Abstracts - Oral Papers

A Study of Clinical Features and Etiological Profile in Pancytopenia

Abinaya Venkatesan*,Shanumugesh**, Sudagar Singh***

*Post graduate ,** Senior Resident, ***Professor, Department of General Medicine, Sri Ramachandra Universityand Research Institute, Chennai, India

Corresponding author - AbinayaVenkatesan(abinaya.v3@hotmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 53

Abstract

Introduction: Pancytopenia is an important clinico-hematological entity encountered in day-to-day practice.It is not a disease by itself; rather it describes simultaneous presence of anemia, leucopenia and thrombocytopenia resulting from a number of disease processes.

Aims: To study the clinical profile of patients with pancytopenia and identify their etiology.

Materials and Methods: This is a cross sectional study of101 cases. History and examination, complete blood count, Peripheral smear, bone marrow aspiration reports were analyzed. Patients who were / are on radiation or chemotherapy were excluded.

Results: Most patients were elderly 60 years;there was a definite male preponderance (71.29%). Common presenting complaints were generalized weakness (44.55%), dyspnea(35.64%), Fever(12.87%), weight loss(7.92%) and bleeding(3.96%). Most common sign was Pallor(97.03%) followed by Icterus(15.84%),Hepatosplenomegaly (12.87%), isolated Splenomegaly (7.92%),Lymphadenopathy (5.94%), and Petechiae(2.97%). Bone marrow aspiration was done in 13 patients.Of the Causes of Pancytopenia 77.23% was due to B12 deficiency (of which 34.6 % had history of alcohol consumption) followed by Aplastic anemia (5.94%), Hypersplenism(5.94%), HIV (3.96%), Leukemia(3.96%), and MDS (2.97%).Macrocytosis was the most common peripheral smear finding in B12 deficient patients (73.07%) and dimorphic anemia (21.73%) was commonly seen in other groups.Hemolysis was present in 57.43% patients.

Conclusion: Large number of patients with pancytopenia had a reversible etiology. A timely and appropriate diagnosis can be life-saving.

Key Words: Pancytopenia, Vitamin B12 deficiency, Hypersplenism, Macrocytosis.

Image Challenge - 5

Clue: Common disorder associated with this condition

- Answer in page : 66

Study of Lipid Profile In Anemia

Charu Nagarjun*
*Postgraduate
Department Of General MedicineVinayaka Mission's Medical College, Karaikal, India
Corresponding author - Charu Nagarajan (charunagarajan21@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 54

Abstract

Introduction: Anemia is reported to be associated with lowering in all lipid sub-fractions. The study was conducted to study the clinical features of anemia, effect of anemia on lipid profile & effect of severity and type of anemia on lipid profile.

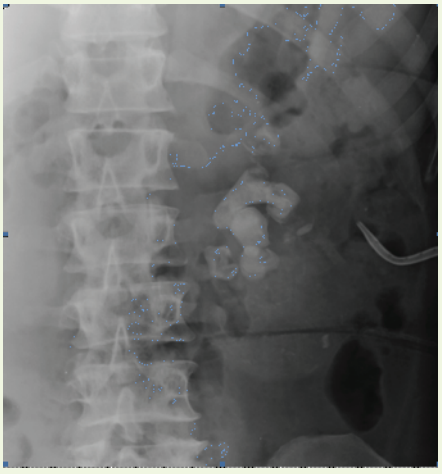
Methods: The data was collected from patients who presented to VMMC Hospital. 100 anemic and 100 non-anemic cases, age and sex matched controls underwent clinical assessment and relevant investigations including lipid profile estimation

Results : Cases younger than 50 years were found to be more likely to have severe anemia. Fatigue and pallor were the most common clinical features. Clinical features were more common among cases with severe anemia. The mean total cholesterol (132.2 ± 29.0 Vs 173.4 ± 20.3, P<0.01), HDL (31.0 ± 6.7 Vs 38.8 ± 7.1, P<0.01), LDL (79.7 ± 25.0 Vs 110.1 ± 16.6, P<0.01), VLDL (21.6 ± 6.3 Vs 24.5 ± 6.2, P<0.01) and Triglyceride (108.1 ± 31.3 Vs 122.5 ± 30.6, P<0.01) levels, along with TC/HDL (4.4 ± 0.8 Vs 4.6 ± 0.7, P<0.05) and LDL/HDL (2.6 ± 0.7 Vs 2.9 ± 0.6, P<0.01) ratios were significantly decreased in cases compared to controls. There was a larger reduction in mean total cholesterol, HDL, LDL, VLDL and triglyceride levels, along with TC/HDL and LDL/HDL ratios with increasedseverity of anemia (P<0.05). Type of anemia did not have significant effect on the lipid levels (P>0.05).

