

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

years of age. Children with normal nutrition were taken as controls and those with undernutrition were taken as cases. The study found that undernutrition was a severe health problem in cerebral palsy children and the risk factors were also found out. The main risk factors were oromotor dysfunction, presence of medical problems, GMFCS levels.

O5

Efficacy of spinal brace in preventing progression of adolescent idiopathic scoliosis

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Eighteen adolescent girls in the age group of 10 to 16 were studied in June 2010 to May 2012. Of these two had to undergo surgery as the curve was more than 50 degree Cobb's angle at the time of first presentation (11%). Out of 16, 12 have remained the same improved (75%). All 16 were treated with very low temperature Thermoplastic Spinal brace. One interesting finding is that irrespective of the duration of wearing the brace none worsened / progressed during the period of study.

Keywords: Adolescent Idiopathic Scoliosis, Spinal Brace.

O6

Rehabilitation of burn injury cases

Dash J B

Objectives of Investigation: Burn injuries comes up with challenges of being most sensitive, riskful area of treatment, unwarranted chances of recovery, demanding experienced handling and optimal care. My investigation was atfirst geared up within my own domain in PM&R dept. in Kalinga Hospital(Odisha) wherein I selected 30 suitable cases that answered almost all queries pertaining to this area. Hereby I present an overlook about the relevant findings of my work.

Methods Used: Prior to the conventional methods of treatment a very essential step is creating awareness for physiotherapy in the patient to help prevent *contracture and deformity* followed by the *Planning of Physiotherapy* such as

TBSA assessment

Progressive Therapeutic Exercises Program

Wax bath in hand injury cases.

Electrophysiotherapy

Ambulation etc (detailed in the presentation)

and most importantly social integration to family & society.

Result: Post the initial treatment results of recovery are classified under excellent, good, average and poor. Regular follow-ups and treatments are lined up from time to time even after the patient is discharged till the journey from "poor" to atleast "good" ensures our job is well done.

Conclusion: Medication saves life but rehabilitation helps live it again. However this is practised by few corporate hospitals only. Moreover burn injury cases being acute are referred to PM&R dept. after the patient's vitals are stable. My cases under investigation have been probed over a period from 8.4.2005-8.8.2012. Still a thousand other cases await to be put under scanner. With some serious interest and skillful indulgences I hope our purpose sees the ultimate sunshine.

O7

Study of histopathological features in various stages of pressure ulcer and to know whether this knowledge will help in its management

Sreejith R

Objective: To study the histopathological features in various stages of pressure ulcer and to know whether this knowledge will help in its management.

Materials and Methods:

Design: Descriptive study

Settings: Inpatients in Dept .of Physical Medicine & Rehabilitation, Calicut Medical College

Study tool: Spinal cord injury patients with pressure ulcer

Period of study: 1st November 2011 to 31st May 2012

Inclusion criteria: Patients with pressure ulcer of stages 2,3 &4 who required tissue biopsy for culture and sensitivity.

Exclusion criteria: Patients with cognitive impairment, patients without significant caregiver.

Procedure: Subjects were taken into study with written informed consent. A bit of tissue is biopsied from the edge of the ulcer along with those taken for culture and sensitivity and send separately to department of pathology for histopathological examination.

Results: The salient histopathological features of stage 2, 3 & 4 pressure ulcers is studied.

Conclusion: Discuss if the knowledge of microscopic details help in improving management of pressure ulcers.

Keywords: Pressure ulcers, Histopathology

O8

Quality of life and functional status of inmates of old age homes

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Objectives: To study the Quality of Life (QOL) of inmates of oldage homes in the urban part of Thiruvananthapuram district using SF36 QOL Questionnaire.

To assess the functional status of these inmates of Oldage homes using Barthel Index.

Design: Descriptive Cross-sectional Study

Setting: Oldage homes in the urban part of Thiruvananthapuram District.

Population or Participants: People selected by following inclusion and exclusion criteria

Inclusion Criteria: Both males and females above age of 60 years who gave a written consent for the study.

Exclusion Criteria: Bed ridden patients

Spinal Cord Injury survivors

Stroke patients

Traumatic brain injury survivors

Amputees

Patients with psychiatric illness or on medication

Patients with dementia, parkinsonism, etc

Malignancy