

ISM I Physical Therapy Final Product

Neck, Shoulder, Back, Hip, and Knee Pain

By: Ishva Patel

Acknowledgements

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Disclaimer

The purpose of this guidebook is to help people start treating some of their common issues early on. The information that was gathered from resources on the internet and local physical therapists in the Frisco, Texas area. Users of this guidebook must understand that each body will react differently to each of the exercises. If you start to experience more pain than you were before please seek experienced professional care. Please use this book in caution and please remember the exercises in the book are just suggestions.

Areas Covered In the Book

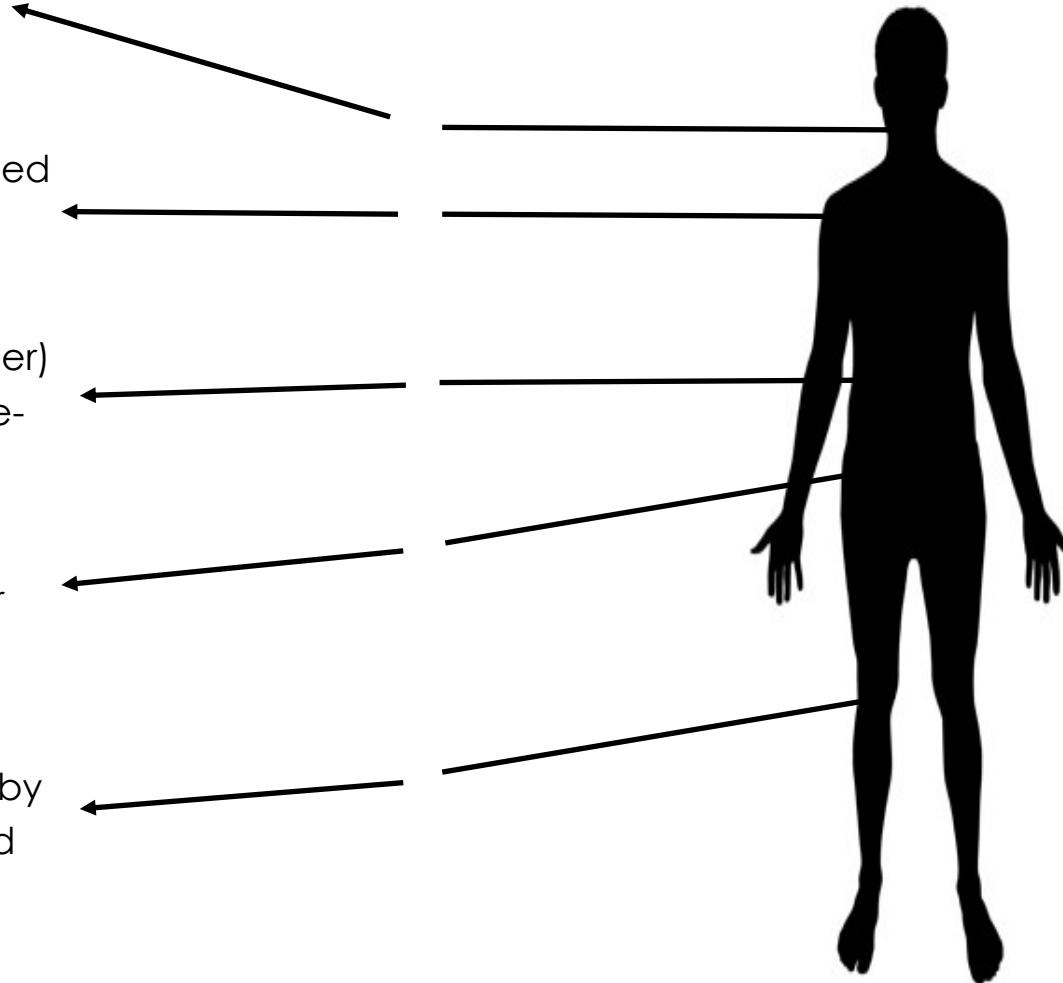
⇒ **Neck**-Pain that is caused by moving it in a uncomfortable way

⇒ **Shoulder**- Pain that is caused injuries or tears

⇒ **Back** (both lower and upper)
- Pain that is caused by mechanical injuries

⇒ **Hip**-Pain that is in the outer part of the hip

⇒ **Knee**- Pain that is caused by torn cartilage or a ruptured ligament



Section 1: Neck Pain

What is Neck Pain?

