

and treat depression in persons who seek treatment for obesity to enhance clinical outcome.

Keywords: obesity, depression.

O15

Effectiveness of metformin in the management of obesity among young adults

Selvan P¹, Sreekala V K², Vijayalekshmi L³

¹MD Trainee, PM&R, ²Professor & HOD, Dept. of PM&R, ³Professor of Biochemistry & HOD, Dept. of Applied Nutrition Medical College, Trivandrum

Primary Objective: To assess the effectiveness of metformin in a dose of 1000mg. sustained release daily for six months in the management of obesity along with the Life Style Interventions compared to the Life Style Intervention alone among the patients with BMI >25, aged 20 to 60 yrs attending Obesity Clinic, Medical College, Trivandrum.

Methods: A Randomized Control Trial was conducted in the Obesity Clinic, Department of PM&R, Medical College, Trivandrum. Sample size of 40 Patients satisfying the inclusion and exclusion criteria were randomly divided into two groups by block randomization technique. In both groups, Life Style Intervention and Dietary advice were given. In addition to this, Metformin 1000mg sustained release tablet was given to the group II, daily orally for six months.

Body weight, Height, Fat Percentage, Waist Circumference, Blood Pressure, Post prandial blood sugar were checked at the first visit, after 1 month, 3 month and six months intervals. The values obtained were put into the software, SPSS.

Findings: At the end of six months, the mean weight reduction in the control group was 1.49kg with a standard deviation of 1.48. The mean weight reduction in the metformin group was 5.88 kg with a standard deviation of 2.03. The P value was <0.001. The mean BMI reduction in the control group was 0.58kg/m² with a standard deviation of 0.78; in the metformin group it was 2.45kg/m² with a standard deviation of 0.98. The P value was 0. The mean fat percentage reduction in the control group was 1.5% with a standard deviation of 4.96 and in the metformin group was 6.65% with a standard deviation of 7.02. The P value was 0.011. The mean reduction of waist circumference in the control group was 3.1cm with a standard deviation of 2.59 and in the metformin group was 4.55cm with a standard deviation of 3.59. The P – value is 0.151. There was no much change in the PPBS of both control and metformin group.

Conclusion: The observations clearly show the effectiveness of metformin in the management of obesity. The reduction of weight, BMI and fat percentage was significant in the metformin group than in the control group (P value <0.05%). But the reduction of waist circumference was not significant. No hypoglycemia was associated with metformin.

Limitation of the Study: Short duration study.

O16

Preliminary study on risk factor assessment of osteoporosis in post menopausal women

Chauhan Sonal

Brief Summary: Osteoporosis is a skeletal disorder characterized

by low bone mass, increased bone fragility and susceptibility to fracture. Approximately one in two women will have osteoporosis related fracture in their life time putting a lot of burden on health care facility and the patients. Life style factors such as tobacco use, exercise and body weight, nutrition etc. appears to play a role in bone health and osteoporosis risk.

Aim & Objectives: To assess the prevalence of osteoporosis in healthy ambulatory post-menopausal women.

To study the various Risk factor and their influence on bone mineral density including various life style factors like dietary intake of calcium, vitamin D3 level, body mass index, activity level measured by General Practice Physical Activity Questionnaire (GPPAQ).

Methods: Total of 70 healthy women with amenorrhea in the previous one year were included in the study.

Results: In our study 66% of women were found to be osteoporotic. 70% of our patients had low vitamin D3 level. 62% of our patients were aware about osteoporosis and its implication. Amount of daily calcium intake was much below recommended. 24% of our subjects were moderately active. None were active and 50% were inactive using the GPPAQ.

Conclusion: This study has shown that a large % of our population is osteoporotic. Prevalence of various risk factors is also very high. Though how much of these factors actually influence BMD can actually be said only after completion and statically analyzing the data.

O17

Lower extremity functional scale and diabetic foot ulcers: a descriptive pilot study

Saikia Priyanka, Jose Naveen Mathew

Objective: To assess the lower extremity functional status in the diabetic foot ulcer population. The purpose was to assess the ambulation status prior to offloading interventions.

Subject: 30 people with diabetic foot ulcers of Wagner Grade 2 and 3 were assessed in SJMCH OPD

Methods: The Lower Extremity Functional Scale (LEFS) was administered during the initial assessment. A descriptive analysis was conducted of the individual components of the LEFS.

Results: Lower extremity function was moderate to severely affected in areas of ambulation (walking, climbing stairs, running, taking turns) and mildly affected in areas of daily activities (bathing, squatting, household work).

Conclusion: Lower extremity function is significantly affected in people with diabetic foot ulcers. Further study is required to know the functional status post offloading.

O18

A study to compare the effectiveness between epidural methylprednisolone injection and intranasal calcitonin in reduction of back pain due to osteoporosis in postmenopausal patients

Singh Th Khelendro¹, Singh A K Joy²

¹MD (PGT), ²Professor and HOD

Department of Physical Medicine and Rehabilitation, RIMS, Imphol

Aims and objective: To compare the effectiveness between

epidural methylprednisolone injection and intranasal calcitonin in reduction of back pain due to osteoporosis in postmenopausal patients

Setting and Design: A Randomised Controlled Trial in a tertiary hospital.

