Cerebral Palsy ALLIANCE

CP Research News

Monday 16 May 2011

Interventions

1. J Child Neurol. 2011 May 6. [Epub ahead of print]

Ethics in Health Care Services for Young Persons With Neurodevelopmental Disabilities: A Focus on Cerebral Palsy.

Larivière-Bastien D, Racine E.

Source: Neuroethics Research Unit, Institut de recherches cliniques de Montréal, QC, Canada.

In this article we review and discuss some of the key ethical and social challenges that young persons with cerebral palsy face in health care delivery. We identify and explain these challenges, some of which are rarely discussed in contemporary medicine and biomedical ethics, partly because they are not considered genuine "ethical" challenges per se. Most of these challenges are heavily shaped by broader social context and institutional practices, which highlights the importance of nonbiological aspects of the care of young persons with cerebral palsy from an ethics standpoint.

PMID: 21551372 [PubMed - as supplied by publisher]

2. Dev Neurorehabil. 2011;14(3):140-4.

Measuring changes in functional mobility in children with mild cerebral palsy.

de Campos AC, Costa CS, Rocha NA.

Source: Federal University of São Carlos, São Carlos, SP, Brazil.

Objective: To support the use of TUG and TUDS to detect changes in functional mobility in children with mild cerebral palsy. Methods: Six children with spastic cerebral palsy and classified by GMFCS as level I or II were enrolled in the study. The gross motor function was measured by the GMFM and functional mobility by the TUG and TUDS. The participants were assessed before and after an 8-week follow-up. Results: After this period, increased GMFM scores were found at dimensions D (standing) and E (walking, running and jumping). The time to complete TUG and TUDS was shorter after the follow-up period. Negative correlations were found between GMFM dimension E and the TUG and TUDS tests. Conclusion: Changes in the gross motor skills measured by the GMFM may be accompanied by changes in the movement speed measured by TUG and TUDS. These tests may complement information provided by GMFM.

PMID: 21548854 [PubMed - in process]

3. Disabil Rehabil. 2011 May 12. [Epub ahead of print]

Fundamental movement skills testing in children with cerebral palsy.

Capio CM, Sit CH, Abernethy B.

Source: Institute of Human Performance, The University of Hong Kong , Hong Kong.

Purpose. To examine the inter-rater reliability and comparative validity of product-oriented and process-oriented measures of fundamental movement skills among children with cerebral palsy (CP). Method. In total, 30 children with CP aged 6 to 14 years (Mean = 9.83, SD = 2.5) and classified in Gross Motor Function Classification System (GMFCS) levels I-III performed tasks of catching, throwing, kicking, horizontal jumping and running. Process-oriented assessment was undertaken using a number of components of the Test of Gross Motor Development (TGMD-2), while product-oriented assessment included measures of time taken, distance covered and number of successful task completions. Cohen's kappa, Spearman's rank correlation coefficient and tests to compare correlated correlation coefficients were performed. Results. Very good inter-rater reliability was found. Process-oriented measures for running and jumping had significant associations with GMFCS, as did seven product-oriented measures for catching, throwing, kicking, running and jumping. Product-oriented measures of catching, kicking and running had stronger associations with GMFCS than the corresponding process-oriented measures. Conclusion. Findings support the validity of process-oriented measures for running and jumping and of product-oriented measures of catching, throwing, kicking, running and jumping. However, product-oriented measures for catching, kicking and running appear to have stronger associations with functional abilities of children with CP, and are thus recommended for use in rehabilitation processes.

PMID: 21563969 [PubMed - as supplied by publisher]

4. J Neurosci Methods. 2011 Apr 30. [Epub ahead of print]

Assessment of surface electromyographic clinical analysis of selective femoral neurotomy on cerebral palsy with stiff knee.

Wang S, Miao S, Zhuang P, Chen Y, Liu H, Zuo H.

Source: Department of Neurosurgery, Yuquan Hospital, Tsinghua University, Beijing 100049, China.