Neck Pain is an injury that is caused when your neck is in an uncomfortable way. It may be caused by sleeping in an uncomfortable position, looking in one direction for prolonged periods of time (i.e. looking down at your phone for multiple hours), or having a lot of stress. Some symptoms may include:

- Muscle tightness or spasms
- Decreased ability to move the head
- Headaches
- Pain that is worsened when holding your head in one place for prolonged periods of time.



What can you do to treat neck pain?

To treat neck pain there is a variety of different activities that you can do to reduce the pain like applying ice/heat to the location of the pain. You might want to apply ice for the first couple of days of when the pain begins and after that start to use heat

In addition to applying heat and ice, you could take some over-the-counter pain relievers such as ibuprofen (i.e. Advil) or acetaminophen (i.e. Tylenol)

However, be sure to consult with your health care provider if you are pregnant or are on other prescription.

A different way of reducing the pain would be doing slow range-of-motion exercises that gently stretch the muscles in the neck. Some exercises that would be beneficial if you have neck pain would be:

- Seated cervical retraction
- Seated cervical retraction and extensions
- Seated upper trapezius stretch

What can you do to treat neck pain? (cont.)

You can also go get a massage or have someone massage the tense areas. Finally, you can try to change the way you sleep. Try sleeping on a firm mattress without any pillow or with a special neck pillow

****PLEASE** remember that if the pain is getting worse, you should go see your health care professional to seek proper treatment. Also remember that each person will react differently to the exercises that are listed, please express caution when attempting any of these exercises******

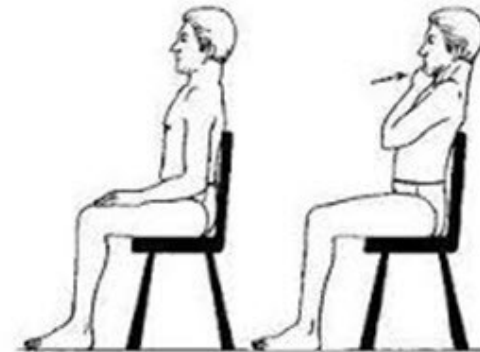
How to do the exercises:

-Seated cervical retractions

- How to do it:

-Start by sitting upright with your feet flat on the floor. Then slowly bring your chin in while you keep your eyes fixed on an object in front of you.

-It is recommended you do 3 sets of 10 reps, once daily



How to do the exercises (cont.):

-Seated cervical retraction and extension

-How to do it:

-Start by sitting in an upright position with your feet flat on the floor. Then, slowly bring your chin directly backwards. Tilt your head back and look upwards. Return to starting position and repeat.

-It is recommended that you do this exercises 3 sets of 10 reps, once daily.



How to do the exercises (cont.):

-Seated upper trapezius stretch

-How to do it:

- Start by sitting upright on a table and hold the edge of the table with one hand. Then rotate your head up and to the opposite of your anchored arm and slowly lean it towards your shoulder. Applying pressure with your hand until you feel a stretch and hold.

- It is recommended that you do 3 sets of this while holding it for 30 seconds.



Section 2: Shoulder Pain

What is shoulder pain?

Shoulder pain is a pain that might cause stiffness and weakness. This makes it harder for people to carry out basic tasks like reaching items on shelves or driving a car. This pain can be caused by numerous things like it might be an injury to your rotator cuff or tears in your rotator cuff. In addition to rotator cuff injuries, another problem that might be related to the shoulder pain might be tendonitis. Some symptoms of shoulder pain might be:

- Dull, burning, or sharp pain in the shoulder
- An ache in the shoulder
- Pain that goes from neck to shoulder

There are some serious medical conditions that might cause shoulder pain and for those injuries, you are highly recommended to see health care professionals. Some of those injuries that might cause shoulder pain are:

- Shoulder Dislocation
- Shoulder Fracture



What can you do to treat shoulder pain?

