









Appendix D: Post Operative Return to Jumping/Running

Post-Operative Return to Jumping




Programs should be designed to address the common faults seen with jumping/landing, include all phases of a plyometric, and be progressive in nature. Below is a sample progression used to return to jumping/running post-operatively but should not replace clinical judgement; modifications should be made accordingly.

<p>Wall sit with heels elevated</p>	<p>A standard wall sit with the heels elevated on a slant board, weight plate, or board can be used promote peak knee flexion and less quad avoidance.</p>	
<p>Split Stance isometric with foam roller cueing</p>	<p>A foam roller can be used as a cue to promote peak knee flexion by improving strength and tolerance to loading in this flexed position. Can simply hold this position or reach with the contralateral lower extremity to increase load.</p>	
<p>Squat with lateral weight shift to single leg balance</p>	<p>Squat with both lower extremities to about 45deg knee flexion. In the bottom position shift weight to involved side and lift the uninvolved lower extremity so that the athlete is balancing on one leg in 45deg knee flexion; come to a standing position rising using in the involved limb.</p>	
<p>Overcoming Isometric</p>	<p>In a split stance position in about 45deg knee flexion, lift a barbell/trapbar up against an immovable object (ie: squat rack). Lift up as hard and as quick as possible, holding for about 3-5sec. This has high central nervous system drive and improves rate of force development.</p>	

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<p>Tall drop: double leg to single leg</p>	<p>Stand up on toes on two legs with both arms overhead. Quick swing the arms down and drop to the heels as weight is shifted to one leg, ending in a single leg lunge position. Designed to improve eccentric loading with adequate peak knee flexion and flexion excursion.</p>	
<p>Box jump: double leg jump to double leg land</p>	<p>From a standing position, quickly squat on both legs and jump up to a box, landing on both legs. Landing should be soft/quiet and demonstrate adequate knee flexion excursion.</p>	
<p>Box jump: Single leg jump to double leg land</p>	<p>While standing on one leg, quickly squat down and jump up to a box, landing on both legs. Landing should be soft/quiet and demonstrate adequate knee flexion excursion.</p>	
<p>Box Jump: Double leg jump to single leg land</p>	<p>From a standing position, quickly squat on both legs and jump up to a box; landing on a single leg. Landing should be soft/quiet and demonstrate adequate knee flexion excursion.</p>	

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Drop Vertical Land: double leg	<p>Start standing on top of a box. Step off the box and fall into a landing position on two legs. Landing should be soft/quiet and demonstrate adequate knee flexion excursion.</p>	
Drop Vertical Land: single leg	<p>Start standing on top of a box. Step off the box and fall into a landing position on one leg. Landing should be soft/quiet and demonstrate adequate knee flexion excursion.</p>	
Split Squat Jump Switches	<p>Beginning in a split squat position, jump and switch legs to that you land in a split squat with the other leg forward.</p>	
Multiple jumps	<p>This can include multiple hurdle jumps, squat jumps, box jumps, or drop vertical jumping with appropriate progressions of double leg and single leg training.</p>	
Skipping	<p style="text-align: center;">Skipping can be used as a good transition to jogging.</p>	