Conclusion: Anemia is associated with significant hypocholesterolemia, with lowering in all lipid sub-fractions. The extent of hypocholesterolemia is proportional to severity of anemia. Further studies are required to study the long term effect of anemia on developing the risk of atherosclerosis and cardiovascular outcomes.

Key words: Anemia, Hypercholesterolemia, Atherosclerosis

Image Challenge - 6



Clue: Female patient with H/O left loin pain and fever

- Answer in page : 67

A Prospective Study of Correlation of Subclinical Hypothyroidism on Lipid Abnormalities in Post Menopausal Women

Chelluri Anil Kumar* Ganesan** Paneerselvam ** Shigil Mathew Varghese***
*Post Graduate** Associate Professor ***Senior Resident
General Medicine Department , Vinayaka Missions Medical College And Hospital, Karaikal, India
Corresponding author - Chelluri Anil Kumar (anilchelluri123@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 55

Abstract

Introduction: Millions of women with menopausal like symptom are suffering from thyroid disease. They predominantly have subclinical thyroid dysfunctions, Hypothyroidism being more than Hyperthyroidism. Menopausal symptoms may be misinterpreted and thyroid dysfunctions go undetected, which in turn lead to health hazards like dyslipidemia, increased risk of hypertension and ischemic heart disease.This aim is to study the effects of subclinical hypothyroidism and hyperthyroidism on lipid profile.

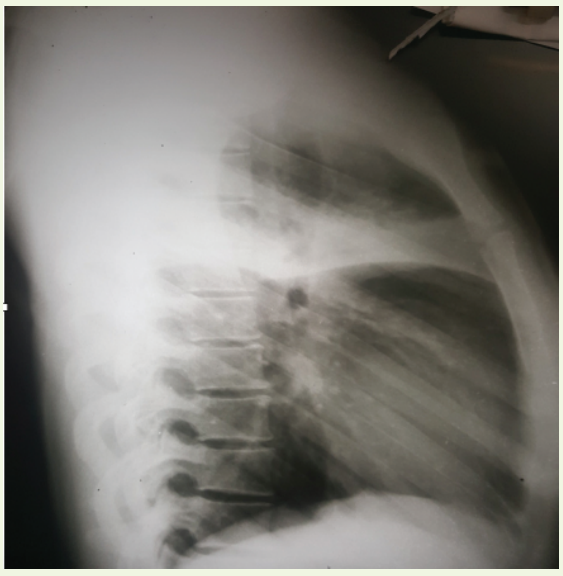
Methods: Prospective Randomized case control study.100 Postmenopausal women attending the outpatient and inpatient of Medicine department were selected.

Result: It was observed that postmenopausal women with thyroid dysfunction, especially subclinical hypothyroidism(28patients), had lipid abnormalities. Free T_3 and lipid profile (except HDL) have negative correlation where as TSH and lipd profile (except HDL) have positive correlation. FreeT_3, FreeT_4 and TSH have positive correlation withHDL.Lipid abnormalities seen in subclinical hypothyroidism patients are mainly in the form of significant elevation of total cholesterol and HDL. According to this study, subclinical hypothyroidism is directly related to total cholesterol and HDL changes ($p< 0.01$).

Conclusion: Therefore, in post menopausal women with thyroid dysfunction evaluation of lipid profile should be made mandatory to avoid the risk of coronary artery disease and cerebrovascular accidents.

Key words: Thyroid dysfunction, Subclinical hypothyroidism, Lipid abnormalities.

Image Challenge - 7



Clue: H/O Cough,Breathlessness

- Answer in page : 68

Study of Oral Glucose Tolerance Test in Chronic Liver Disease

Deepa M*, Balaji*, Prasanth*, Jeeva N**

Postgraduate* , Professor**, Department of General Medicine, Vinayaka Missions Medical college, Karaikal, India

Corresponding author - Deepa M (dr.deepajames@rediffmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 56

Abstract

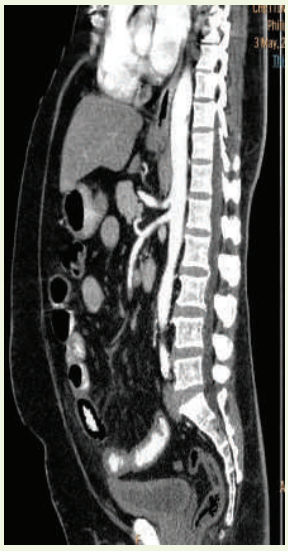
Introduction: The liver plays a key role in blood glucose control. In presence of cirrhosis of liver, the metabolic homeostasis of glucose is impaired. Diabetes mellitus in cirrhosis may be subclinical, since fasting glucose may be normal. Hence post-prandial blood glucose level by oral glucose tolerance test may be a simple indicator of liver disease.