There are a variety of ways you can treat shoulder pain. The most frequent way to treat shoulder pain is with heat/ice. This is a way to reduce the inflammation in the muscles that are in the shoulder. Many health care professionals recommend that you apply heat for the first couple of days and then shift over to ice if the pain continues.

Along with applying ice/heat, you could start taking pain medications like ibuprofen (i.e. Advil) or acetaminophen (i.e. Tylenol). Ibuprofen helps reduce inflammation in the area of pain. Acetaminophen helps to reduce pain because it helps higher the pain threshold so you are able to tolerate the pain you are having. However, please talk to your health care professional if you are pregnant or you are taking other medication.

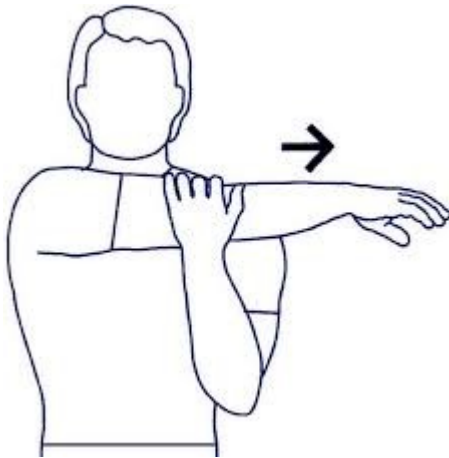
Different stretches can help reduce shoulder pain. Some stretches might be:

- Seated Shoulder Stretches
- Seated Triceps Stretches
- Seated Chest Stretches

How to do the exercise:

-Seated Shoulder Stretches

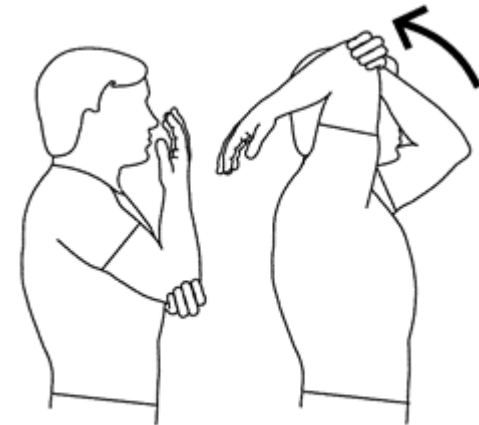
- Sit straight in a chair and place your left hand on your right shoulder. Then cup your left elbow with your right hand. Then pull your left elbow across your chest as you fully extend your arm. You should be able to feel the stretch in your shoulder muscles. Hold this position for a couple of seconds and then return to the starting position.
- It is recommended that you do this stretch for 4 reps of 10 seconds while alternating hands



How to do the exercise:

-Seated Triceps Stretch

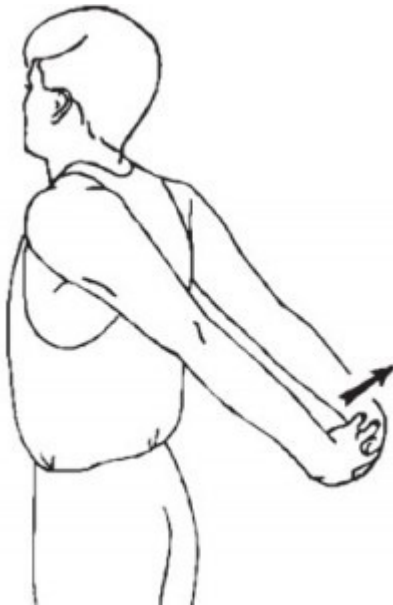
- While sitting with good posture holding your right shoulder with your right hand. Then hold your right arm with your left hand. Lift your right elbow and push it up vertically towards the ceiling. Then you should feel the stretch in the upper right arm. Hold this position for a couple of seconds and then return back to the original position.
- It is recommended that you hold this position for 10 seconds and alternate hands. Do this 2 to 4 times



How to do the exercises:

-Seated Chest Exercises

- Sit with proper posture sideways in a chair. Clasp your hands behind your back with your fingers intertwined. Slowly lift your hands toward the ceiling. You should be able to feel the stretch in the front of your shoulder.
- Hold this stretch for 10 seconds and repeat it 2 times.



