

KNEE REHABILITATION

By
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The question of what to do after a knee injury or knee surgery has come up quite often at clinics. Here are my ideas which have proven to be very successful:

There is a broad gamut of injuries to the knee in relation to their seriousness. In any event, the athlete and coach will be working with an orthopedic surgeon. You have a much better chance of getting back to full strength in a faster time if you can find a sports medicine specialist. After surgery, the doctor will put the athlete on a machine which normally utilizes a leg extension and leg curl movement. Some of these machines are quite elaborate costing over thirty thousand dollars. It is very important to exercise the knee with both a leg curl and leg extension movement for balanced strength rehabilitation. It is extremely rare but sometimes an orthopedic surgeon does not know this.

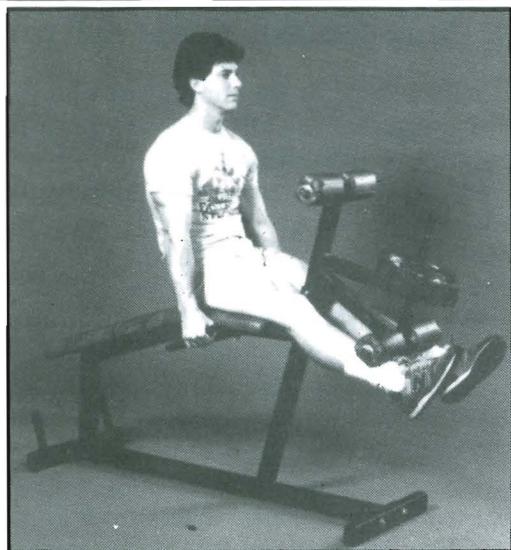
Many times without thinking the matter out entirely, the doctor will say "No weight training at all for you." Now what he really means is: no weight training with your legs. What you should do at this point is ask him about benches, dips and other upper body exercises. The vast majority will give you permission.

After the athlete starts approaching normal strength in his rehabilitation process, we can start the athlete on light box squat and possibly step-up routines. I like to have the bad leg within at least 90% of the good leg. If the athlete can do leg extensions with the good leg at 100 pounds, he must be able to do at least 90 pounds with the injured leg. The same percentage would apply to the leg curl exercise.

At this stage, we can try a box squat which should be 2-3 inches above parallel. The athlete should sit on the box without the weight at first and practice great technique with a correct stance and a locked-in concave lower back. Then five reps should be performed without the bar. If there is any pain at all: STOP. The athlete is not ready. There is a 99% chance there will be no pain. Now we can try 145 pounds. Do one rep. How does it feel? If there is pain: STOP. If there is no pain do five reps and put the bar away. Now you need to analyze the effect of those five reps over a 24 hour period. Any pain? Any swelling? Any aching? Again, there is about a 99% chance that everything will be alright.

Now, the athlete is ready to begin the BFS Set-Rep System for a four week cycle. Begin the 3x3 week with 145 pounds and move up cautiously. Anytime pain or aching occurs, back off and start over. You may also want to use knee wraps.

Instead of parallel squats, step-ups can be used without near the stress. Therefore, box squats can be done one day and then step-ups the other days of the week.



STEP I: LEG EXTENSIONS



STEP II: LEG CURLS

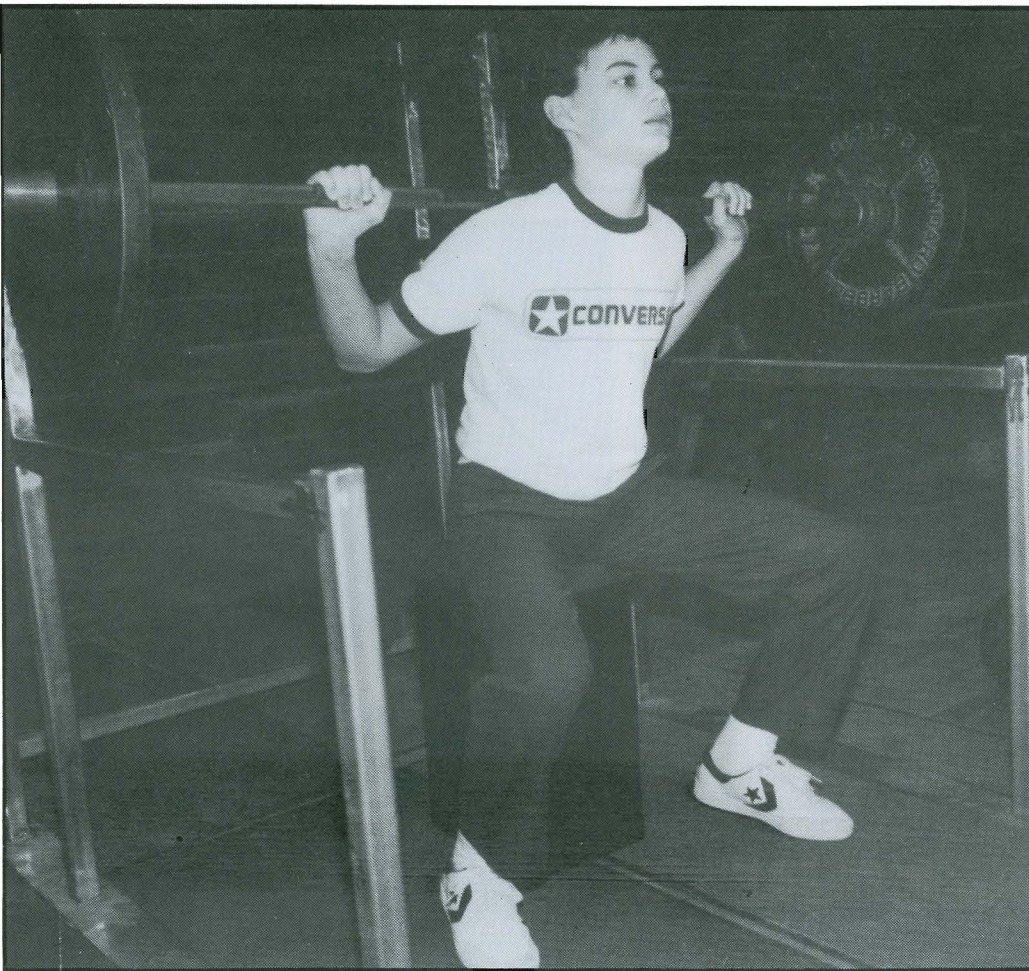


ALTERNATIVE STEP-UPS

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After one cycle has been completed over a four week period then parallel squats can be attempted. First, get in our low power parallel position. Make sure the knees are straight, feet flat and the lower back is in a locked-in concave position. Now, do five reps. Again, if there is no pain or aching, the athlete may proceed. There is a 99% chance he will be able to continue. Put on 145 pounds and do one rep. Analyze how it feels. If it feels OK, then do four more and stop. Over the next 24 hours, again analyze how the knee feels. If everything is OK, then you may start with 145 pounds and begin with the BFS Set-Rep System and do 3 sets of 3 reps. I recommend to move up cautiously and knee wraps probably should be worn on the heavier reps. You should now be out of the rehabilitation mode and into the development mode.



BOX SQUAT: Begin when leg extension and leg curl exercises are done with at least 90% resistance of the good leg.



PARALLEL SQUAT: Begin after one full four week BFS Set-Rep Cycle of successful box squatting.