Materials and Methods: Hundred patients with back pain due to postmenopausal osteoporosis who fulfilled the inclusion criteria were selected for the study. The patients were divided into two equal groups (calcitonin group and epidural steroid group) and back pain severity was assessed by VAS on daily basis from the day of initiation of therapy till 21 days.

Results: In the epidural group, 5 (10%) and 22 (44%) of patients got pain relief on the first and second day of post therapy periods respectively with median value of 2 days \pm 7.8SD while in calcitonin group 16%(n=12), 12%(n=6) and 18%(n=9) of patients got pain relieved on 12, 13 and 14 days of the initiation of intranasal therapy respectively with median value of 15 days \pm 3.7SD.

Conclusion: Epidural methylprednisolone gives better and faster pain relief as early as the first post injection day with a median value of 2 days against 15 days in cases of nasal calcitonin spray. Early onset of pain relief was significant among younger age group, lesser duration of back pain and lower grades of osteoporosis.

Keywords: Osteoporosis, back pain, calcitonin, epidural steroid, visual analogue scale(VAS).

O19

Cervical spondylosis – a soft target

Pramanik R

MD, MRCP (UK), Assistant Professor, PMR, IPGMER, Kolkata, India

Introduction: It's really a common practice to victimize CS as a cause of vertigo in this part of India. This presentation is a sincere and humble effort to emphasize the role of clinical judgments diagnostic skills or aptitude in the field of rehabilitation Medicine.

Methods: This is a presentation based on the observations in OPD of Department of PMR in IPGMER, Kolkata from July 2009 to October 2012. This is a case series of so called cervical spondylosis presented to Department of PMR for rehabilitation.

Results: According to my experience in one of the apical hospital in a big state of India cervical spondylosis is frequently picked up as a cause of vertigo and dizzy spells without performing a Dix Hal pike test. This case series are consisting of cases of vertigo due to amurosis fugax, aortic stenosis, atrial fibrillation etc. which were actually referred to Department of PMR as cervical spondylosis. Even the patient with Pan Coast tumor has been refereed as a case of radiculopathy of cervical spondylosis.

Discussion: Caries spine is really common cause of any part of spinal pain. This presentation is consisting of few atypical presentation of tubercular infection of spine leading to spinal pain mimicking CS. Sometimes it becomes very difficult to pick up exact causes of neck pain or radicular pain or vertigo or dizzy spells. Clinical skills and aptitude can only save cervical spondylosis as soft target of the above chief complains.

Potential implications: This case series are pointing towards lack of expertise and thorough examination and investigation for the cause of vertigo and neck pain in this part of the world.

O20

Treatment of congenital clubfoot—a challenge for rehabilitation

Sahoo J¹, Mohanty R N², Das S P³

¹DNB (Ortho), DNB (PMR), Lecturer, ²HOD, ³Asst. Prof. Dept of PMR, SVNIRTAR, Cuttack, Odisha

Objective of Study: About 1 in every 1000 children is born with clubfoot worldwide. Children having club foot are often abandoned or face a future in poverty. By correcting their feet, they get the opportunity to live a normal life. Surgeons report that Clubfeet treated by surgical methods become weak, stiff and are often painful in adult life. The Ponseti method is a very effective and relatively inexpensive treatment with good long term results. In this study I have tried to evaluate the effectiveness of Ponseti method in physiatrist practice.

Material & Methods: 18 patients having 29 club feet (11 B/L & 7 U/L) were treated as Out patients from January 2010 to June 2012 at Physical Medicine & Rehabilitation Department of SVNIRTAR, Cuttack. All feet are evaluated by pirani scoring and follow the ponseti method of treatment.

Results: Six unilateral feet had corrected fully as measured by pirani scoring and podogram. Two feet remain resistance for which the child sends for surgical correction. One unilateral case lost the follow-up. Twenty six feet got corrected fully till now without any complications.

Conclusion: It shows 92 % good result by using ponseti method of plaster technique. Ponseti method of manipulation and plaster casting is a good standard for correction of club foot deformity in early stage in the rehabilitation practice.

Keyword: Club foot, Pirani scoring, ponseti method

O21

Interventional Physiatry – Calicut Experience

Sobeekrishna G S

O22

Can musculoskeletal USG replace NCS in management of CTS?

Kataruka Mohit¹, Pramanik R², Halder R N³

¹MD PGT, ²Assist Prof, ³Prof & HOD, Dept of PMR, IPGMER, Kolkata

Introduction: USG has several advantages like easy availability, short procedure time, non invasive, can localize or understand better pathological lesion causing entrapment, short waiting time etc. Over the years NCS has been used to diagnose and monitor the patients with carpal tunnel syndrome (CTS). But USG can fairly pick up the carpal tunnel as per the literature. This study has been done to find out the diagnostic accuracy of USG.

Aims & Objectives:

1. To find out accuracy of USG as diagnostic tool in CTS
2. To compare the efficacy of USG with standard NCS in CTS

Study design: Prospective cross sectional analytical study.

Study population: Patients attending PM&R OPD, IPGME&R, with suspected CTS