Section 3: Upper Back Pain

What is upper back pain?

Upper back pain is when pain occurs from the lower neck to the bottom of the ribcage. It may be caused by overuse/muscle strain or an injury. However, that is not the only reason one would be experiencing upper back pain. Other reasons are poor posture, pressure on spinal nerves, or a fracture on a vertebra. Some symptoms might be:

- Dull, burning, or sharp pain in the upper back
- Muscle tightness or stiffness
- Tingling or numbness in the arm



What can you do to treat upper back pain?

You can try to use ice and heat to help reduce the pain and inflammation of the upper back. When you start this treatment you are recommended that you apply ice for the first couple of days and then start to apply heat after that. Make sure you don't apply the heat/ice for heat too long.

Another way is to treat the pain is to take pain medications like ibuprofen (Advil) or acetaminophen (Tylenol). This can help reduce the inflammation in the location of the pain.

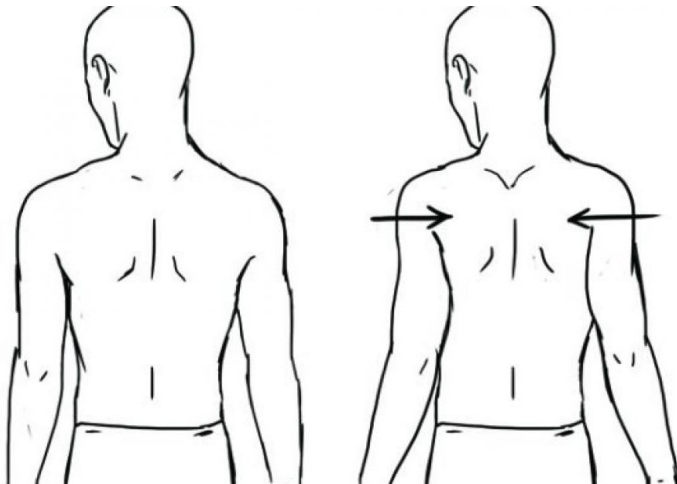
Another way to reduce the pain in your upper back pain is to do some stretches and exercises. This can help relieve the pain that is in the back and it can also strengthen the muscles in order to prevent the injury from happening again. Some exercises that are recommended:

- Scapular Squeeze
- Thoracic Stretches
- Quadruped Arm and Leg Raise

How to do the exercises:

-Scapular Squeeze

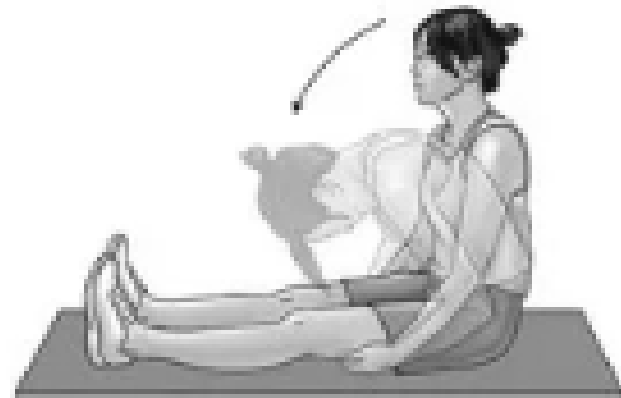
- While sitting or standing have your arms by your side. Squeeze your shoulder blades together and hold it in that position for 5 seconds.
- It is recommended that you do this exercise for 2 sets and 15 reps.



How to do the exercises:

-Thoracic Squeeze

- While sitting on the floor with your legs in front of you. Hold your thighs and curl your head back and neck toward your stomach.
- It is recommended that you do this stretch for 15 seconds and repeat it 3 times.



How to do the exercises:

-Quadruped Arm and Leg Raise

-Get on your hands and knees, suck your stomach in and hold it to make your spine stiff. Raise one arm and the opposite leg and hold it out straight.

