**Non-Specific LBP**

**TREATMENT AND REHABILITATION PROTOCOL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **STAGE** | **AIMs** | **TREATMENT** | **HOME EXERCISE** | **CLINICAL PILATES PROGRAM****(see attachments)** | **ACTIVITY MODIFICATION** |
| 1 | Settle painMaintain ROMCorrect shiftReduce 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 |