Materials and Methods: 50 patients with cirrhosis of liver were included in this study, after getting informed consent. Diabetics, pregnant women, drugs and diseases causing hyperglycemia were excluded. OGTT was performed and correlated with Child Pughs scoring system.

Results and Conclusion: In this study of OGTT in chronic liver disease, diabetes mellitus was detected in 8% of patients -hepatogenous diabetes; and impaired glucose tolerance in 40%, thus showing abnormal glucose homeostasis in 48% of patients overall. Impaired glucose tolerance was seen in 77% of patients in Child Pughs category B. This indicates that as the liver disease advances, diabetes becomes clinically manifest. Hepatogenous diabetes can be considered as a marker for liver function deterioration. Hence in patients having advanced chronic liver disease (Child Pughs category B), OGTT may be done to assess the severity of liver disease.

Key words: Chronic liver disease, Glucose homeostasis, Oral glucose tolerance test, Child-Pugh score

Image Challenge - 8



Clue: Uncontrolled DM, Coronary artery disease P/W Postprandial abdominal pain

- Answer in page : 69

Serum Zinc Level in Decompensated Liver Disease and Its Correlation with Stage of Hepatic Encepalopathy

P M Karthik*, S Prasanth*
*PostGraduate
Department of General Medicne, Vinayaka Missions Medical College & Hospital, Karaikal, India
Corresponding author - P M Kathik (pmkarthik1993@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 57

Abstract

Objective /Aim: The purpose of this study is to assess serum Zinc levels in Decompensated liver disease (DCLD) patients with various stage of hepatic encephalopathy and determine the role of Zinc deficiency in precipitation of hepatic encephalopathy.

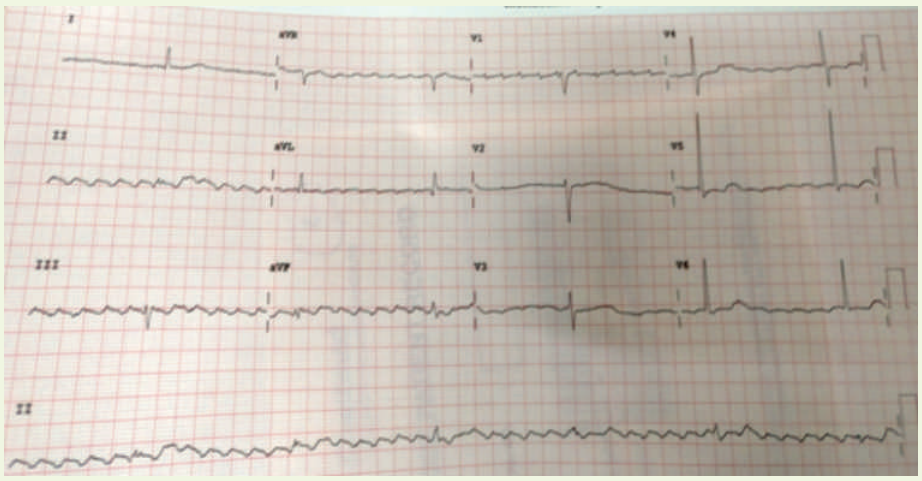
Material and Methods: The descriptive cross sectional study was conducted at vinayaka mission medical college and hospital, karaikal. Total 75 cases were taken , all patients were above 20 years of age with diagnosed cases of DCLD, admitted with hepatic encephalopathy. All cases were further evaluated for serum Zinc and all patients were divided according to stage of hepatic encephalopathy and class of liver cirrhosis. The data was analyzed statiscally with SPSS software and the p-value <0.001 was considered as statically significant.

Result: Our study showed 96% male and 4% female, predominantly affected group between 30-50 year of age (63%). Most common aetiology was alcohol abuse (90%), more than 10 year duration. All DCLD patients in Hepatic encephalopathy (HE) had low serum Zinc and low serum Zinc significantly associated with worse grade of HE and advanced class of liver cirrhosis (p-value 0.001). Our study also showed that low serum albumin was significantly associated with low serum Zinc level (p-value 0.029).

