

## Oral Abstracts

O1

### Changing trend in clinical profile of Cerebral Palsy

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**Objectives:** To study the changing trend in clinical profile & etiological factors in Cerebral Palsy .

**Methods:** The clinical profile & etiological factors were studied retrospectively in Cerebral palsy (CP) patients attending PMR OPD of VMMC & Safdarjang Hospital between 1981 to 1989 (Group A: 544 patients) and 2008 to 2012 (Group B: 410 patients). Patients clinical profile & etiological factors were compared by Student's T Test for significance using SPSS software version 17.

**Results:** There was no significant difference in sex ratio between two groups. Among the different types of CP, Spastic CP remained most common in both the groups. The pattern also remained same for Hypotonic and Dyskinetic type of CP. The Mixed type showed an increase in percentage (Group A: 0.18 % vs. Group B: 3.7 %). The difference was statistically significant.

Among the Spastic type, Quadriplegia (Group A: 34.9% vs Group B:26.6%) and Hemiplegia (Group A: 28.7% vs Group B: 20.5%) were more in Group A, and Diplegia more in Group B (Group A: 21.9% vs Group B:36 %). The difference was statistically significant.

In Etiology, there was a decrease in Prenatal and Natal causes in Group B, whereas Natal causes increased as compared to Group A. The difference was statistically significant.

**Conclusion:** Types of CP were same in both the groups except for mixed type, which showed increase in Group B. In Spastic Type, there was a change in topographic pattern. Etiological factors also showed a significant change in both the groups.

O2

### Prevalence of peripheral neuropathies in upper limbs of chronic spinal cord injured persons

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**Objective:** This study was done to determine the prevalence of upper limb compressive neuropathies at wrist in chronic spinal cord injured (SCI) patients by electrodiagnosis and self-assessment questionnaire.

**Methods:** 54 chronic SCI patients filled up Boston Questionnaire to assess symptoms related to carpal tunnel syndrome and other compressive neuropathies. All patients underwent electro-neuromyography (ENMG) to evaluate presence of neuropathy. ENMG involved assessment of Median, Ulnar and Radial nerves sensory and motor conductions. Herrmann and Logigian severity scale was used for CTS grading.

**Results:** 50 males and 4 females participated in the study. Mean duration of paraplegia was 10.3 (range 1 - 37) years. Analysis of Boston questionnaire yielded mean symptom-severity score of 1.6 and mean functional-status score was 1.38. Electrophysiologically, 45 subjects had one or more compressive neuropathy involving median, ulnar or radial nerve. 14 had ulnar neuropathy, 43 had median neuropathy and 10 had findings suggestive of radial

neuropathy. 7 subjects had more than one nerve involvement. The incidence of peripheral neuropathy had a direct correlation with duration of spinal cord injury.

**Conclusion:** Comparison between subjective (Boston questionnaire) and objective (ENMG) data showed high prevalence of compressive neuropathies in upper limbs of chronic SCI persons. The objective findings showed greater sensitivity in diagnosing neuropathies compared to subjective symptoms. There is a direct association between prevalence of compressive neuropathies and time since injury.

**Keywords:** Spinal cord injury; Compressive nerve entrapment; Upper extremity.

O3

### Burden and stress in caregivers of children with cerebral palsy

Sardana Ramita

**Objective:** The purpose of this descriptive research was to study the burden and stress in caregivers of children with Cerebral Palsy and to study the association between various factors and stress and burden in the caregivers.

**Methodology:** The study sample consisted of 65 primary caregivers of children with Cerebral Palsy aged 6 months to 10 years. Two scales were used, DAS (Depression, Anxiety and Stress) scale and Family burden scale. Data were collected by questionnaires. Descriptive statistics and multiple regressions were used for data analysis.

**Results:** Caregivers of children with Cerebral Palsy experienced high burden and stress. Mothers experienced more stress than fathers; gender of the child was not found to have any effect on caregivers' burden and stress. Caregivers with high education level and family income were found to have less burden and stress. With increase in total duration of caregiving, caregivers experienced more burden and stress. Caregivers having children (Cerebral Palsy) with speech disturbance, seizures or mental retardation were found to have more burden and stress.

**Conclusion:** From this study it can be concluded that caregivers of children with Cerebral Palsy experience burden and stress, which are associated with many factors. So it is recommended that healthcare professionals should provide interventions to increase the caregiver's skill in providing care and coping with stress. They should also enhance support networks and encourage and promote the health and wellbeing of the caregivers, so that caregivers can effectively and efficiently care for their children with Cerebral Palsy.

O4

### Risk factors for undernutrition in children with cerebral palsy—a case control study

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A case control study was conducted in Department of PMR to assess the prevalence of undernutrition in cerebral palsy and its risk factors. 50 children were enrolled in the study between age groups 2 and 12