-It is recommended that you do this stretch 10 times on each side while holding it for 15 seconds.

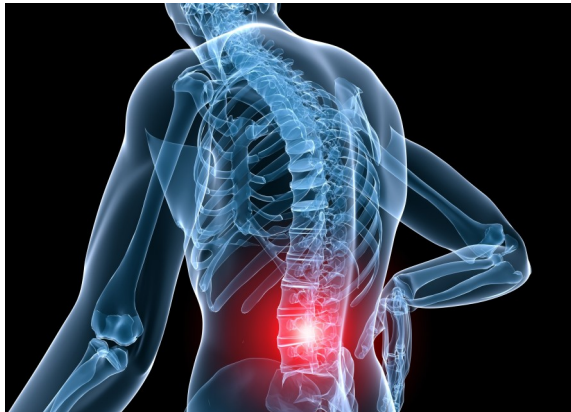


Section 4: Lower Back Pain

What is lower back pain?

Lower back pain is an injury that is caused by mechanical injuries. Mechanical means the source of pain might be in the spinal joints, discs, vertebrae, or the soft tissue. In most cases, the lower back pain might be linked spondylosis (general degeneration of the spine, which is related to regular wear and tear that occurs in the pieces of the spine). Some symptoms of lower back pain might be:

- Dull, burning, or sharp pain in the lower back
- Muscle tightness or stiffness
- Pain that radiates down the leg (upper thigh area)



What can you do to treat lower back pain?

Many doctors and physicians often recommend applying ice and heat to the location of the injury. It reduces inflammation in the location. Start with ice then move to heat.

Bed rest might not be the best thing if you are experiencing pain. Instead you should try stretching and go back to normal activities as soon as possible while make sure not aggravating the pain. Many physical therapist recommend to regularly doing core exercises, in order to prevent this pain. Some stretches you can try:

- Child's pose
- Supine double knee to chests
- Lower back rotational stretches
- Glute bridges

Another way to treat the pain is to take pain relievers. This is a quick way to relieve pain. Many medical professionals recommend that you take ibuprofen(Advil) or acetaminophen (Tylenol).

How to do the exercises:

-Child's Pose

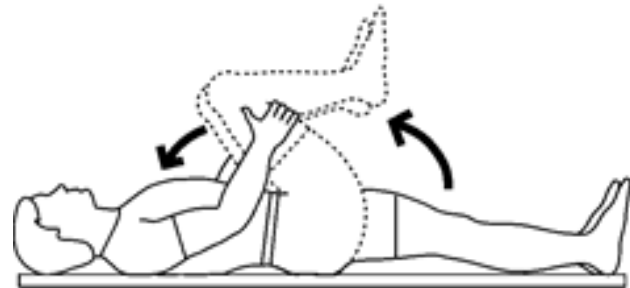
- Sit on your knees and bend forward trying to get your head to touch the floor. Also, make sure you stretch your hands as far as you can.
- It is recommended that you hold this position for 30 seconds and repeat 3 times.



How to do the exercises:

-Supine Double Knee to Chest

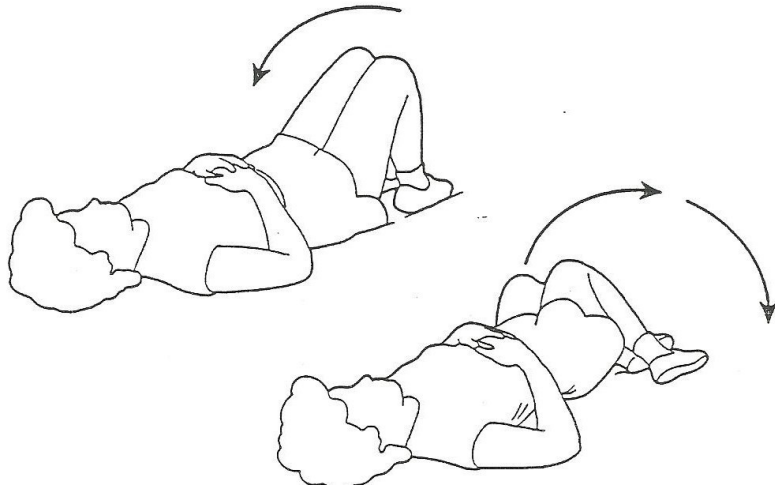
- Lying on your back and with your knees bent and feet flat on the floor. Use your hands and slowly pull your knees toward chest until there is a slight stretch in your back
- It is recommended that you hold this position for 30 seconds and repeat 3 times



