Neurological Physiotherapy

Skill Number  U 12

Impairment  Loss of dexterity

Aim  To train conjunct rotation of the thumb and little finger in preparation for manipulating objects

Rationale:
Two important components for manipulating objects are:
1. conjunct rotation of the thumb
2. conjunct rotation of the little finger.

Task-related training is set up so the patient can practice with manual guidance from the therapist if necessary.

Equipment:
• Table
• Chairs
• Cylindrical objects

Key Points:
• Patient is positioned in sitting, arm supported on table
• Therapist is positioned to the side of the patient and provides manual guidance at the hand if necessary
  1. Conjunct rotation of the thumb
     • Patient holds a cylindrical object and rolls thumb down so the pad is in contact with the object
     • It may be necessary to tape the cylinder into the hand if the patient is unable to grasp objects
     • Ensure forearm remains in contact with the table
  2. Conjunct rotation of the little finger
     • Patient places tips of thumb and little finger together (ie, opposition) and abducts little finger

Common Errors:
• Patient slides thumb up the cup (ie, extends the MCP jt of the thumb)
• Patient abducts and/or internally rotates shoulder
• Patient flexes the wrist
• Patient fails to maintain opposition of thumb and little finger when attempting conjunct rotation of the little finger

Progression and Variety:
• Decrease/remove manual guidance
• Remove support from table
• Sustain muscle contraction
• Increase circumference of object in hand