**Runners Knee (ITB Syndrome)**

**TREATMENT AND REHABILITATION PROTOCOL**

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| **STAGE** | **AIMs** | **TREATMENT** | **HOME EXERCISE** | | | **CLINICAL PILATES PROGRAM**  **(see attachments)** | | **ACTIVITY MODIFICATION** | | |
| 1 | Settle pain and de-load tendon | -Deep tissue techniques/ dry needling gluts/ TFL/ ITB/iliopsoas | - Quad stretches in prone  - Piriformis stretch  -Activation intrinsic hip muscle sitting/ standing  -Spikey ball massage to deep hip muscles and gluteal  Isometric gluteal in side lying with pillow (clam level 1) | | | -Non weight bearing clinical Pilates program (see sheet) | | -Avoid hip adductions postures (x leg sit/standing ‘hanging on one hip’  -Sleeping with pillow under knees in supine or side lying with pillow  -No running especially downhill running  - If competitive runner allow sprints (knee angles are different) **as long as painfree.** | | |
|  | **CRITERIA TO PROGRESS** | **-Decrease in night pain**  **-Correct activation of stability muscles (deep abdominals/ deep hip stabilisers/ pelvic floor** | | | | | | | | |
| 2 | -Continue to settle pain  -Sustained isometric contractions to enhance tendon analgesic effects  -Begin muscle hypertrophy gluteus medius/min | -Continued soft tissue therapy/ dry needing if required to achieve optimal tissue tension  -Assessment and treatment of lumbar spine and adjacent areas causing altered hip kinematics | -Clam Level 2  -Lying Banded hip abduction  -Standing banded hip abduction  ISOMETRIC DAILY  HIGH TENSILE EXS 3X WEEK  -Double bridge 10 x 10 sec holds  -Foot/ ball/ wall glut max activation  -Sitting on ball with gluteal activation  -Static standing posture with band around feet  -banded wall squats | | | -Focus on low velocity/ high tensile load in NON COMPRESSIVE POSITION with weight bearing stimulus.  -Platformer excellent  -Pool rehab/ hydrotherapy | | -Continued avoidance of static and dynamic compressive loading postures as per stage 1.  -Able to do walking on flat surface BUT no increase in pain and definitely NO increase night pain | | |
| **CRITERIA TO**  **PROGRESS** | | **-Standing Hip abduction 10 x 10 secs (no compensation)**  **-Banded wall squat without femoral adduction and with good lumbopelvic alignment** | | | | | | | | |
| 3 | -Continued strengthening hip abductors  -Begin movement retraining control of pelvic/ femoral alignment during  -Focus on load bearing control exercises | -General progress to exercise therapy/ Clinical Pilates in this phase  -Video movement analysis of SLS and treatment walking | | | -SLS with core and gluteal control  -Lunge with band around knee  -SLS with ball control on wall (10 sec holds)  🡪 progress with small squat (0-30 deg)  -One leg standing on side of step (eccentric glut med in weight bearing + hip circles  -Side plank static hold (elbow)  +progress to leg holds | | -Focus on weight wearing exercises to simulate walking/ running/ activity postures  -Gradually increase loads/ hold and instability during this phase | -Increased walking tolerance up to 30 mins (flat ground) | |
| **CRITERIA TO**  **PROGRESS** | | **-Single bridge 10x10**  **-SLS 30 sec hold nil Trendelenburg**  **-SLSq with good alignment (No increase femoral adduction)**  **VIDEO ANALYSIS TO CONFIRM** | | | | | | | | |
| 4 | -Improve lumbopelvic control  -Graduate return to activity | -1/1 Clinical Pilates  -Video running analysis and correction if needed | | -Exercise to improve Lx pelvic control (front plank/ praying mantis/ side plank (raised)  -Single leg box squat  -Single leg landing with lumbopelvic and hip control | | Progression to Semi supervised Clinical Pilates with individualised program to target specific weaknesses | | | Return to running program as per guideline (start 30 sec ON 2.5 mins OFF) | |
| **CRITERIA TO**  **PROGRESS** | | **-Y Balance test within normal Limits** | | | | | | | | |
| 5 | Return to high level activities | Functional movement screen to assess contributing factors/ altered movement patterns that may cause increased loading and therefore risk factor for re-injury | | -High level core stability exercises  -Raised side plank with leg lift hold 🡪 progress to leg raise and lower  -Physioball side lying pelvis raise and lower  -Activity/ sport specific | | Progression to performance Pilates | | | Graduated progression to full running and hills | |
| **CRITERIA TO**  **PROGRESS** | | -FMS score >14  -No major faults in running pattern  -Normal single hop score | | | | | | | | |