Conclusion: The inference attained from the study is, all patients with DCLD in hepatic encephalopathy had low serum Zinc levels.As the grading of hepatic encephalopathy worsened, the serum zinc levels dropped. The low serum Zn is an indirect precipitating factor for HE. The low Zn levels were also associated with higher class of cirrhosis and low albumin. Short term Zn supplementation may be useful in prevention and treatment in HE patients.

Key words: Decompensated Chronic Liver Disease (DCLD), Hepatic encephalopathy (HE), Serum Zinc, Albumin

Image Challenge - 9



Clue:K/C/O Valvular heart disease with H/O Palpitation

- Answer in page : 70

An Observational Study on QT Dispersion (QTd) Profile in Diabetic Population in a Tertiary Care Hospital

*Mallikarjuna Reddy, **Vrinda V
*Postgraduate, * *Assistant Professor
Department of General Medicine, Chettinad Hospital & Research Institute, Chettinad Academy of Research & Education, Chennai, India
Corresponding author - Mallikarjuna Reddy (drmmreddy1990@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 58

Abstract

Introduction: : Cardiovascular autonomic neuropathy (CAN), within the context of Diabetic autonomic neuropathy, occurs when there is an impairment of autonomic control of the cardiovascular system after ruling out other causes of dysautonomia. Symptomatic CANmanifestsonly in about 5% of diabetic patients and is associated with the increased mortality by predisposing the patient to ventricular arrhythmias, silent ischemia, and cardiac arrest.

Aims and Objectives : To determineQT dispersion (QTd) in Type2 DM (Diabetes mellitus) patients and to study the significance of QTd as an indicator of severity of CAN in Type 2 DM.

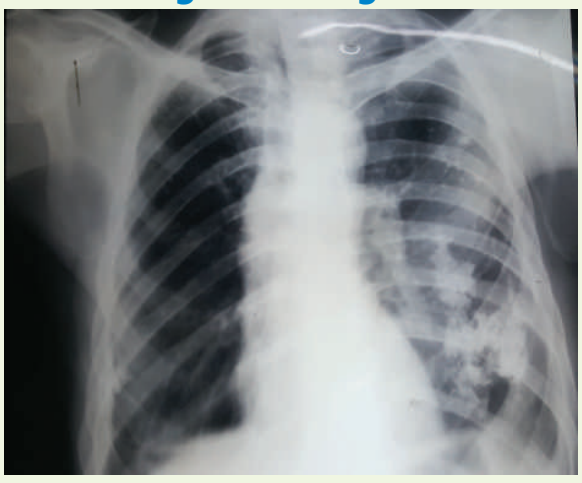
Materials and Methods: It's a prospective observational study conducted among 100 patients with type 2 DM in a tertiary care hospital. 55 were males and 45 were females.

Results: Of the 100 patients, 62 patients were found to have CAN . Of these 44 patients had Grade 2 CAN and 18 patients had Grade 1 CAN.QTd was found to be significantly high in patients with CAN compared to those without CAN. Among patients with CAN,QTd was significantly high in patients with grade 2 compared to those with grade 1 CAN.

Conclusion: The study thus concluded that QTd can be used as a simple tool to assess the presence and severity of cardiac autonomic neuropathy in type 2 diabetes mellitus.

Key words: QTd, Cardiac autonomic neuropathy, Type 2 diabetes mellitus

Image Challenge - 10



Clue: 21 year old female presenting with dyspnoea, H/O left lower lobe Pneumonitis in past.

- Answer in page : 71

Correlation of Serum Protein in Pulmonary Tuberculosis and Extrapulmonary Tuberculosis Before and after Treatment and Correlation with Disease Severity and Assessing the Disease Outcome

Megha*
*Postgraduate,
Department of General Medicine, Vinayaka Missions Medical College, Karaikal, India
Corresponding author - Megha(meghagoswami@outlook.com)

Chettinad Health City Medical Journal 2018; 7(2): 59

Abstract

Introduction: : Tuberculosis is a contagious bacterial infection that is transmitted through the air and can spread through the lymph nodes and bloodstream to any organ in the body. Aim of the study was Correlation of serum protein in pulmonary tuberculosis and extrapulmonary tuberculosis patients attending General medicine department of Vinayaka Mission Medical College

Methods: A total of 50 cases were taken for the study. They were divided into two groups. The first group positive pulmonary tuberculosis, which consists of 25 patients. The second group was positive extra pulmonary tuberculosis, which consists of 25 Patient.