This study aimed to explore the role of surface electromyography (sEMG) on the changes of myoelectric activities of quadriceps femoris and the assessment of its clinical effect before and after selective femoral neurotomy on spastic cerebral palsy with stiff knee. Selective femoral neurotomy was carried out in 15 patients on 26 sides. The electromyography of quadriceps femoris was recorded before and after the operation. Passive and voluntary movements were performed during recording. The root mean square (RMS) and integrated electromyography (iEMG) was calculated by time domain analysis. Meanwhile, the range of the patients' knee joint motion (ROM) was measured by a joint goniometer. The RMS and iEMG of the quadriceps femoris during passive movement was significantly decreased post-operation when compared to those pre-operation (both $P<0.05$, $n=26$). Meanwhile, the RMS and iEMG of the quadriceps femoris during voluntary movement post-operation was significantly reduced than those pre-operation (both $P<0.05$, $n=26$). Additionally, total excursion on the sagittal plane and the peak knee flexion in the swing phase were significantly raised post-operation than those pre-operation (both $P<0.05$, $n=26$). The spasms in the quadriceps femoris in spastic cerebral palsy patients with stiff knee was clearly improved, and the ROM of the knee was significantly enhanced after the selective femoral neurotomy. Importantly, surface EMG can objectively evaluate the clinical therapeutic effect of spastic cerebral palsy stiff knee as a noninvasive detection method.

PMID: 21554900 [PubMed - as supplied by publisher]

5. J Neurosci Methods. 2011 Apr 27. [Epub ahead of print]

Quantification of dynamic EMG patterns during gait in children with cerebral palsy.

Bojanic DM, Petrovacki-Balj BD, Jorgovanovic ND, Ilic VR.

Source: University of Novi Sad, Faculty of Engineering, Trg Dositeja Obradovica 6, 21000 Novi Sad, Serbia.

Our goal was to simplify the representation and interpretation of surface electromyographic (EMG) activity during gait to develop a clinical method for evaluating gait disabilities in children with cerebral palsy (CP). EMG was recorded from four muscles of a lower extremity. Gait cycles were tracked from one force-sensing resistor signal that was recorded synchronously with EMG. The method is based on the comparison of a patient's dynamic EMG envelope shapes and the normative gait-related patterns (norms). Developed norms were based on EMG data obtained in 10 healthy children. Due to newly introduced techniques for time and amplitude normalization, norms were developed regardless of differences in subject age, gender, basic gait parameters and the EMG measurement process. The proposed gait metric quantifies the similarity between a patient's gait-related patterns and norms by a single global value suitable for gait analysis in general, including a detailed analysis using the 10 partial values. The gait metric was experimentally validated with a control group of healthy children and a group of children with CP with different degrees of motor deficits. Gait metric values obtained in children from the control group are high for all muscles, which means that gait-related patterns are close to norms, whereas in children with CP the higher the degree of motor deficit, the lower the gait metric values. The method could be a very useful clinical tool for the recognition and tracking of motor disorders of the lower extremities in children with CP as well as many other neuromotor pathologies.

PMID: 21549756 [PubMed - as supplied by publisher]

6. Pediatr Phys Ther. 2011 Summer;23(2):179-86.

Relationship of therapy to postsecondary education and employment in young adults with physical disabilities.

Bjornson K, Kobayashi A, Zhou C, Walker W.

Source: Seattle Children's Research Institute, Developmental Medicine (Dr Bjornson) and Biostatistics (Dr Zhou), University of Washington, Seattle, Washington; and Developmental Medicine, Seattle Children's Hospital, Seattle, Washington (Ms Kobayashi and Dr Walker).

PURPOSE: The relationship of therapy services to postsecondary education and paid employment in young adults with physical disabilities was examined. METHODS: A sample of 1510 youth from the National Longitudinal Transition Study 2 categorized with orthopedic impairment including cerebral palsy and spina bifida was analyzed using weighted sampling multivariate regression. RESULTS: At follow-up, 48% participated in postsecondary education and 24% had paid employment. Receiving physical and/or occupational therapy at ages 13 to 16 years was significantly associated with higher levels of enrollment in postsecondary education at ages 19 to 21 years. Social interactions and expressive language skills but not therapy services were associated with paid employment. CONCLUSIONS: Results suggest that therapy services that focus on improvement of upper extremity function, self-care skills, and social skills are associated with participation in postsecondary education. Longer follow-up is needed to effectively examine paid employment.

