**Non-Specific LBP**

**TREATMENT AND REHABILITATION PROTOCOL**

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| **STAGE** | **AIMs** | **TREATMENT** | | **HOME EXERCISE** | **CLINICAL PILATES PROGRAM**  **(see attachments)** | | **ACTIVITY MODIFICATION** | | |
| 1 | Settle pain  Maintain ROM  Correct shift  Reduce anxieties | -Deep tissue techniques Lx paraspinals/ QL/ Glutes  - Mobs/Manips  -AVOID prolonged sitting any aggravating positions/ no heavy lifting | | -Pelvic tilting  - Lumbar rolls/ Childs pose  -TA Activations  -Spikey ball massage to QL/ Paraspinals/ Glutes  -Sit to stand / squat depending on severity of pain/ function | -Pool rehab/Hydrotherapy program (see sheet)  -Non weight bearing clinical Pilates program (see sheet) | | -Avoid aggravating positions  -Sleeping with pillow under knees in supine or side lying with pillow  - Modify training ensure pain free | | |
|  | **CRITERIA TO PROGRESS** | **-Decrease in night pain**  **-Correct activation of stability muscles (deep abdominals/ deep hip stabilisers/ pelvic floor)** | | | | | | | |
| 2 | -Continue to settle pain  -Begin muscle hypertrophy (ensuring correct movement patterns) | -Continued soft tissue therapy/ dry needing if required to achieve optimal tissue tension  -Assessment and treatment of thoracic spine and adjacent areas causing altered movement patterns | | -Pelvic tilts into shoulder bridge 10 x 10sec  -TA Activations with OLS or Overhead arms (pelvic dissociation)  -Wall squat/ B/W Squat  -Sitting on ball with gluteal activation  - Weight distribution through foot  -Double sumo squat with band | -Focus on low velocity/ high tensile load in NON COMPRESSIVE POSITION with weight bearing stimulus.  -Continue 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** | | **-Shoulder bridge 10 x 10 secs**  **- Toe Touch (pain free, good ROM)**  **-Double squat without femoral adduction and with good lumbopelvic alignment** | | | | | | | |
| 3 | -Continued strengthening core  -Begin movement retraining control of pelvis  -Focus on load bearing control exercises | -General progress to exercise therapy/ Clinical Pilates in this phase | -SL Bridge  - Squat – increased weight as able (front/ back depending on need)  -Banded good mornings into weighted as able  -RDL’s 🡪 progress to single leg  - Plank statics  -Side plank static hold (elbow)  +progress to leg holds | | | -Focus on weight bearing 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**  **-Side Plank – good control/ painfree**  **-SLSq with good alignment (No increase femoral adduction)** | | | | | | | |
| 4 | -Improve lumbopelvic control  -Graduate return to activity | -1/1 Clinical Pilates  - correct movement patterns | -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** | | **-Toe touch – Full + pain free**  **- Excellent Lx Pelvic control in all three planes of motion** | | | | | | | |
| 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 | | | | | | | |