Results: In pulmonary patients serum protein before the treatment mean was3.93 with 0.92 standard deviations, post-test one mean was 5.06 with standard deviation 0.77. And in post-treatment mean was 6.30 with standard deviation 0.73. In extrapulmonary patients' serum protein before the treatment means was 5.49 with 0.38 standard deviation, post-test one mean was 5.80 with standard deviation 0.27. And in post-treatment mean was 6.19 with standard deviation 0.32.

Conclusion: Dysproteinaemic syndromes occur with increasing frequency in patients with PTB, especially among those with severe disease. Serum protein changes occurred because of anti-tuberculosis drugs. It was indicated that as the patients recovered there was a gradual significant decreased in Gamma globulin towards the normal value and after anti-tuberculosis treatment Albumin/Alpha-2 globulin gradually increases toward the normal levels in Six months Post treatment.

Key words: Dysproteinemia, Antituberculous treatment, Gamma globulin

Image Challenge - 11

Clue:Elderly male with stooped posture and bow legs
H/O Constipation, abdomen pain

- Answer in page : 72

C-Peptide Levels In Type 2 Diabtes Mellitus Patients And Its Relevance In Clinical Management

Mohamed Kasim*, Jayasingh**, Abhinav***
*PostGraduate, **Professor, *** Senior Resident
Department of General Medicine, Mahatma Gandhi Medical College and Research Institute, Puducherry, India
Corresponding author - Mohammed Kasim (mohamed_16kasi@yahoo.co.in)

Chettinad Health City Medical Journal 2018; 7(2): 60

Abstract

Introduction: : Type 2 Diabetes mellitus is the most common form of Diabetes mellitus and it has multiple mechanisms. Pancreatic beta cells produce insulin by enzymatic cleaving of pro-insulin to insulin and C-peptide levels.

Aims and Objectives : To estimate the levels of C-peptide levels and to analyse the glycemic levels in patients on OAD

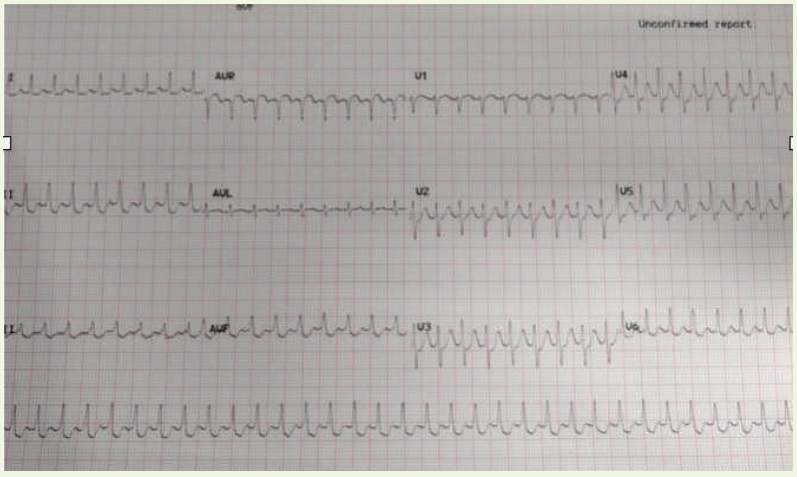
Materials and Methods: 100 newly diagnosed Type 2 diabetes patients were taken into the study after fulfilling the inclusion criteria. All patient's fasting and post prandial blood sugars, C-peptide levels were estimated and was started on oral anti-diabetic medications. Patients were followed up at the end of first, second and third month with Fasting, blood sugar, post prandial blood sugars, C- peptide levels.

Results: Among 100 participants, 19% had low C-peptide levels and 16% had high C-peptide levels and average C-peptide value was 2.25ng/dl and there was no significant association with fasting and post prandial blood sugars. At the end of 3 months patients who had normal/high C peptide levels had good glycemic levels and with low C peptide levels had poor glycemic control.

Conclusion: Estimating C-peptide levels will be beneficial for patients with poor glycemic control in deciding treatment modalities and also the judicious use of insulin in Type 2 diabetes mellitus patients.