PMID: 21552083 [PubMed - in process]

7. Pediatr Phys Ther. 2011 Summer;23(2):159-69.

Effects of positioning on respiratory measures in individuals with cerebral palsy and severe scoliosis.

Littleton SR, Heriza CB, Mullens PA, Moerchen VA, Bjornson K.

Source: Physical Therapy Department, University of Michigan-Flint, Flint, Michigan (Dr Littleton); Rocky Mountain University of Health Professions, Provo, Utah (Drs Heriza and Mullens); Department of Physical Therapy and Rehabilitation, University of Washington, Seattle, Washington (Dr Mullens); Physical Therapy Program, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin (Dr Moerchen); and University of Washington, and Seattle Children's Research Institute, Seattle, Washington (Dr Bjornson).

PURPOSE: To examine the effect of positioning on respiratory measurements in individuals with cerebral palsy and severe scoliosis. METHODS: Five individuals aged 17 to 37 years participated in an alternating treatment, single-subject design. Oxygen saturation, respiratory rate, heart rate, and chest wall excursion measurements were obtained in supine, sitting, and sidelying positions. RESULTS: Level of support for hypotheses varied on the basis of the respiratory measurement and participants' status. Respiratory rate appeared to be most sensitive to change in the positions. Severity of respiratory compromise and age may be associated with less tolerance for supine position versus sitting and sidelying positions. CONCLUSIONS: The use of therapeutic positioning in sitting and sidelying positions should be considered as a noninvasive intervention for a population with respiratory compromise. Further research with a larger sample is needed to empirically link specific positions with improved respiratory efficiency.

PMID: 21552079 [PubMed - in process]

8. Pediatr Phys Ther. 2011 Summer;23(2):170.

Commentary on "effects of positioning on respiratory measures in individuals with cerebral palsy and severe scoliosis".

Michaels MB, Crytzer TM.

Source: Slippery Rock University, Slippery Rock, Pennsylvania (Michaels) Western Pennsylvania School for the Blind University of Pittsburgh, Pittsburgh, Pennsylvania (Crytzer).

PMID: 21552080 [PubMed - in process]

9. Pediatr Phys Ther. 2011 Summer;23(2):136-42.

The effect of suit wear during an intensive therapy program in children with cerebral palsy.

Bailes AF, Greve K, Burch CK, Reder R, Lin L, Huth MM.

Source: The Division of Occupational Therapy and Physical Therapy (Mss Bailes and Greve and Drs Burch and Reder) and The Center for Professional Excellence, Research, and Evidence Based Practice (Ms Lin and Dr Huth), Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio.

PURPOSE: To examine the effects of suit wear during an intensive therapy program on motor function among children with cerebral palsy. METHOD: Twenty children were randomized to an experimental (TheraSuit) or a control (control suit) group and participated in an intensive therapy program. The Pediatric Evaluation of Disability Inventory (PEDI) and Gross Motor Function Measure (GMFM)-66 were administered before and after (4 and 9 weeks). Parent satisfaction was also assessed. RESULTS: No significant differences were found between groups. Significant within-group differences were found for the control group on the GMFM-66 and for the experimental group on the GMFM-66, PEDI Functional Skills Self-care, PEDI Caregiver Assistance Self-care, and PEDI Functional Skills Mobility. No adverse events were reported. CONCLUSIONS: Children wearing the TheraSuit during an intensive therapy program did not demonstrate improved motor function compared with those wearing a control suit during the same program.

PMID: 21552073 [PubMed - in process]

10. Pediatr Phys Ther. 2011 Summer;23(2):143.

Commentary on "the effect of suit wear during an intensive therapy program in children with cerebral palsy".

Christy JB, Steed L.

Source: University of Alabama-Birmingham (Christy) Children's Health System, Birmingham, Alabama (Steed).

PMID: 21552074 [PubMed - in process]

11. Pediatr Phys Ther. 2011 Summer;23(2):150-7.

Effect of weight-bearing in abduction and extension on hip stability in children with cerebral palsy.

Martinsson C, Himmelmann K.

