gluteal (buttock) muscles of your front leg and slowly drop your back knee towards the ground. Your front knee stays at 90 degrees, but does not go forwards of that point. Return to the start position.

Video: <http://youtu.be/LBfYKQyf-i8>



Dear Mrs Dass, please stop any exercise that causes pain. If you have any questions with an exercise, just email us on [stablestherapycentre@gmail.com](mailto:stablestherapycentre@gmail.com). Good luck and keep with it!