Neurological Physiotherapy

Skill Number  L 24

Activity  Walking

Aim  To train the spatio-temporal aspects of walking

Rationale:
Whole-task training is set up so the patient can practice spatio-temporal aspects of walking with feedback. Training is structured so that flexibility of performance is encouraged, ie, the cognitive and/or physical demands of the activity are increased.

Equipment:
• Non-stick footprints
• Metronome
• Measuring tape (not shown in video)
• Stopwatch (not shown in video)
• Arm sling (if necessary)

Key Points:
• Patient is positioned in standing, feet shoulder-width apart, toes pointing forward, trunk, hips and knees extended
• Therapist determines appropriate step length and places footprint cues to indicate step length and width (not shown on video)
• The first step is taken with the intact leg
• Therapist is positioned to the side of the patient and provides stand-by supervision
• Ensure the following is taken into consideration when setting up training:
  o Normal cadence is 120 steps/minute
  o Normal velocity is 1.2 metres/second
  o Step length and height are inter-related
• Therapist may monitor speed using a stopwatch and count number of steps over a known distance. Step length and cadence can be derived from these measures

Common Errors:
• Therapist does not stay close enough to steady the patient if necessary
• Therapist gives explanations or instructions while the metronome is “beeping”

Progression and Variety:
• Decrease/remove feedback
• Increase speed of movement
• Increase step length
• Increase cadence
• Increase cognitive demand