Source: Habiliteringen Björkängen (Ms Martinsson), Borås, Sweden; and The Queen Silvia Children's Hospital (Dr Himmelmann), Göteborg, Sweden.

PURPOSE: To study the effect of 1 year of daily, straddled weight-bearing on hip migration percentage (MP) and muscle length in children with cerebral palsy who were nonambulatory. METHODS: Participants stood upright in maximum tolerated hip abduction and hip and knee extension ½ to 1½ hours per day for 1 year. Controls, matched for age, motor ability, and surgery, were derived from a national cerebral palsy follow-up program. RESULTS: Participants using straddled weight-bearing after surgery had the largest decrease in MP (n = 3, 20 controls; P = .026). Children using straddled weight-bearing at least 1 hour per day for prevention also improved (n = 8, 63 controls; P = .029). Hip and knee contractures were found only in controls. CONCLUSION: Straddled weight-bearing, 1 hour per day, may reduce the MP after adductor-iliopsoas-tenotomies or prevent an MP increase and preserve muscle length in children with cerebral palsy who did not need surgery. Larger studies are needed to confirm the results.

PMID: 21552077 [PubMed - in process]

12. Pediatr Phys Ther. 2011 Summer;23(2):158.

Commentary on "effect of weight-bearing in abduction and extension on hip stability in children with cerebral palsy".

Senesac C, Lammers J, Algood C.

Source: University of Florida, Gainesville (Senesac) Shands Hospital, Gainesville, Florida (Lammers) Marion County School System, Ocala, Florida (Algood).

PMID: 21552078 [PubMed - in process]

13. Int J Emerg Med. 2011 Apr 14;4:15.

Massive acute colonic pseudo-obstruction successfully managed with conservative therapy in a patient with cerebral palsy.

Cooney DR, Cooney NL.

Source: Department of Emergency Medicine, SUNY Upstate Medical University, EMSTAT Center/550 East Genesee, Syracuse, New York 13202, USA.

Acute colonic pseudo-obstruction (ACPO), also known as Ogilvie syndrome, is a massive dilation of the colon in the absence of mechanical obstruction. Treatment measures may include anticholinergic agents such as neostigmine, colonoscopy, or fluoroscopic decompression, surgical decompression, and partial or complete colectomy. We re-

viewed the case of a 26-year-old male with cerebral palsy who had a history of chronic intermittent constipation who presented to the emergency department (ED) with signs of impaction despite recurrent fleet enemas and oral polyethylene glycol 3350. The patient was found to have a massive colonic distention of 26 cm likely because of bowel dysmotility, consistent with ACPO. This article includes a discussion of the literature and images that represent clinical examination, x-ray, and computed tomography (CT) findings of this patient, who successfully underwent conservative management only. Emergency department detection of this condition is important, and early intervention may prevent surgical intervention and associated complications.

PMID: 21559070 [PubMed - in process] PMCID: PMC3084169

14. J Child Neurol. 2011 May 6. [Epub ahead of print]

Botulinum Toxin Type A on Oral Health in Treating Sialorrhea in Children With Cerebral Palsy: A Randomized, Double-Blind, Placebo-Controlled Study.

Wu KP, Ke JY, Chen CY, Chen CL, Chou MY, Pei YC.

Source: Department of Physical Medicine and Rehabilitation, Chang Gung Memorial Hospital, Taoyuan, Taiwan.

Intrasalivary gland injection of botulinum toxin type A is known to treat sialorrhea effectively in children with cerebral palsy. However, oral health may be compromised with escalating dose. In this randomized, double-blind, and placebo-controlled pilot trial, the authors aim to determine the therapeutic effect of low-dose, ultrasonography-controlled botulinum toxin type A injection to bilateral parotid and submandibular glands on oral health in the management of sialorrhea. Twenty children diagnosed with cerebral palsy were randomly assigned to 2 groups. The treatment group received botulinum toxin type A injections, whereas the control received normal saline in the same locations. The authors evaluated subjective drooling scales, salivary flow rate, and oral health (salivary compositions and cariogenic bacterial counts). A significant decrease was found in salivary flow rate at the 1- and 3-month follow-up in the botulinum toxin-treated group. The authors suggest that current protocol can effectively manage sialorrhea while maintaining oral health.

