Dry needling improves function in spastic upper extremity

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Dry needling paired with traditional rehabilitation **can improve upper extremity function** and range of motion for patients **with chronic spasticity**.

Dry needling may **inform decision making** for **pharmacologic or surgical interventions** for management of spasticity.

The Case

Diagnosis: Spastic cerebral palsy

Age: 48-year-old female patient

Chief Complaint: increasing tightness in right arm making daily tasks more difficult

Upper Limb Posture

Target Muscles
- FDS, FDP*, Dorsal Interossei
- Pronator Teres*, FCR
- Brachioradialis, Biceps*
- Pectoralis Major

Indications for Dry Needling
- Spasticity
- P/AROM deficits
- Address functional goals
- Maximized benefit from traditional therapy
- Hesitant to pursue botulinum toxin injections

Treatment Intervention

01 Assessment
Range of Motion
Muscle Tone
Muscle palpation
Patient report
Response to prior session

02 Dry Needling
Identify target muscles
3-4 muscles/session
Intramuscular stimulation
x10 minutes

9 total sessions

03 Therapy
NMES
Weight bearing
Mass practice fine motor coordination
Functional training

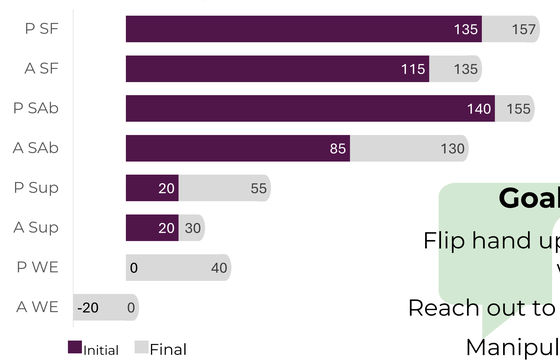
30 to 60-minute sessions

04 Outcomes
A/PROM
Box and blocks
9-hole peg test
Patient report

Completed at initial and final sessions

Outcome Measures

Range of Motion Improved



Coordination Improved on 9-hole peg test

Goals Achieved

Flip hand up and open fingers to wash hair

Reach out to push elevator buttons

Manipulate smaller items