Key words: Type 2 diabetes mellitus, C-peptide, Pancreatic beta cells

Image Challenge - 12



Clue: Young female presenting with sudden onset palpitation and chest tightness

- Answer in page : 73

A Prospective Study of Functional Thyroid Disorders In Geriatric Subjects

Ponambalaganapathi*, Khalid Andrabi **, Rajasekaran***
Postgraduate , **Senior Resident, *** Professor
Department of General Medicine, Chettinad Hospital Research Institute, Chennai ,India
Corresponding author - Ponambalaganapathi (ponnambalanadaro1@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 61

Abstract

Introduction: The thyroid gland undergoes crucial functional changes with aging. Many physiological and morphological changes of the thyroid during the process of aging are already well-known. Picking up thyroid diseases in the elderly relies on the presence of more subtle symptoms which are many a times attributed to normal aging.

Aim and Objective : To find out the prevalence of thyroid disorders in geriatric subjects attending a tertiary care hospital.

Methods and Material : It is a Prospective cross sectional study among 620 patients attending Chettinad Hospital and Research institute.

Result: Hypothyroidism was found in 20.7% of elderly patients (overt 7.6%, subclinical 13.1%). Prevalence of overt hypothyroidism was found to be highest (63.8%) in the age group of 66 years to 75 years. Prevalence of subclinical hypothyroidism was found to be highest (74.1%) in the age group 61 years to 70 years in geriatric patients. Prevalence of subclinical and overt hypothyroidism is the same in both sexes in geriatric patients. Symptoms of hypothyroidism are more likely to be found in those with overt than subclinical hypothyroidism.Coronary artery disease is found to be associated with subclinical hypothyroidism ($p<0.001$), there was no association of hypothyroidism with Diabetes mellitus, chronic kidney disease and systemic hypertension.

Conclusion: Hypothyroidism is more common in the age group of 61 years to 75 years with no gender inequality. Among the comorbidities Coronary artery disease is more likely associated with hypothyroidism than any other comorbid illness.

Key words: Hypothyroidism, Geriatric patients

Image Challenge - 13

Clue:Presented with history of recurrent upper limb weakness.

- Answer in page : 93

Evaluation of Effect of Ascorbic Acid on Ferritin and Erythropoietin Resistance in Patients of Chronic Kidney Disease

S Prasanth *
*Postgraduate
Department of General Medicine,Vinayaka Mission's Medical College & Hospital, Karaikal, India
Corresponding author - S Prasanth (dr.prasanthsuseela@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 62

Abstract

Aim : This study was done to evaluate the effect of short term intravenous ascorbic acid on reducing ferritin levels and Erythropoietin resistance in patients of chronic kidney disease (CKD) who were on maintenance haemodialysis (MHD).

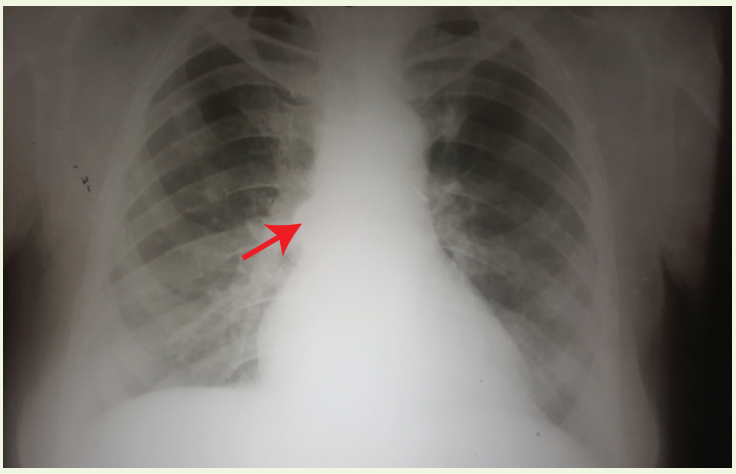
Methods: 40 adult ESRD patients on hemodialysis were divided into 2 groups of 20 each (Group A and B). Group A patients had increased serum ferritin level (>500 ng/ml) and transferrin saturation (TSAT) ≤20% and Group B patients had normal serum ferritin level (<200 ng/ ml), TSAT ≤20%. All these patients had Erythropoietin hypo-responsiveness. Group A was given intravenous (i.v.) ascorbic acid in a dose of 500 mg once a week for 3 weeks in a month (total 1500 mg/month), for a period of 3 months along with erythropoietin 6000 IU subcutaneous (S/C) twice weekly without iron therapy. Group B was given erythropoietin (6000 IU S/C twice weekly) and intravenous (IV) iron 100 mg/week for 3 months. All injections were given after a 4 hours dialysis session. Hematological and renal investigations, erythrocyte sedimentation rate (ESR), high sensitivity C-reactive protein (hsCRP), serum ferritin and TSAT were done at baseline and then at one monthly intervals for three months whereas intact parathyroid hormone (iPTH) was measured at the start and at end of 3 months.