PMID: 21551374 [PubMed - as supplied by publisher]

Epidemiology / Aetiology / Diagnosis & Early Treatment

15. BJOG. 2011 Jun;118(7):892-3. doi: 10.1111/j.1471-0528.2011.02973.x.

Antenatal magnesium sulphate to prevent cerebral palsy in very preterm infants.

Brok J, Huusom L, Secher Nj, Pryds O, Whitfield K, Gluud C.

Source: Department of Paediatrics, Hvidovre Hospital, Copenhagen University Hospital, Hvidovre, Denmark Department of Gynaecology and Obstetrics, Hvidovre Hospital, Copenhagen University Hospital, Hvidovre, Denmark The Copenhagen Trial Unit, Centre for Clinical Intervention Research, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark.

PMID: 21564488 [PubMed - in process]

Publication Types: Letter

16. BJOG. 2011 Jun;118(7):891. doi: 10.1111/j.1471-0528.2011.02972.x.

The information gap between the required and the actual accrued information size in the meta-analysis of antenatal magnesium sulphate to prevent cerebral palsy in preterm infants.

Brok J, Huusom L, Secher Nj, Pryds O, Whitfield K, Gluud C.

Source: Department of Paediatrics, Hvidovre Hospital, Copenhagen University Hospital, Hvidovre, Denmark Department of Gynaecology and Obstetrics, Hvidovre Hospital, Copenhagen University Hospital, Hvidovre, Denmark The Copenhagen Trial Unit, Centre for Clinical Intervention Research, Rigshospitalet, Copenhagen University Hospital, Denmark.

PMID: 21564487 [PubMed - in process]

Publication Types: Letter

17. BJOG. 2011 Jun;118(7):891-2. doi: 10.1111/j.1471-0528.2011.02971.x.

Antenatal magnesium sulphate to prevent cerebral palsy in very preterm infants.

Doyle L, Crowther C, Middleton P, Voysey M, Marret S, Rouse D.

Source: Royal Women's Hospital, Melbourne, Vic, Australia The University of Adelaide, Women's and Children's Hospital, Adelaide, SA, Australia University of Sydney, NHMRC Clinical Trials Centre, Sydney, NSW, Australia Rouen University Hospital, Rouen, France Brown University, Providence, RI, USA.

PMID: 21564486 [PubMed - in process]

Publication Types: Letter

18. BJOG. 2011 Jun;118(7):890. doi: 10.1111/j.1471-0528.2011.02969.x.

The information gap between the required and the actual accrued information size in the meta-analysis of antenatal magnesium sulphate to prevent cerebral palsy in preterm infants.

Wetterslev J, Imberger G.

Source: Copenhagen Trial Unit, Centre of Clinical Intervention Research, Rigshospitalet Copenhagen, Denmark.

PMID: 21564485 [PubMed - in process]

Publication Types: Letter

19. Radiology. 2011 May 9. [Epub ahead of print]

Athetotic and Spastic Cerebral Palsy: Anatomic Characterization Based on Diffusion-Tensor Imaging.

Yoshida S, Hayakawa K, Oishi K, Mori S, Kanda T, Yamori Y, Yoshida N, Hirota H, Iwami M, Okano S, Matsushita H.

Source: Departments of Radiology and Pediatrics, Kyoto City Hospital, 1-2 Mibu, Higashitakada-cho, Nakagyo-ku, Kyoto 604-8845, Japan; Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins University School of Medicine, Baltimore, Md; F. M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Baltimore, Md.

