



# Sri Lanka Association for Child Development Newsletter

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## Highlights of 'Autism Awareness Day 2017' Campaign

On Sunday, 2nd of April, 2017, SLACD held its annual Autism Day Celebrations at Viharamahadevi Park, Colombo. A walk to promote public awareness, as well as other activities such as sensory games, fun events, relaxation and yoga sessions were organised for children with Autism and their families.



## Leading Article - Glimpse of Cerebral Palsy

by Dr Saraji Wijesekara,

Consultant Paediatric Neurologist, Colombo South Teaching Hospital.

Cerebral palsy describes a group of permanent disorders of the development of movement and posture, causing activity limitation, that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, perception, cognition, communication and behaviour, by epilepsy and by secondary musculoskeletal problems.

The symptoms of cerebral palsy have an effect on the whole life course and the main concern is lack of a definitive cure. The survival rates among even the most functionally compromised young people with cerebral palsy have remarkably improved over the past few decades globally.

Prematurity is the most important risk factor in cerebral palsy. Intra-uterine growth retardation and postnatal inflammation have additive effects on the risk of cerebral palsy in premature infants.

In full-term infants with low Apgar score, there is an increased risk of developing cerebral palsy. Only  $\leq 10\%$  of children who develop cerebral palsy clearly experienced major birth asphyxia. Meconium passage, need for caesarean section, neonatal seizures and respiratory difficulties after birth — are correlated with cerebral palsy, but may reflect other underlying biological processes that occur earlier in development. Neonatal hyperbilirubinaemia can cause dyskinetic cerebral palsy at any gestational age. A small percentage of cerebral palsy ( $<5\%$ ) in full-term infants is due to perinatal ischaemic stroke associated with hemiplegic cerebral palsy.

Approximately 10–15% of children with cerebral palsy have a brain malformation needing neuroimaging. Birth defects outside of the brain, such as cardiac and skeletal abnormalities are found with much greater frequency in cerebral palsy.

Any infant with known risk factors should be considered at risk and screening should be offered. A combination of assessment of general movements with cranial ultrasonography and, when available and appropriate, MRI scanning, will enable the diagnosis of cerebral palsy with a very high level of sensitivity and specificity.

However approximately 11–17% of children with a diagnosis of cerebral palsy on clinical grounds will have normal MRI scans. These children in particular should be investigated carefully to exclude genetic and metabolic conditions. Many children with cerebral palsy have no known risk factors. Regular checks by well-baby clinic visits are essential, with referral to paediatricians for early childhood intervention services of children when there is concern.

Secondary preventive strategies may include efforts to reduce prematurity. Magnesium sulphate has been shown to be effective in reducing the risk of cerebral palsy by 30% when administered to women at risk of preterm birth, and antenatal steroids when administered before 34 weeks of gestation. Whole-body and brain cooling has been shown to be effective in reducing the risk of death and severity of neurodisability when commenced within 6 hours of birth up to 72 hours.

Given that the hallmark of cerebral palsy is a motor disability and other associated deficits, physiotherapy, occupational therapy and speech and language therapy has long been part of the clinical management. Children should be referred for therapy as soon as the diagnosis is suspected. Therapy may offer many benefits to patients and their families, such as a detailed assessment of motor capabilities to identify strengths as well as possible targets for intervention, provision of mobility or positioning aids to improve daily functioning, and as a source of support and cerebral palsy-related health information. Although the traditional methods of therapy such as Bobath techniques are still used in the developing world, the rapid progress in neuroscience, exercise science and genetics will continue to inform advances in therapy approaches for those with motor disabilities.

A primary goal of therapy interventions is to enhance a functional motor activity that is prioritized by the child and the family. The two main types of intervention that have been shown to be effective in individuals with cerebral palsy are task-specific skill training to improve motor coordination and performance. Evidence clearly supports the use of activity-based approaches in therapy,

Regular physical activity can prevent or reverse the secondary skeletal abnormalities in cerebral palsy and help to maintain function as well as reduce associated adverse health outcomes from inactive lifestyles. Botulinum toxin A (BoNT-A) to spastic muscles with dynamic contractures and orthopaedic surgical manouvers in reducing deformities and spasticity has been tried with variable results.

The care of both children and adults with cerebral palsy involves attention to numerous medical issues that may be present. Epilepsy occurs in approximately 40% of individuals

with cerebral palsy, most commonly in those with severe motor impairment. Advances in eye-tracking technology may facilitate the ability to communicate for those without speech, and improved environmental control systems may enable more individuals to live independently. Growth and nutrition should be monitored remembering that failure to thrive and under-nutrition frequently occur owing to oro-motor difficulties. Gastro-oesophageal reflux commonly occurs and can result in pain, poor appetite and, if severe, aspiration. Chronic lung disease may develop in some individuals owing to aspiration. Respiratory complications are a major cause of morbidity and mortality in cerebral palsy. Osteopaenia may require treatment, particularly following a pathological fracture. Management of drooling with speech pathology interventions, medications, BoNT-A injections or surgery to the salivary glands can significantly improve the complications.

Two crucial outcomes for children with cerebral palsy, are ‘QOL’ — defined as “the individual’s perception of their position in life in the context of the culture and value systems in which they live” — and ‘participation’ — defined as “involvement in life situations”

“Is there a cure on the horizon for cerebral palsy?” Prevention — rather than cure — is the most realistic option.

(Based on NATURE REVIEWS | DISEASE PRIMERS –CEREBRAL PALSY doi:10.1038/nrdp.2015.82 Published online 7 Jan 2016)





## Autism Awareness Day 2017 - Media conference

This was held at Health Education Bureau on 26th of April 2017. Deputy Minister of Health and then Director General of Health Services Dr. Jayasundara Bandara participated in this media briefing.



## Highlights of the Awareness Program on World Down Syndrome Day

21 March 2017

An awareness program on intervention and management for primary medical care practitioners was held on 21st March 2017 at Lady Ridgeway Hospital for Children.



## Other programs of SLACD in 2017/18

- Two outreach programs were conducted by a team of experts to enhance awareness of Autism and other Neuro-developmental disorders among staff of health and education sectors in the stations below.
  1. Base Hospital - Pimbura
  2. Provincial General Hospital - Ratnapura
- A sponsorship program for children with Autism has been planned with support from CDB - Citizen Development Business Finance PLC. It will be initiated in near future.



## Upcoming Events

- SLACD is preparing to hold programs to commemorate World Downs Syndrome day (21 March 2018) and World Autism day (1st of April 2018) in style.

