

GREATER TROCHANTERIC PAIN SYNDROME – RECOMMENDED EXERCISES & PROGRESSIONS.

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PART 2:

In Part 1, we discussed the downsides to using the Clam exercises as a method to strengthen the Hip Abductors, External rotators. Please refer to Part 1: THE PROBLEMS WITH THE CLAM EXERCISE: an emphasis on Greater Trochanteric Pain Syndrome for details on this discussion.

In Part 2, I would like to discuss some exercise and management principles in patients presenting with GTPS as well as the judicious use of progressive loading. This article does not discuss tests used to clinically confirm a diagnosis of Gluteal Tendinopathy & will be covered in a future article. Note, however, that the use of the VISA-G questionnaire is a validated & useful objective assist in monitoring change in pain & disability in this patient group as your rehabilitation progresses (Fearon et al, 2015).

Exercise Principles in patients presenting with Greater Trochanteric Pain Syndrome (GTPS)

- Excessive hip adduction is considered a key driver in Gluteal Tendinopathy. For this reason, avoid the following:
 - Stretching: Especially whilst the patient has posterior or lateral hip pain (eg Tensor Fascia Lata (TFL) stretches, or the 90/90 in lying) as this causes compression onto the Gluteus Medius and Minimus tendons by the overlying TFL.
 - Crossing legs: Especially with the affected leg crossed on top of the unaffected.
 - Standing on one leg (eg carrying baby on 1 hip).
 - Sleeping without a firm pillow between the knees.
- Use external pacing to stimulate Neuroplastic changes for better outcomes (Rio et al, 2015).
 - Visual: Mirrors, Video, pressure biofeedback
 - Auditory: Exercise to a metronome
 - Mental imagery: mentally rehearse the task
- Perform exercises slowly as this biases the deep stability system of muscles. I often tell the patient: “You can never do the exercise too slowly, only too ‘fastly’”. Try follow the mantra of ‘2 seconds out, 2 seconds hold and 2 seconds return’, for a rate of 6 seconds per repetition. Specific loading exercises, such as isometrics, can be performed to a 4/10 intensity and symptoms should be no worse at 24 hours post exercise. However, no pain should be allowed during a functional task exercise (eg lunging, step-ups) as this implies an inadequate control of optimal alignment with resultant increased compression on the Gluteal tendons.
- Initially avoid exercises that encourage hip flexion. This can negatively affect motor control, optimal muscle activation and sequencing by causing superficial hip flexors such as TFL & Rectus Femoris to dominate over the hip abductors/ external rotators (Abd/ER).

- Remember that even the small amount of flexion at the hip that results from a posture of anterior pelvic tilt (lordosis) will increase the hip internal rotation moment and thus encourage medial collapse during loading (refer to Part 1). For this reason, encourage exercises to be performed from a position of ‘lumbo-pelvic neutral’.
- Progressively increase tendon load. The entry point to exercise load is patient dependent. Some patients need a gentler / slower entry into loading intensity.
 - Isometrics have been shown to be highly effective in reducing pain and improving corticospinal excitability (Rio et al, 2015). They can be used as an entry into rehabilitation, but also can be effective ‘in-season’ for athletes to reduce pain and control symptoms. Build up resistance to 4/10. Hold 30 seconds. Repeat 5 times daily.
- Load: Resistance (weight) X reps X Sets X frequency/ week.
 - Monitor and be specific with progressions. The use of a logbook by the patient can be helpful.
 - Eg: Loop exercises (Abd/ER & Extension). Yellow band. 1 set of 8 reps. 4 X/ week. Watch 24-hour response. Progress over 2 weeks to 3 sets of 12 reps. Then change to a stronger resistance band (Eg red or green) and reduce either sets or reps. Monitor the 24-hour response and progress.
- If an exercise flares a patient do not discard it. It may be the correct exercise, but the incorrect load. Either stop that exercise and return to it at a later stage in the rehab, or reduce the load (reduce resistance or repetitions or sets or frequency).
- Functionally retrain activities where the patient falls into medial collapse (sometimes described as Valgus or Hip Adduction/ Internal rotation). Examples of functional dynamic loading include lunging, step downs or getting out of a chair. During these functional loading activities, in the frontal plane, the nose should be in line with the knee which should be in line with the middle of the foot.
- In my experience, patient education is perhaps the most important component to address. Please refer to the information infographics for patient education on the Physio Software Program: <https://www.groovimovements.co.za/physio-software/>. Educate your patient on managing associated ‘ancillary’ factors such as hormonal status, obesity, sensitivity to certain medications, sleep hygiene and associated co-morbidities. Although addressing these ‘ancillaries’ may not be curative, cumulatively they assist in a better, more holistic outcome.

Table 1: Examples of progressive exercise options over 12 weeks. Progression should be patient dependent & patient specific.

Week / Stage	Exercise Type	Ex examples	Load effort	Reps	Sets	Frequency
Week 1 Early	Isometrics: Abduction	In standing or lying. Against wall. Bridging with resisted abduction	Low Build up resistance slowly to a 4/ 10 pain (max). 30-45 sec hold	5-8	1-2	Throughout day

	Isometrics: Extension	In standing or lying. Against wall. Supine into ball	Low Build up resistance slowly to a 4/ 10 pain (max). 30-45 sec hold	5-8	1-2	Throughout day
Week 2	Isotonics. Side ly against gravity	Modified Clam Use elastic tubing to increase resistance	Moderate. As an isometric OR also isotonic	8-12	2	Once daily
	Standing Abduction / ER	Bilaterally. Start with yellow & progress to blue elastic tubing	Moderate. If isometric – use blue (strong resistance) elastic tubing. Light resistance if isotonic.	8-12	2	Once daily
	Motor control	Glute Max over bed	Light. Activate Glute max before either hamstring or back extensors. 10 second holds	8-12	2	BD
Week 3 Mid stage	Neuroplastic training.	Fire Hydrant. Progress to elastic tubing	High load isometric. 30-60 sec holds	6-8	1	Once daily
	Bridge loading exercises	-Off set Bridge -Single leg bridge -Hip Drop Bridge	High load. Ensure no dominance / cramping in hamstring	10	1 of each exercise. Adds up to 3 sets	Once daily. Stop some of earlier exercises eg isometrics wall & basic bridge
Weeks 4-6	Increase loading. Incorporate function. Heavy Slow Resistance (HSR)	-Abduction slides -The 'Loop' for proprioception & functional loading. -The 'Bird Dog' -Lateral Step-Downs	Increase elastic tubing to increase resistance. Progress by increasing resistance & decreasing Reps.	8-12	3	3- 4 times weekly. Stop optimal glute max, modified clam
Weeks 6-12 Late rehab	Increase loading. Can increase speed Sports Specific	Single- leg squats Backward lunges on ball Contralateral split squats Step-up 'Amandla's' on half -ball	Ensure performed with optimal correct alignment. Increase weight. Remember 'Heavy Slow Resistance'. Reduce reps as you increase weight	8-12	3	3-4 times weekly



Static Hip Extension



Static Hip Abduction



Bridge with static abduction



Modified Clam with resistance



Optimal Glute Max firing



Pelvic Drop & Lift from Bridge



The Loop



Bird-Dog resisted



Lateral Step-Downs



Ball backward lunges



Step ups 'Amandla'

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Physio Software: www.groovimovements.co.za. 9th Ed, 2019