Purpose: To evaluate the anatomy of deep gray and white matter structures in children with athetotic cerebral palsy (CP) and those with spastic CP by using diffusion-tensor (DT) imaging and to investigate whether these types of CP

have unique anatomic correlates that can support their diagnosis and prognosis. Materials and Methods: This study was approved by the institutional review board of each participating institution, and written informed consent was obtained from the parents of each patient. DT imaging was used to retrospectively evaluate 19 children with clinically diagnosed athetotic CP (mean age, 3.4 years ± 3.3 [standard deviation]), 26 children with spastic CP (mean age, 3.3 years ± 3.2), and 31 healthy control subjects (mean age, 3.2 years ± 3.0). Fractional anisotropy (FA) and mean diffusivity (MD) were measured with a region of interest (ROI) method. The ROIs were drawn on bilateral deep gray and white matter structures, including projection fibers, association fibers, and commissural fibers. Statistical analysis was performed by using the Kruskal-Wallis test with Bonferroni correction. P < .05 indicated a significant difference. Results: FA values in the athetotic CP group were significantly lower than those in the control and spastic CP groups for multiple structures, including deep gray and white matter (P < .05 and P = .0001, respectively); these differences were also associated with increasing MD (P < .05 and P < .001, respectively). On the other hand, in the spastic CP group, the significantly decreased FA values, compared with those of the normal group, were limited to several white matter structures (P < .05 and P = .0001). Conclusion: In children with athetotic CP, the extent of change on DT images due to early brain damage tends to be more diffuse, including multiple brain structures, compared with the changes in children with spastic CP. © RSNA, 2011 Supplemental material:

http://radiology.rsna.org/lookup/suppl/doi:10.1148/radiol.11101783/-/DC1

PMID: 21555354 [PubMed - as supplied by publisher]

20. Klin Padiatr. 2011 May 11. [Epub ahead of print]

2-Year Follow-up Examinations (Bayley II) in Infants Born at <32 Weeks in a German Perinatal Center. [Article in German]

Moll M, Schöning M, Gölz R, Döbler-Neumann M, Arand J, Krägeloh-Mann I, Poets C.

Source: University Hospital, Department of Neonatology, Tübingen.

BACKGROUND: Since 2008, follow-up examinations at 2 years of age with the standardized Bayley II test have become obligatory in Germany for all very low birth weight infants. AIM: We already performed such examinations before 2006. Here, we compared our data and the completeness of our examinations before and after the introduction of the obligatory 2-year follow-up. PATIENTS: From 2004-2007, 372 infants <1500g or <32 weeks were discharged alive from our center, 19 infants died during their initial hospital stay, 2 after discharge. RESULTS: 271 patients participated in the follow-up examination at age 2 years, with the proportion of participating infants increasing from 64% to 84% after the introduction of obligatory tests. 75% of infants showed a normal development, while 4% had a severe impairment (defined as being blind (1), deaf (1) or having cerebral palsy (6), the CP rate thus being 2%). 49% of infants completed the Bayley test; the mean MDI was 100.3 (SD 10.6). There were no significant qualtitative differences in test results with the introduction of the obligatory test. CONCLUSIONS: The completeness of our follow-up increased over the years. In comparison with international data we found a low rate of severely impaired, deaf or blind VLBW infants.

PMID: 21563046 [PubMed - as supplied by publisher]

21. Clinics (Sao Paulo). 2011;66(3):425-30.

Respiratory outcomes and atopy in school-age children who were preterm at birth, with and without bronchopulmonary dysplasia.

Guimarães H, Rocha G, Pissarra S, Guedes MB, Nunes T, Vitor B.

Source: Serviço de Neonatologia, Hospital de São João, Porto, Portugal.

OBJECTIVE: To assess pulmonary function and the prevalence of atopy in school-age children who were very low birth weight as infants and to compare those who had bronchopulmonary dysplasia to those who did not. METHOD: We studied 85 (39 male and 46 female) at a mean age of 84 (range, 62 to 107) months who were very low birth

