

## Dr. Joshua D. Harris Houston Methodist Hospital Center for Orthopaedics & Sports Medicine

Office: 713-441-8393 Fax: 713-790-5134

www.methodistorthopedics.com

## Knee Exercises

- Ankle pumps: With your leg straight, bend your ankle up (toes
  pointing straight up) and down (toes pointing straight out ahead of
  you). Do 10 repetitions. Also, spell out the alphabet (A, B, C, D, etc)
  forward and backward using your big toe as the pen or pencil.
- Straight leg raises: With your leg straight, lift up your leg off the bed about 2 feet (24 inches), then slowly bring the straight leg back down to the bed. You should use your front thigh muscles (quad muscles) to raise the leg.
- Quad sets: With your leg straight out and your foot and ankle
  resting on a rolled towel, tighten the front of your thigh (quad
  muscles) and try to push the back of your knee flat down towards
  the bed. Hold the leg in this position for 10 seconds, then relax.
- Gluteal squeezes: While laying flat on your back, squeeze your butt muscles (gluteals) together and hold together for 10 seconds, then relax.
- 5. Heel slides: While laying flat on your back and your leg straight, begin to slide your heel backward towards your butt. Stop sliding towards your butt once you reach you reach approximately 90 degrees or once your knee becomes a little uncomfortable and you feel pressure inside your knee. Hold your leg in this position for 10 seconds. Then slowly let your heel slide back to a straight leg position.
- 6. Patellar mobilizations: With your leg straight out, use both hands to move your kneecap in four different directions. First, push the kneecap left and hold it for 10 seconds. Next, push the kneecap right and hold it for 10 seconds. Then, push the kneecap towards your toes and hold it for 10 seconds. Finally, pull the knee up towards your hip and hold it for 10 seconds. The total distance moved for each direction should be one inch or less.
- 7. Prone hangs: While laying flat on your stomach and your legs hanging off the edge of the bed, position the leg so that the kneecap is comfortably just off the edge of the bed. Simply relax your body and your legs so that your knee straightens out and stretches the back of your knee. Hold in this position for 5 minutes or as long as tolerated if less than 5 minutes.

