

Edward S. Chang, MD Inova Orthopaedics and Sports Medicine

OFFICE LOCATIONS

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WEDNESDAY 1005 N. Glebe Rd Suite 410 Arlington, VA 22201 T 571-414-6940 F 703-970-6465

THURSDAY FRIDAY (AM only) 6355 Walker Lane Suite 300 Alexandria, VA 22310 T 703-797-6980 F 703-797-6981

CLINICAL NURSE

Eileen Perri, BSN (703) 797-6918

REHABILITATION GUIDELINES

AGILITY AND PLYOMETRICS PROGRAM

This program is designed as a guide for clinicians and patients through a progressive return-to-run program. Patients should demonstrate > 80% on a Functional Assessment and started a running program prior to initiating this program (after lower extremity surgery).

PHASE I: ANTERIOR PROGRESSION

Goals:

- Safely recondition the knee
- Provide a logical sequence of progressive drills for pre-sports conditioning

Agility:

- Forward run
- Backward run
- Forward lean in to a run
- Forward run with 3-step deceleration
- Figure 8 run
- Circle run
- Ladder

Plyometrics:

- Shuttle press: Double leg \rightarrow alternating leg \rightarrow single leg jumps
- Double leg:
 - \circ Jumps on to a box \rightarrow jump off of a box \rightarrow jumps on/off box
 - Forward jumps, forward jump to broad jump
 - Tuck jumps
 - o Backward/forward hops over line/cone
- Single leg (these exercises are challenging and should be considered for more advanced athletes):
 - Progressive single leg jump tasks
 - Bounding run
 - Scissor jumps
 - o Backward/forward hops over line/cone

Criteria to Progress:

- No increase in pain or swelling
- Pain-free during loading activities
- Demonstrates proper movement patterns



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PHASE II: LATERAL PROGRESSION

Goals:

- Safely recondition the knee
- Provide a logical sequence of progressive drills for the Level 1 sport athlete

Agility (*Continue with Phase 1 interventions):

- Side shuffle
- Carioca
- Crossover steps
- Shuttle run
- Zig-zag run
- Ladder

Plyometrics:

- Double leg:
 - Lateral jumps over line/cone
 - Lateral tuck jumps over cone

• Single leg (these exercises are challenging and should be considered for the more advanced athletes):

- Lateral jumps over line/cone
- o Lateral jumps with sport cord

Criteria to Progress:

- No increase in pain or swelling
- Pain-free during loading activities
- Demonstrates proper movement patterns

PHASE III: MULTI-PLANAR PROGRESSION

Goals:

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• Challenge athlete in preparation for final clearance for return to sport

Agility:

- Box drill
- Star drill
- Side shuffle with hurdles

Plyometrics:

- Box jumps with quick change of direction
- 90 and 180 degree jumps

Criteria to Progress:

- Clearance from MD
- Functional Assessment
 - $\circ \geq 90\%$ contralateral side
- <u>Return to Sport Index</u>