weight infants. Bronchopulmonary dysplasia was defined as oxygen dependency at 36 weeks gestational age. We excluded 8 patients (4 for cerebral palsy and 4 for no collaboration). Detailed perinatal and clinical data were collected. Lung function was evaluated using conventional spirometry. Atopy (assessed by the allergy skin-prick test) was considered when at least one positive skin test occurred in a panel of the most common environmental allergens in the local region. Comparisons between the bronchopulmonary dysplasia and no bronchopulmonary dysplasia groups were performed using the Mann-Whitney, x2 and Fisher's exact tests. RESULTS: We compared the bronchopulmonary dysplasia (n = 13) and no bronchopulmonary dysplasia (n = 64) groups. Atopy was observed in 4 (30.8%) of the bronchopulmonary dysplasia patients and in 17 (26.6%) of the no bronchopulmonary dysplasia patients (p = 0.742). Two (15.4%) patients with bronchopulmonary dysplasia had a family history of atopy vs. 17 (26.6%) in the no bronchopulmonary dysplasia group (p = 0.5). Lung function tests showed airway obstruction in 2 (15.4%) of the bronchopulmonary dysplasia patients and in 10 (15.6%) of the no bronchopulmonary dysplasia patients (p = 1.0). Four (33.3%) of the bronchopulmonary dysplasia patients had small airway obstruction vs. 14 (22.2%) of the no bronchopulmonary dysplasia patients (p = 0.466). CONCLUSION: Our data showed no significant differences in lung function between bronchopulmonary dysplasia and no bronchopulmonary dysplasia patients at school age and no evidence of an association between atopy and bronchopulmonary dysplasia.

PMID: 21552667 [PubMed - in process] PMCID: PMC3072003

22. Ned Tijdschr Geneeskd. 2011;155(18):A2853.

Congenital toxoplasmosis: severe ocular and neurological complications. [Article in Dutch]

Hoekstra F, Buzing C, Sporken JM, Erasmus CE, van der Flier M, Semmekrot BA.

Source: Canisius-Wilhelmina Ziekenhuis, Nijmegen.

Two infants with congenital toxoplasmosis are presented. A girl born prematurely was treated postnatally after the mother had received antimicrobial treatment during pregnancy for acute toxoplasmosis. Apart from being small for gestational age, she remained without symptoms and treatment was ceased after 13 months. A 2-month-old boy presented with hydrocephalus and chorioretinitis, consistent with congenital toxoplasmosis. Despite antimicrobial treatment, at 12 months of age he suffered from epilepsy, cerebral palsy and vision impairment. Most infants with congenital toxoplasmosis (2 per 1000 live births in the Netherlands) are asymptomatic at birth. The education of pregnant women is crucial for the prevention of congenital toxoplasmosis. Awareness of antenatal and postnatal presenting signs and symptoms is important for clinicians, because early diagnosis and treatment may minimize sequelae. Untreated, the majority of affected infants will develop chorioretinitis, deafness and/or neurological symptoms.

PMID: 21557824 [PubMed - as supplied by publisher]

23. Neuropsychiatr Dis Treat. 2011;7:183-7. Epub 2011 Apr 5.

Population-based study of acquired cerebellar ataxia in Al-Kharga district, New Valley, Egypt.

Farghaly WM, El-Tallawy HN, Shehata GA, Rageh TA, Hakeem NA, Abo-Elfetoh NM.

Source: Department of Neurology and Psychiatry, Assiut University, Assiut, Egypt.

BACKGROUND: The aim of this research was to determine the prevalence and etiology of acquired ataxia in Al-Kharga district, New Valley, Egypt. METHODS: A population-based study of acquired ataxia was conducted in a defined geographical region with a total population of 62,583. A door-to-door survey was used to identify cases of acquired cerebellar ataxia. Patients with acquired cerebellar ataxia at any age and of both genders were included. Cases of known inherited cerebellar ataxia, acquired neurological disorders with ataxia as a minor feature, or pure acquired sensory ataxia, were excluded. RESULTS: We identified 17 cases of acquired ataxia, of which eight were vascular, six were an ataxic cerebral palsy subtype, and three involved postencephalitic ataxia. The crude prevalence rate for acquired ataxia was 27.16/100,000 (95% confidence interval [CI]: 14.3-40.1). The mean age of the patients at interview was 31.8 (range 4-72) years, with a male to female ratio of 2.1:1. The most frequent presenting complaint was disturbance of gait (90.7%). The majority (92%) were ambulatory, but only 9.3% were independently self-caring. CONCLUSION: This population-based study provides an insight into acquired cerebellar ataxia within a

defined region, and may inform decisions about the rational use of health care reSource: s for patients with acquired cerebellar ataxia. The most common causes of acquired cerebellar ataxia in this region were cerebrovascular injury and cerebral palsy.

PMID: 21552320 [PubMed - in process] PMCID: PMC3083991