How to do the exercises:

- Lower Back Rotational Stretches:

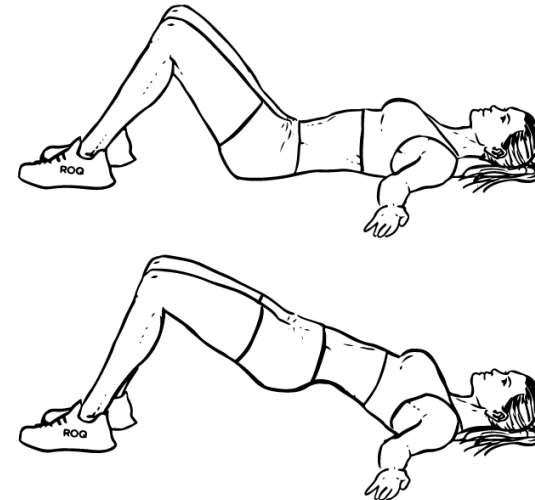
- Lie on the back with feet flat on the floor and knees bent. Roll knees to one side and hold it for 30 seconds and then do the other side. Keep your shoulders on the floor.
- It is recommended that you hold this exercise for 30 seconds each side and repeat it 3 times.



How to do the exercise:

- Glute Bridges

- Lie on your back with your knees bent and with the bottom of your feet flat on the floor. Press weight on your heels to raise your hips. Raise your hips until they form a straight line from shoulder to knees (or as high as you can). Then lower your hips back to the starting position.
- It is recommended that you hold this position for 15 seconds and repeat it 10 times



Section 5: Hip Pain

What is hip pain?

Hip pain is the pain that occurs in the hip area. The location of hip pain can help determine what is causing the pain. There are two part of the hip: the inner hip and outer hip. Pain near the outer hip usually indicates there is a tightness in the muscles. When there is a pain in the inner hip then that could indicate that there could be issues with the joint. The location of the pain can tell a lot about the pain. Symptoms of hip pain might be:

- Limping
- Swelling or tenderness over the hip
- Groin pain

However, there are some serious medical conditions that might be linked to hip pain. For example:

- Inability to move leg or hip
- Inability to bear weight on the affected leg.



What can you do to treat hip pain?

One of the most common ways is to rest. Make sure to avoid bending at the hip and direct pressure on the hip. Do not sit for prolonged periods of time.

Another way you could relive pain is to apply heat/ice. This helps reduce inflammation and swelling.

Along with heat/ice use pain medication. Like acetaminophen (Tylenol) or ibuprofen (Advil). Ibuprofen reduce inflammation. Acetaminophen make the pain threshold higher.

A different type of way that you could do to treat the pain is to do some stretches and exercises.

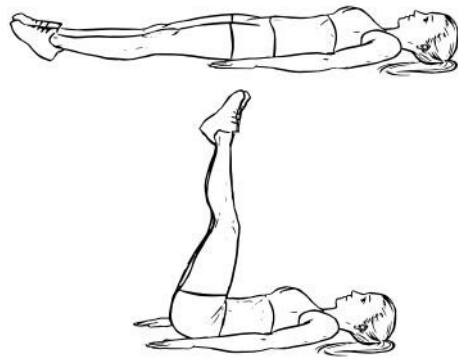
Some stretches like:

- Leg raises
- Butterfly
- Leg swings

How to do the exercises:

