Neurological Physiotherapy

Skill Number U 11

Impairment Loss of dexterity

Aim To train forearm supination and pronation in preparation for reaching and manipulation

Right side affected

Rationale:
An important component of reaching and manipulation is forearm supination and pronation. Task-related training is set up so the patient can practice with manual guidance from the therapist if necessary.

Equipment:
• Table
• Chairs
• Ruler
• Targets, eg, cups, tissue boxes

Key Points:
• Patient is positioned in sitting, arm supported on table, shoulder slightly flexed, elbow flexed and forearm neutral
• Patient holds a ruler, supinates and pronates forearm.
• It may be necessary to tape the ruler into the hand if the patient is unable to grasp objects (shown in video)
• Ensure forearm remains in contact with the table
• Therapist is positioned to the side of the patient and provides manual guidance at the forearm if necessary
• Therapist provides cues for range of movement using targets

Common Errors:
• Patient flexes and extends wrist
• Patient laterally flexes trunk

Progression and Variety:
• Decrease/remove manual guidance
• Remove support from table
• Increase amplitude of movement
• Increase speed of movement
• Sustain muscle contraction