

If Your Post-Operative Knee Athlete Lacks Confidence, Post Them Up

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The rehabilitation and athletic performance training of the post-operative knee athlete requires a structured and organized plan to ensure optimal success. This “plan” often includes progressions or “goals” that the athlete must achieve prior to progressing to the next “level” of their rehabilitation/performance training. Until the athlete regains total confidence in their post-op knee, these program guideline progressions, necessary for optimal rehabilitation and athletic performance training, will be difficult to achieve. Achieving confidence in their knee is also essential for the successful performance and accomplishment of specific exercises and drills performed by the athlete during their rehabilitation/performance training regimen. One weight room exercise commonly utilized by the athlete during this rehabilitation or athletic performance training progression is the back or front “squat” exercise.

The squat exercise is often performed with athlete standing in an exercise “rack” where a barbell of a specific weight is placed on their shoulders, either in front or behind the neck, depending upon the desired squat exercise to be performed. The athlete then lifts the bar from the rack, steps backward, and establishes a safe and stable standing base of support. The athlete then proceeds to descend toward the ground surface to a specific instructed depth (knee angle), whereby they then reverse the direction of movement by ascending to the starting standing position. Often during the performance of the squat exercise the athlete will not have the confidence in the strength and/or stability of the post-op knee/leg and “shift” or “lean” their body weight away from the involved, post-op extremity. This places the majority of the barbell and body weight over the non-surgical knee/leg, the leg with “confidence”. (Photo 1). One way to correct this avoidance “shift” is to “post up” the “*non-involved or good leg*” prior to the performance of the squat exercise.

The technique of “posting up” the “good” leg requires the athlete to elevate the non-involved lower extremity by placing it on a box of a specific height prior to the performance the squat exercise. Initially a 2 inch to 4 inch box will suffice, but it is best to achieve an optimal box height through “trial and error”. All athletes are different as comfort and corrected squat technique should be based on an individual performance evaluation. By elevating the good leg, an exercise environment is created that will increase the difficulty of the athlete to shift away from their post-op leg during the performance (the decent) of the squat exercise (Photo 2). Caution should be taken to *never* have the athlete walk backward out of the rack and *step up* onto the selected height box. This may cause a loss of balance and possible fall to the ground. The squat exercise should be initiated and completed with the foot of the non-operative extremity in place at all times on the box. The box height should never be too high as this will also create an awkward and dangerous position during the performance of the squat exercise.

As the athletes exercise performance improves, box heights should be reduced. One to two inch decreases are recommended for each “stage” of exercise progression. The continued decrease in box height along with the eventual total elimination the box during the exercise performance; will result in the elimination of the body shift and correct technique when the squat is performed on a level surface area. During the course of this “lowering the box” progression, the athlete will continually gain both strength and confidence in the post-operative lower extremity.



(Photo 1) Weight shift to the left, away from the post-op right knee



(Photo 2) Posted left leg allows for proportional weight distribution of right post-op knee