-Leg raises

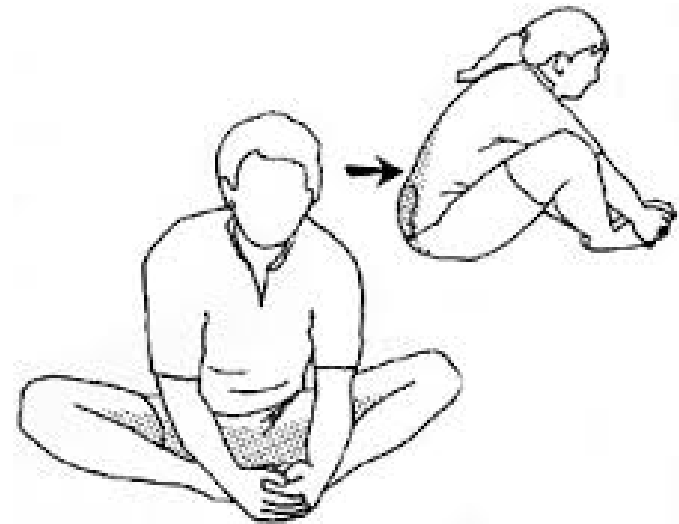
- While laying on your back put your legs together and make sure they are straight. While keeping your legs straight lift them all the way up to the ceiling until the butt comes off the floor. Then slowly lower your legs down until they are just above the floor. Hold it for a moment and then repeat.
- It is recommended that you repeat this stretch for 10 to 15 times while holding it for about 5 seconds.



How to do the exercises:

-Butterfly stretch:

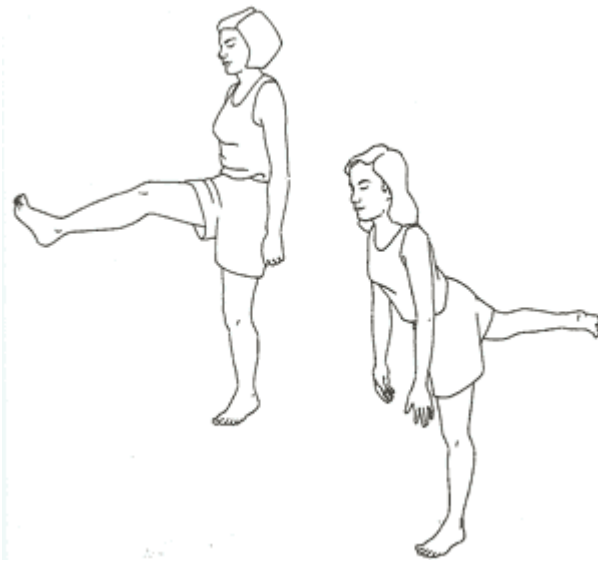
- Sit with proper posture with the soles of your feet together, slowly move your heels closer to you.
- It is recommended that you hold this stretch for 1 minute and do it twice daily



How to do the exercises:

- Leg Swings

- While standing hold a stable surface and step back about 1 foot and swing your leg side to side. To get the best results, try to minimize the twisting of the torso. Then repeat with the other leg. Then try swinging your foot back and forth.
- It is recommended that you do each exercise for 15 seconds and repeat it twice.



Section 6: Knee Pain

What is knee pain?

Knee pain is an injury that might be caused by torn cartilage or a ruptured ligament. Knee pain is an injury that affects all ages. In some cases, knee pain might be linked to other health issues like arthritis, gout, and other infections. Minor injuries can be treated through self-care measures like physical therapy. Some symptoms of knee pain might be:

- Swelling and Stiffness
- Popping or Crunching Noises
- Weakness or Instability

There are some serious medical conditions that are linked to knee pain. For those injuries, you are highly recommended to go see a professional. Some of these injuries are:

- ACL Injuries
- Torn Meniscus



What can you do to treat knee pain?

One of the most common ways to treat knee pain is rest. It is recommended that you take a break from your normal activities in order to give your knee some time to heal and rest.

Another way to treat knee pain is to use ice/heat. Ice helps reduce pain and inflammation. It is recommended that don't use ice for more than 20 minutes at a time. Along with ice, you can use heat. Heat gives you temporary relief to the pain.

