

CEREBRAL PALSY - Diagnostic and Therapeutic Trends in BULGARIA

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Specialized Hospital for Residential Treatment of
Prolonged Therapy and Rehabilitation of
Children with Cerebral Palsy "Santa Sofia"

Who care for CP

■ Out-Patients Medical Units

Physiotherapy (physiatrist and physiotherapists) / **Neurol. Dept.**
Non-team, medical rehab.

■ Hospitals

Pediatr./Neurol. + Rehab.Dept.

non-team, multimodal (but very often just medical)

- Multimodal, Specialized
- Active Treatment, Rehabilitation, Residential Treatment, Resid. Treatment & Rehab.
- Regional, National, University

■ Out-Patient Nonmedical Units

Mostly non-medical, non-team rehab. (very rarely + physiotherapist)

- Social Ministry Units
- NGO's Units

Hospitals designed for CP

- **Nat. Rehabilitation Hospital "M. Prohod"**
70 km. south-east from Sofia; 1-18 years old; multimodal rehab.
- **Nat. Rehabilitation Hospital "Tuslata"**
350 km. north-east from Sofia; 5-18 years old; multimodal rehab.
- **Univ.Spec.Hosp.Act.Treatm.Neurol.Psych. Diseases "St.Naum" - Pediatric Clinic**
Sofia, different neurological diseases incl. CP; 5-18 years old, mainly diagnostic
- **Univ.Spec.Hosp. Active Treatm. Pediatric Diseases - Neurol. Clinic + Rehab. Clinic**
Sofia, different neurological diseases incl. CP; 0-3 years old, mainly diagn., + 3-8 years, mainly rehab.
- ***Spec. Hosp. Resid. Treatment, Prolonged Ther. & Rehab. Children with CP "St.Sofia"**
Sofia, 126 place; 0-18 years, for early diagn. and multimodal periodic team rehab.

The Diagnose - CP

■ What is CP ?

A very popular term with a lot of definitions:
W.Little 1862, S.Freud 1897, Osler 1889, M.Bax 1964, Mutch 1992,
Brown and Lin 1998, Brown and Walsh 1999, F.Stanley 2000;

■ Who put it ?

CP, mainly Pediatricians, rarely Neurologists, some time Orthopedic Surg.

■ When put it ?

hyper-diagnostic before 1y6m mainly; hypo-diagnostic over 2y. rarely

■ Who treat it ?

Physiatrists; Physio-Ocup. Speech Ther.; Neurologists, Orthop.Surgeons,

■ How treat it ?

Mainly: Uni-modal, Non-periodic / Very rarely: Multimodal & Team & Periodic

WHO WE ARE ?

- **Regional Specialized Hospital - 86 beds**
for children between 2 and 18 y. old
- **with Out-patient unit - 40 places**
between 0 and 2 y. and over 18 y. old.
- **Early Diagnostic Tools**
- **Multi-Modal Periodic Neuro-Developmental Habilitation**
- **Rehab Team -**
physiatrist, neurologist, pediatrician, psychologist, physio-speech-occupational therapists, nurse, parents.

Our formula about CP

■ CP at risk - under 2 years old

"psycho-motor develop. delay BG", "central motor disturbances UK", "cerebral motor dysfunction USA", "central coordination atourning ID", "durchgang syndrom A" and s.o.

treatment strategy:

collection - after delivery, "risk infants" have to be directed for:

early diagnostic - after it - decision for observation or:

therapy - what type ???

Chance for 100% recovering

■ CP fixed - over 2 years old

"an umbrella term covering a group of non-progressive, but often changing, motor impairment syndroms, secondary to lesions or anomalies of the brain, arising in the early stages of its development associated some time with limitation in the setting, speech, cognition, perception, learning, visual coordination, behavior, convulsions and others.

management:

To engage resources and professionals, to construct a team and to organize purposeful "step by step" activities, which final point have to be the chance of successful socialization of the child with his/her difficulties - motor, speech or cognitive.

DIAGNOSTIC TOOLS 1

■ Medical

CP at risk

Neuro-Kineziological Diagnostic** ad.modum.Vojta: positional reactions & primitive reflexes
 Neuro-Pediatric Status - spont. motor activities, pathological and peristaltic reflexes
 Transfontaneal Echography - checking the brain structure (or with CAT/MRI - very rarely)
 EEG - for convulsions or after the 5-th month- for DD of pathologic dystonic reactions
 EMG - after the 6-th month for DD of "floppy child"

CP fixed

Neuro-Pediatric Status, EEG (just for convulsions)
 Motor Tests (GMFCS**, GMFM**, Ashworth**, Goniometry)

** Activities done just in Specialized Hospital for Children with CP "Santa Sofia"

DIAGNOSTIC TOOLS 2

■ Non(para)medical

CP at risk

Check the feeding** (abilities of sucking and swallowing)
 Munchen's Functional Diagnostic** (fine motoric, perception, soc.envir., act.&pos.speech..)

CP fixed

Testing Speak, Speech, Cognitive, Educational, Self-care, Finemotor and other Abilities

** Activities done just in Specialized Hospital for Children with CP "Santa Sofia"

THERAPEUTIC TOOLS 1 Medical Issues

- Physiotherapy - Vojta, NDT, SIT, Analitic,
- Electrical Stimulations - TENS
- Lowfreq.Impuls.Magn.Field - Transcranial
- Thermotherapy - Heat/Cold
- Hydrotherapy - Pearl bad, Underwater jet-massage,
- Pharmakotherapy - Antiepileptic, Myorelaxants@BtA
- Hyperbaric Oxygenation - 100% pure damp O2
- Laser Acupuncture - He-Ne

THERAPEUTIC TOOLS 2 Nonmedical Issues

■ Psychological Interventions

Individual therapy
 Family Intervention
 Behavior Therapy

■ Speech Interventions

Feeding Therapy
 Pre-speech Therapy
 Speech Therapy

■ Special Pedagogic

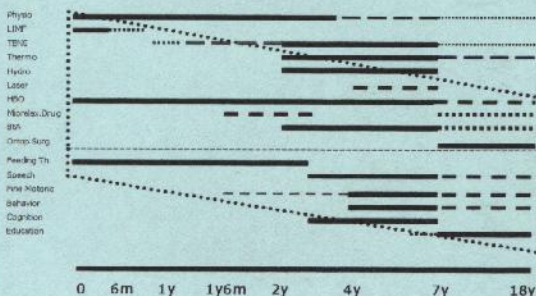
Daily-Life Games
 Montessori Therapy
 Pre-school Training

■ Education

School Classes
 Out-of-school training
 Professional Training

out-side staff - Ministry of Education
 staff - IGO
 staff - IGO

Multi-Modal Periodic Neuro-Developmental Habilitation A General Overview



Problems about CP in BG

- There is not a consensus in BG when&what diagnosis to use.
- There is not full information about the number of CP in BG.
- There is not any information about CP-persons over 18 years.
- There is not any register for CP-children.