

Peripheral Neuropathy

DIAGNOSING PERIPHERAL NEUROPATHY AMONG OLDER PERSONS

1. ABSENT ACHILLES TENDON REFLEX
2. VIBRATION FELT LESS THAN 10 SECONDS AT LAT MALL.
3. <8/10 POSITION SENSE OF TOES (TEST ALL TOES 1 CM MVMT)

Intervention Exercises

The exercise interventions, performed daily on a firm surface for 3 weeks, included:

- (1) Warm up (open chain active ankle ROM exercises). Subjects wrote the alphabet in the air with each foot by moving the ankle.
- (2) Bipedal toe raises and heel raises (lifting the forefoot as one does to balance on a heel). Subjects did these as quickly as possible, using support as necessary. Subjects started with 1 set of 10 and increased by 1 set every 5 exercise sessions for a total of 3 sets.
- (3) Bipedal inversion and eversion. In this exercise, subjects' center of mass was shifted laterally as subjects strengthened ankle invertors and evertors via closed chain exercises. The goal was to do so without using the upper extremities, but support was used as necessary. Subjects started with 10 repetitions in each direction and increased to 2 sets of 10 repetitions after 5 exercise sessions.
- (4) Unipedal toe raises and heel raises. Again, subjects attempted to perform this quickly—even if that was not possible. Subjects started with 5 repetitions of each exercise and increased to 10 repetitions after 5 exercises and then to 2 sets of 10 after 10 exercise sessions.

(5) Unipedal inversion and eversion. Subjects inverted and everted the foot while standing on it to challenge Balancend to create a closed chain exercise of the ankle invertors and evertors. It was anticipated that most subjects would find this task challenging and so they used their hands for balance when needed. Subjects started with 1 set of 5 repetitions in each direction and increased to 10 repetitions after 5 exercise sessions.

(6) Wall slides. Subjects started with bipedal slides with knee flexion maximum of about 45°. They performed 3 sets of 10. After 5 exercise sessions the first set was performed on each foot.

(7) Unipedal balance for time. Three tries on each foot