

CO10-004-e

### Effect of intensive physical therapy program on gross motor abilities of children with cerebral palsy

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**Background.**– The paper presents the finding of gross motor abilities of cerebral palsy children treated with the method of intensive suit therapy program (6 hours/day, 6 days/week for successive 4 weeks). Bungy suit is breathable easy to wear suit designed to correct the patient's posture and movements. Spider is in space therapy. The patient can move without fear from falling. It will eliminate gravity to a calculated degree. MGU is used to teach the patient the normal pattern of movement and to strength muscles associated to the pattern. Cooling down therapy between each vigorous work the patient must be cooled down and work with less effort, but without complete rest.

**Methods.**– A consecutive series of 400 CP patients (2–15 y) were assessed by Denver Scale then we classify them into two equal groups then we apply intensive suit therapy program for group I and normal manual physical therapy program for group 2 then we reevaluate them 1 week after the program.

**Results.**– Significant improvement of children admitted to intensive course in comparison to other group.

**Discussion.**– Application of intensive physical therapy program increases the skills of gross motor abilities dramatically than the manual course.

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CO10-005-e

### Properties of the self-assessment version of the INTERMED to assess case complexity for patients with musculoskeletal disorders

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**Keywords:** INTERMED; Biopsychosocial complexity; Evaluation

**Background.**– The INTERMED (IM) has been developed as a generic method for the assessment of biopsychosocial health risks and needs. Recently the self-assessment INTERMED (IM-SA) was developed to assess health care needs as perceived by patients themselves. The aim was to evaluate the measurement properties of the IM-SA for patients with musculoskeletal disorders (MS).

**Methods.**– In this cross-sectional study 248 inpatients (73 from a University Rheumatologic Ward [URW], 175 from a Trauma Rehabilitation Clinic [TRC]) participated in an interview (IM) and completed IM-SA and others questionnaires. Pearson's correlation was calculated between IM-SA and IM, and between IM-SA and SF-36, EQ-5D, HADs.

**Results.**– Correlation between the total score IM-SA and IM was 0.71 in URW patients (pt) and 0.51 in TRC patients. IM-SA scores were lower than IM scores in both groups (–2.9 pt URW; –2.4 pt TRC). Correlations evaluating the IM-SA convergent validity were moderate (between 0.41 to 0.71).

**Discussion.**– This study supports the use of IM-SA for patients with MS. Patients have a perception of lower biopsychosocial health risks and needs. The INTERMED complexity cut-off score should probably be adjusted. Difference between the two groups may be due to difference in clinical settings.

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### Determining the anaerobic threshold in post-polio syndrome: Comparison with current guidelines for training intensity prescription

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**Keywords:** Post-poliomyelitis syndrome; Anaerobic threshold; Exercise test; Neuromuscular diseases

**Background.**– We determined whether the anaerobic threshold (AT) can be identified in individuals with post-polio syndrome (PPS) using submaximal incremental exercise testing, and compared current guidelines for intensity prescription in PPS with the AT.

**Methods.**– Power output, gas exchange variables, heart rate (HR) and ratings of perceived exertion (RPE) were measured in an incremental submaximal cycle ergometry test. We assessed correlations between recommended HR according to current guidelines (40% to 60% HRR or an RPE of 12) and HR at the AT. In addition, we determined the proportion that would have been recommended to train at an intensity corresponding to their AT.

**Results.**– The AT could be identified in 77% of the participants. RPE correlated better to the AT ( $r = .86$ ) compared to 40% HRR ( $r = .56$ ) and 60% HRR ( $r = .50$ ). Based on RPE, 56% of the individuals would have been recommended to train at an intensity corresponding to their AT. This proportion was higher compared to 40% HRR (41%) or 60% HRR (18%) as criterion.

**Discussion.**– The AT can be identified in most individuals with PPS offering an individualized target for exercise intensity. In the absence of respiratory gas analysis equipment, intensity prescription can best be based on RPE.

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### Comparison of quality of life in patients with post-polio syndrome and myalgic encephalomyelitis/chronic fatigue syndrome with Swedish norm

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**Keywords:** ME; CFS; Post-polio; Fatigue; SF36; Quality of life

**Background.**– Fatigue is a common and often dominating symptom both for patients with post-polio syndrome (PPS) and myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). Even other symptoms such as chronic pain and decreased physical activity are also common. The aetiology of PPS and ME/CFS also has some similar futures because of earlier infections (polio virus vs. virus and bacterial infections in ME/CFS). The aim of this study was to compare the quality of life (QoL) by using SF-36 in outpatients diagnosed with PPS vs. ME/CFS.

**Methods.**– The SF-36 questionnaire was used to compare the quality of life in 124 patients with PPS and 100 patients with ME/CFS.

**Results.**– The PPS population were older than the ME/CFS. Female gender dominates in a higher degree among ME/CFS patients than in PPS. The comparison of SF36 showed significant lower role physical, bodily pain, general health, vitality, social functioning and mental health in patients with ME/CFS as compared to PPS. Both groups had lower QoL than Swedish normal population. Results indicate that both groups have lower QoL than Swedish norms, and that ME/CFS patients had lower quality of life as compared with PPS.

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CO16-002-e

### Stronger relation between impairment and manual capacity in the non-dominant hand than the dominant hand in congenital hand differences: Implications for surgical and therapeutic interventions

