Constraint Induced Movement Therapy (CIMT) or “forced use therapy” restricts use of the unaffected arm by placing a mitt on the hand or the arm in a sling, forcing use of the affected limb with the goal of promoting purposeful movements when performing functional tasks.

Functional tasks are progressively graded to increase task difficulty ensuring clients experience success. This shaping approach is intended to reduce learned non-use.

Traditional forms of CIMT are very time and resource intensive. Modified CIMT (mCIMT) has been found to be equally effective in improving motor control and requires less intensive restraint. This modified form of CIMT is more appropriate for a self-management approach adopted in “The BEST study”.

Evidence suggests that mCIMT has greater benefit than traditional rehabilitation methods when measuring effect on arm impairment (Fugl Meyer Assessment), arm motor function (Action Research Arm Test), disability (Functional Independence Measure), amount of use and perceived arm function (Motor Activity Log) and potentially on quality of life (Stroke Impact Scale).

National Stroke Foundation Guidelines

6.3.5 Upper Limb Activity
People with difficulty using their upper limb(s) should be given the opportunity to undertake as much tailored practice of upper limb activity (or components of such tasks) as possible. Interventions which can be used routinely include:

- Constraint Induced Movement Therapy in selected people

IS THIS SUITABLE FOR THE CLIENT?

TARGET IMPAIRMENT
- UL weakness
- learned non-use

STAGE OF RECOVERY
- Commencing CIMT early (5–9 months post-stroke) has produced greater functional gains than delayed treatment (15–21 months post-stroke)
- No benefits associated with very acute administration (< 3 months post stroke).

SEVERITY OF IMPAIRMENT
- minimal active finger/wrist extension required
- minimal spasticity or pain
WHAT RESOURCES DO I NEED?

EQUIPMENT:
Mitt or sling to constrain the non-affected UL. The choice of restraint type is essentially a question of safety vs. intensity of therapy. A hand mitt restricts the patient from using their hand and wrist, though allows use of their arm in case of loss of balance or falls. A hand mitt (versus an arm sling) will result in less intensive practice because the unaffected arm can still be used to assist task performance.

SUPPORT:
Carer assistance may be needed to “set-up” tasks to do during the designated constraint time period. Assistance may be needed to put on and remove the mitt/sling.

CIMT RECEIVES A GREEN LIGHT
CIMT is strongly recommended for stroke clients with some active wrist and finger extension and should be provided to improve arm and hand use.

CONSIDERATIONS
CIMT requires a significant time commitment: minimum 2 hours of active therapy per day for 2 weeks, plus restraint for at least 6 hours a day. This minimum expectation should be clearly explained to clients and caregivers to maximise the likelihood of a successful outcome. CIMT is not suitable for clients with cognitive impairments or clients with reduced balance, as restraining an arm or hand can increase risk of falls.

ADDITIONAL RESOURCES