Along with that you can try pain medication. Taking acetaminophen (Tylenol) or ibuprofen (Advil). Ibuprofen reduces the inflammation. Acetaminophen helps because it increases the body's pain tolerance allowing you to endure more pain.

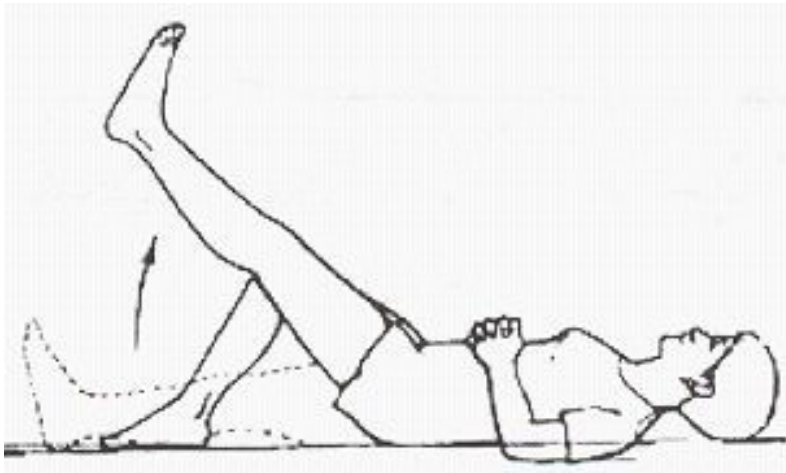
A different way to treat pain is to try do some stretches and exercises. Certain stretches can help relieve knee pain. Some exercises are:

- Straight Leg Raises
- Clamshells
- Prone Straight Leg Raises

How to do the exercises:

-Straight leg raises

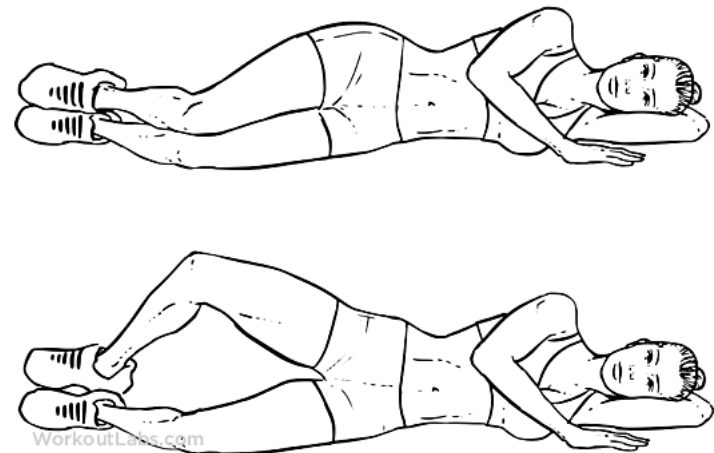
- Lying on your back and using a pillow or a towel to support your back. Bend one knee so the foot is flat and your other leg flat on the side with your arms by your side. With the leg that is flat, make sure that your toes are pointing up and begin lifting your leg up to the height of the knee that is bent. Then lower the leg back to the ground
- It is recommended that you do these exercises for 3 sets of 10 reps.



How to do the exercises:

-Clamshells

- While laying on your side use a towel or a pillow to support your neck. Bend your knee inward (toward your chest) and keeping your back straight and your feet in line with the rest of your body. Keep your feet together and lift the top knee toward the ceiling, then after holding it in that position for a couple of seconds slowly bring your knee down.
- It is recommended that you do 3 sets of 10 reps.

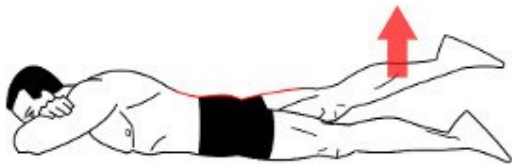


How to do the exercises:

-Prone Leg Raises

-While laying on your stomach with your legs straight, tighten the muscles in the glutes and the hamstrings of one of your legs. Lift the leg toward the ceiling. Hold that position for a couple of seconds and then slowly lower it down.

-It is recommended that you do 10 lifts and then alternate legs.



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