Results: At the end of 3 months of study, in group A, Hemoglobin (Hb) and TSAT significantly increased while ferritin, hsCRP and erythropoietin resistance index (ERI) decreased significantly. In group B, the increase in Hb and TSAT was not statistically significant. But Ferritin levels increased significantly with iron while there was a fall in hsCRP and ERI but it was not statistically significant. The mean rise in Hb between subsequent months was also higher in group A as compared to group B.

Conclusion: Short term i.v ascorbic acid could be a new successful adjuvant in reducing ferritin and erythropoietin resistance and enhancing Hb and TSAT in CKD patients on MHD.

Key words: Ascorbic acid, Erythropoietin, Anemia, CKD

Image Challenge - 1



Answer:Hilar Lymphadenopathy

A Study on the Prevalence of Peripheral Neuropathy and its Risk Factors in Pre-Diabetics

Sandeepkumar *, ChandrasekaranAravind **
*Post graduate, ** Assistant Professor
Department of General Medicine, Chettinad Hospital & Research Institute, Chettinad Academy of Research & Education, Chennai, India
Corresponding author - Sandeep Kumar (sandysandeep9010@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 63

Abstract

Introduction : Peripheral Neuropathy is the commonest symptomatic complication of diabetes.Prevalence of Diabetic peripheral Neuropathy (DPN) is15 to 40 percent in various study groups.There is an emerging evidence that peripheral neuropathy begins even before the onset of symptoms of diabetes . This study attempts to diagnose Peripheral Neuropathy by using clinical methods in Pre-diabetic population and its risk factors.

Aim : The study aims to estimate the prevalence of Diabetic Peripheral Neuropathy in subjects with Pre-diabetes and to study the distribution of risk factors for Diabetic Peripheral Neuropathy in Pre-diabetic subjects .

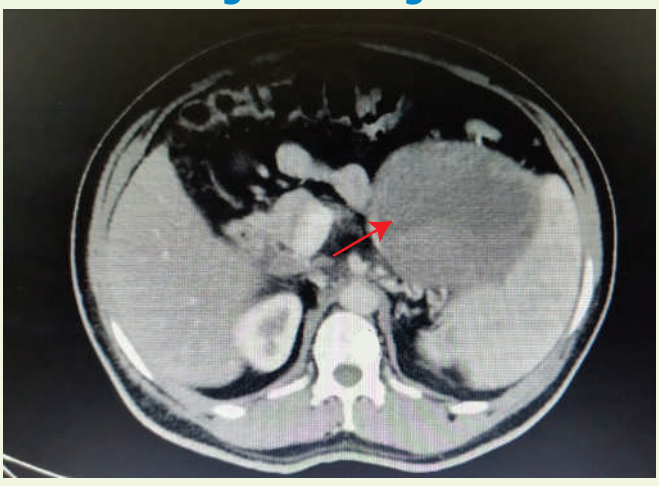
Materials and Methods : This is a cross sectional study conducted among Pre-diabetic population of age more than 30 years old.After detailed examination,venous blood was drawn for fasting blood glucose levels, HbA1c levels , serum cholesterol and triglycerides. Height , weight and waist circumference of the individual patient was measured and BMI was calculated . Presence of peripheral neuropathy was assessed by validated MNSI (Michigan Neuropathy Screening Instrument) scoring system.

Results: The relationship between DPN and HbA1c more than 6.1 was plotted and p value was less than 0.001, thus statistically significant. The prevalence of peripheral neuropathy in patients aged more than 70 was very high (88.9 percent).The prevalence of obesity in subjects with DPN (62.30%) was significantly higher than in subjects without DPN (p value <0.05).The prevalence of Dyslipidemia in subject with DPN was 63.93 % and the relationship between DPN and Dyslipidemia is statistically significant.

