

Hamstring Rehabilitation Exercises

With WSC Physiotherapists Andrew Darcey & Liana Cope

Knee flexion/extension on chair



- Sitting on chair, neutral back position
- Slowly straighten knee to point of comfort
- Lower down
- Repeat 10 times, 3 sets
- Do 3 times daily

Prone Curls



- Lying on tummy
- Flex knee towards bottom
- Lower back down as fast as can without pain
- Repeat 10 times, 3 sets
- NO PAIN!!
- **Progression: Increase Speed**

Eccentric catches – ‘donkey kicks’



- Lying on stomach, TA, pelvic floor and multifidus co-contracted
- Bend knee to take heel to bottom and then quickly flick the leg out straight, stopping before foot hits floor
- Repeat 10 times, 3 sets
- NO PAIN!!
- **Progression: Increase Speed**

Standing Hip Extension



- Standing facing theraband which is attached to ankle
- Hip is flexed and knee straight
- TA, pelvic floor and lumbar multifidus co-contracted
- Bend knee and extend hip at same time against resistance
- Repeat 10 times, 3 sets
- NO PAIN!!
- **Progression: Increase speed or resistance**

Lying Hip Extension



- Lying down, theraband attached to ankle
- Hip flexed, knee straight + co-contract as above
- Same action as above
- Repeat 10 times, 3 sets
- NO PAIN!!
- Progression: gradually increase speed of kick
- **Progression: Increase speed or resistance**

Eccentric Catches



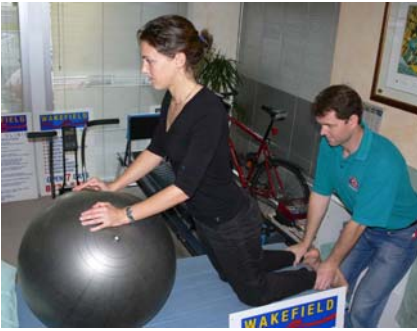
- Similar action to previous exercise, but different starting position
- Lie on table or bed so that hips are at the edge and are bent to about 50°, arms resting on floor or a chair
- Bend (R) heel to bottom and then extend rapidly, catching foot before knee reaches full extension
- Repeat 20 times, 3 sets, NO PAIN!!
- **Progression: add 0.5kg ankle weight**

Standing Eccentric Catches



- Standing with hand on wall for support
- Co-contract TA, pelvic floor and Lx multifidus
- Flex hip in fast motion and catch at 90°, lower down to neutral
- Repeat 10 times
- Flex knee to buttock and kick down straight to floor, catching before knee straightens fully
- Repeat 10 times
- Combine two exercises, flexing hip to 90° and extending knee, catching both in quick motion.
- Repeat 10 times
- 3 sets whole process
- **Progression: Increase Speed**

Nordic HS with support



- Kneeling, facing ball, hands clasped & forearms on ball
- Have a partner support your ankles with their body weight
- Roll forwards as for Wheelbarrow exercise but control forward motion with hamstrings
- Repeat 10 times, 3 sets, NO PAIN!!
- **Progression: go further forward, hold longer**

Drinking Bird



- Standing on (R) leg, co-contract TA, pelvic floor and Lx multifidus
- Bend forwards from (R) hip, maintaining Lx neutral
- Raise back up
- Repeat 10 times
- **Progression: Dip further forward, more reps**

Eccentric Catches



- On edge of bed/table as in week 3
- Increase weight to 1kg and speed as fast as comfortable
- Repeat 20 times, 3 sets, NO PAIN!!

Nordic HS (every 2nd day)



- Kneeling upright, partner supporting ankles with their body weight
- Pillow or cushioned mat under knees
- Place hands across chest, co-contract TA, pelvic floor and Lx multifidus
- Keeping trunk straight, bend body forwards from knees, controlling forward motion with hamstrings
- When reach point of “no return” take hands out forwards and stop forward progression and push up with hands
- Repeat 5-10 times, 3 sets, NO PAIN!!
- **Progression: further forward, static holds**

Gluteus Maximus Recruitment

Bridging



Swiss ball exercises: Bridging



Hamstring Curls



Single Leg Bridging



Single Leg Curls



- Crook lying with neutral spine, co-contract TA, pelvic floor, lumbar multifidus and gluteals
 - Raise bottom off ground until thighs are straight with body
 - Hold 2-3 seconds, lower down
 - Repeat 10 times, 3 sets
 - Can progress to single leg
 - **Progression: hold longer, more reps**
-
- Lying on back, feet on top of ball
 - Co-contract TA, pelvic floor and Lx multifidus
 - Pre-set glutes and raise bottom off floor until body straight
 - Hold 5 seconds and lower down
 - Repeat 10 times, 3 sets
 - **Progression: Hold longer, more reps**
-
- Position and action as for bridging
 - When at top of bridge, curl feet towards bottom by flexing knees and hips
 - Maintain neutral lumbar spine
 - Return out straight and lower down
 - Repeat 10 times, 3 sets
 - **Progression: Increase reps**
-
- Same as double leg bridging in week 3, but this time with one leg held off ball in extended position
 - Co-contract TA, pelvic floor and lumbar multifidus and pre-set glutes
 - Raise bottom off floor until body is in straight line with thigh
 - Hold 2-3 seconds
 - Repeat 10 times each leg, 3 sets
 - **Progression: Increase hold time, increase reps**
-
- Same exercise as above, but when body reaches straight position, curl (R) heel towards buttock flexing knee and hip
 - Maintain lumbar spine neutral
 - Extend back out straight and lower down
 - Repeat 10 times each leg, 3 sets **Increase reps**

Stretches

Piriformus



- Bend (R) knee to chest and take across to (L) shoulder
- Grab (R) ankle with (L) hand and twist foot across body

Gluteus Maximus



- Maintain Lx/pelvis in neutral (place a rolled-up towel under back if needed)
- Take knee to chest

Iliopsoas



- ½ kneel on (L) knee
- Tilt pelvis under (take tail bone under and fwrds)
- When feel stretch at front of thigh, gently push fwrds

Rectus Femorus



- Start in position for iliopsoas stretch as before
- Grab (R) ankle with (R) hand and flex knee until feel stretch in front of thigh
- Hold 15-20 seconds
- Repeat 3 times

Hamstring



- (R) foot on stool
- Forward tilt of pelvis
- Gently bend forwards at hips
- Maintain neutral spine
- Hold 15-20 seconds
- Repeat 3 times each leg

Progressive running program

- Perform 2-3 times in week (trainings and on weekend)
- Jog 3 laps followed by 3-4 minutes of active HS stretching (leg swings)
- 80m run throughs:
 - Lead-in/out distance is 20m
 - 70% pace through middle 40 m, walk back to start
 - Repeat 6 times
- Jog/run (lift pace up and down) 3 laps followed by active HS stretching
- 80m run-throughs
 - 85% pace through middle 40m, walk back to start
 - Repeat 6 times
- Jog/run (lift pace up and down) 3 laps followed by active HS stretching
- Zig-zag run-throughs
 - Cones placed in zig-zag fashion along 80m strip
 - Run around cone and accelerate to 80% to next cone
 - Repeat 6 times
- Jog 2 laps and passive stretch to end (+ICE after session)
- In final week can:
 - Increase pace of mid-section of run-throughs (to full pace)
 - Incorporate backwards running/sprinting
 - Participate in training, monitoring for signs of fatigue/soreness

