Keywords: Limb defects; Prenatal consultations

Objective.– The limb defects are rare. The antenatal diagnosis has led to a reduction of effective birth and organization of care at birth [1,2].

Method.– Fifty-three pregnancies, 10IMG has been made for more or less severe malformations [3]. Decisions regarding the coming of pregnancy are highly variable from one couple to another and from one team to the other.

Discussion.– Several tables antenatal clinics were found different at birth. Functional capabilities are different for the same anomaly… and it is impossible to have a systematic description.

References
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P377-e

Neuro-motor rehabilitation evaluation scale for the child with cerebral palsy in Romania

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Keywords: Cerebral palsy; Evaluation; Motor development

We designed and investigated the efficacy of a new specific neuro-motor scale (SED-PCI) for the Romanian cerebral palsy child in order to evaluate the rehabilitation treatment outcomes with practical application on Romanian particularities of CP case.

The scale was conceived to be especially an observational instrument used to assess motor behaviour and to sustain an early identification of neuro-motor skills difficulties.

In order to demonstrate the validity of SED-PCI we use a comparative research with GMFM and GMFCS scales on 75 cerebral palsied children. The findings showed us a proper correlation with this scale which means that SED-PCI can be a useful instrument to describe the development for this type of pathology at different ages of year.

This instrument adapts easily to evaluation program’s needs, it is culturally sensitive for this region, and is intended to be useful in our care community-based programs which usually have limited resources and depend on the efforts of parents and personnel who have little formal training.

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P378-e

Problems of head-holding in children with cerebral palsy

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The disability of cerebral palsy-subjects to hold their head for a long time consequently creates other disorders such as perception troubles (troubles between sight, spacing and touching information), moving troubles (eyes to hand coordination), feeding troubles (swallowing quality) postural troubles (pathological behavior), and troubles in communication and life quality (pains).

the related therapeutic means used is supported by various works carried out by A. Grenier and Le Métayer about the innate abilities of the newborn, or by Assaillante and Berthoz about the child construction of their equilibrium strategy. We observed very young premature babies and also severe several palsy subjects and have been able to propose responses to correct their bad head-holding.

Further reading

P379-e

Ultraflex® dynamic orthosis: High tolerance, key factor of its efficiency in the treatment of knee flexion contracture in child with cerebral palsy

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Keywords: Cerebral palsy; Knee flexion contracture; Dynamic orthosis; Tolerance

Objective.– Assessing patient compliance and impact on sleep.

Methods.– Questionnaire in 92 patients assessing wearing time and regularity, sleep quality, tolerance.

Results.– Seventy answers, 18 females, 52 males aged from 5 to 23 (28 GMFCS I & II; 19 GMFCS III & IV; 23 GMFCS V). Compliance: 68% worn every night (among which 52% of simultaneous bilateral treatment); 15.7% every other night; 12.8% less than 3 nights a week; 2.8% abandoned Wearing night time: 78.7% > 7 hours. Tolerance: 74.2% excellent or good, 18.6% medium; 7.1% bad.

Discussion.– Assessing sleep quality before treatment and therapeutic proposals after analysis of disturbances if necessary.

Conclusion.– Ultraflex® dynamic orthosis uses a low load prolonged stretch with really good results on walking and not walking child, not least thanks to its good tolerance, which allows to propose it early in case of uni or bilateral knee flexum.

Further reading

P378-e

Flexed and hyperextended knee in cerebral palsy: A comparison of the efficacy of conservative treatments

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Keywords: Orthoses; Botulinum toxin; Cerebral palsy; Gait; Hyperextended knee; Flexed knee

Introduction.– Flexed and hyperextended knee represent frequent gait abnormalities in children with cerebral palsy. Spasticity, muscle contracture formation, impairments of motor control, weakness, balance deficits, and extrapyramidal motions can all contribute to the functional limitations imposed at the knee [1]. Several conservative management strategies are available. The aim of our
study was to compare how conservative treatments (physiotherapy, orthoses, botulinum toxin A injections and a combination of these) influence these two different patterns.

**Material and methods.**– Fifteen hemiplegic and 10 diplegic children were recruited. During the clinical evaluation a video-recording of child’s gait before and after treatment with BTX-A injections (walking barefoot and with orthosis) was made. The Observational Gait Scale (OGS) based on split-screen video with slow-motion facility and Gross Motor Function Classification System (GMFCS) were used for the assessment.

**Results.**– From our preliminary data a multimodality approach seems to be more effective than single modality to maintain a correct alignment of the knee, mainly for hyperextended pattern.

**Discussion.**– An adequate management of the knee motion results in a more functional gait pattern.

**Reference**

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**P381-e**

**Effect of radial shock wave therapy for reduction of muscle hypertonia in cerebral palsy**

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**Keywords:** Spasticity; Cerebral palsy; Radial shock wave therapy

**Background.**– Extracorporeal shock wave therapy is used for the treatment of musculoskeletal disorders.

**Objective.**– The aim of our study was to investigate the effect of radial shock wave therapy (RSWT) on muscle spasticity of plantar flexor muscles in children with cerebral palsy.

Twenty-five children, mean age 4.84 ± 3.11 years, with spastic diplegia and hemiplegia participated in the study. One placebo session was applied followed four weeks later by one active treatment session. We used passive range of motion, Modified Ashworth Scale and baropodometric measurements for outcome assessment.

**Results.**– After RSWT, a significant increase in passive range of motion was observed: 47.00 ± 2.298 versus 33.25 ± 2.208 (P < 0.001), which persisted at fourth week (44.12 ± 1.938, P < 0.001). The Modified Ashworth Scale score decreased from 2.77 to 2.00 points (P < 0.001), persisting at the fourth week (2.15 ± 0.76, P < 0.001). Baropodometric measurement showed a significant increase in the contact plantar surface area (from 81.32 ± 6.14 to 101.58 ± 5.41 cm², P < 0.001) and in heel pressure (from 50.47 ± 6.61 to 75.17 ± 3.42 N/cm², P < 0.001).

**Conclusion.**– There is a significant decrease of spasticity in children with cerebral palsy after the application of RSWT.

**Further reading**

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