

PREPARING FOR KNEE SURGERY

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Preparing for knee surgery can be a daunting task. Doctors tend to focus on what can go wrong rather than on the long-term goal of being pain free and having quality movement. The reasons for knee surgery are many; however, most of you are most likely undergoing knee replacement. I recently had knee surgery to re-attach my patellar tendon. I can tell you from experience, when your knee isn't functioning properly, or in my case not functional at all, it can have a tremendous effect all over your body. For instance, if you are unable to bend your knee or are very limited, your body will adapt in order to formulate a new movement strategy.

A typical thing people will do is swing the leg out to the side as they walk. Because the knee won't bend, the hip has to lift the leg higher, and since the knee cannot play an active role, the hip will then move the leg laterally before slapping the foot down on the ground. This particular movement pattern will tighten the hip because it will naturally misalign the pelvic region since the upper leg cannot simply lift and drive when the heel strikes the ground. As a result, many people in this situation will experience back pain as well as the knee pain they already have.

If any of you are in this situation, don't worry--there is hope. Every day I wake I thank God for science. Without science most of us would not be alive and living today. Most of you who are in the process of scheduling surgery are thinking about the recovery and rehab. What I want to emphasize is the preconditioning you all should be doing before surgery. The first thing you should do is to make sure your thigh muscles (quadriceps) are as strong as possible. The best way to strengthen those is to perform a straight leg lift. You can perform this on the floor, in bed, or on a trainer's table. The first step is to lie on your back with your affected leg straight and your toes pointed toward the ceiling. Your other leg should be bent about 90 degrees. Keeping your lower back flat, tighten your thigh muscles and slowly lift your leg up. There is no reason to lift the affected leg higher than the bent leg. Once the leg is up high enough to where it is parallel with the bent knee, hold that position for a few seconds and slowly lower it down. If the movement becomes easy, try adding an ankle weight to the affected leg. This movement is one of the first movements you do after knee replacement. If for some reason you are unable to lift the leg up, practice straightening the leg and squeezing your thigh muscles. Eventually as you develop better control of those muscles you will be able to lift the leg.

Another good strengthening exercise is the side leg raise. Begin by lying on your side with a pillow under your head. Your affected leg should be on top, with both legs straight and in line with your torso. Lift the affected leg up by using the muscles of your hip and butt. Make sure you have good control and are not simply swinging the leg wildly. This exercise will strengthen the muscles of the hips including the glutes (butt muscles.)

Another thing you can do is stretch your hamstrings (muscles behind the thigh). You can do so by laying on your back and placing a strap at the bottom of your foot. You can also use a belt or towel to stretch the leg. The most important thing to do is to keep the knee straight. Don't worry if you can't lift the leg very high. By having the knee straight you will improve your hamstring flexibility.

By properly strengthening your leg before surgery, it will greatly improve your recovery and make the rehab more effective. Remember--science and technology are improving the success rate of surgeries and reducing the risks of infections and other potential risks. My doctor told me the day before the surgery, "I have the easy part, I just perform the surgery." I took those words to heart and am currently rehabbing my knee 2 hours per day. I am just shy of 14 weeks from my surgery and I am happy to report that I can now do a body weight squat and walk up and down stairs with very little to no pain. I am also stable and no longer require crutches or a walker. So have faith and focus on what you can control, which is your preparation and rehab!