Conclusion: Peripheral Neuropathy is equally common in both diabetic and pre-diabetic individual.People with pre-diabetics who have peripheral neuropathy have higher HbA1c values .There is strong relationship between obesity and peripheral neuropathy in pre-diabetic individuals.It is more prevalent in elderly pre-diabetic individuals of age more than 70 years . Both males and females are equally affected ,there is no sex predilection for the occurrence of peripheral neuropathy.Prevalenceof dyslipidemia is higher in pre-diabetic people with peripheral neuropathy

Key words: Peripheral neuropathy, Risk factors, Pre-diabetic, HbA1C

Image Challenge - 2



Answer: Renal Cell carcinoma

Association And Impact of Non – Alcoholic Fatty Liver on Thyroid Function

Sankar*, Prasanth*, Kishan Raj*, Ganeshan**
*Post Graduate, **Professor
Department of General Medicine, Vinayaka Missions Medical College and Hospital, Karaikal, Puducherry, India
Corresponding author - R N K Shankar (shankaro3864@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 64

Abstract

Introduction : Nonalcoholic fatty liver disease (NAFLD) is characterized by excessive hepatic accumulation of triglycerides and free fatty acids in the liver. The incidence of NAFLD is increasing rapidly, and it is the most common cause of abnormal liver function results worldwide .The increase in the prevalence of NAFLD has been attributed to the global increase in the prevalence of obesity and other metabolic risk factor.

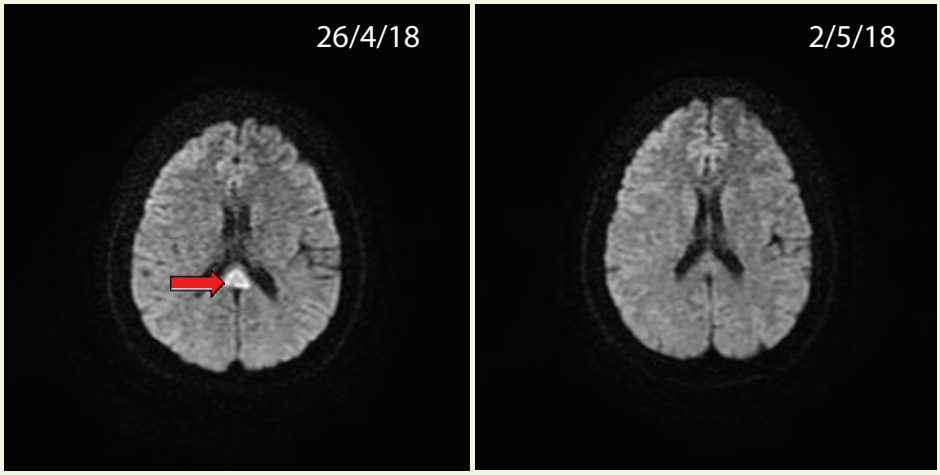
Materials and Methods : This case–control study consisted of sixty adult men and women with non-alcoholic fatty liver disease . The diagnosis of NAFLD was based on the results of abdominal ultrasonography, after excluding heavy alcohol consumption, and viral, or other liver diseases.60 patients who were admitted with non alcoholic fatty liver diseases and fulfilling the inclusion and exclusion criteria were evaluated by physical examination and assessed biochemically.

Results: Ultrasonography of hepatobiliary system to assess the liver echotexture and hepatic steatosis was done and revealed that twenty-four patients (40%) had hepatomegaly and 100% of patients had both increased liver echogenecity and hepatomegaly.

Conclusion: From this study thyroid hormone profiles may be tested as a part of initial clinical assessment in patients with NAFLD and treatment of hypothyroidism in patients with NAFLD with thyroid replacement therapy may improve disease progression and outcome.

Key words: NAFLD, Hypothyroidism, Hepatic steatosis

Image Challenge - 3



Answer: Transient lesion in the splenium of corpus callosum

Evaluation of Platelet Distribution Width in Relation to Risk Factors Among Patients With Ischemic Stroke

Saravana Bharathy*, Lakshmanan**, Vigneshwaran***, Rajasekaran****
*Post graduate ,**Senior Resident ,***Associate Professor, ****Professor
Department of General Medicine, Chettinad Hospital & Research Institute, Chettinad Academy of Research & Education, Chennai, India
Corresponding author - Saravana Bharathy(saravana24.2@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 65

Abstract

Introduction : Cerebrovascular events are becoming increasingly important problem in developing countries. Atherosclerotic events are the basic pathophysiology process. Platelets play a major role in the formation of atherosclerotic plaque and the subsequent complications. The platelets in circulation exhibit polymorphism. The larger platelets are more reactive and result in pro-thrombotic state. To identify highly reactive platelets, platelet distribution width shall be useful.

Aims and Objectives: The aim of the study is determine the association between platelet distribution width (PDW) and ischemic stroke. To establish values of platelet distribution width and platelet count in ischemic stroke and evaluate whether there is any significant difference among patients with diabetes mellitus, systemic hypertension and dyslipidemia.

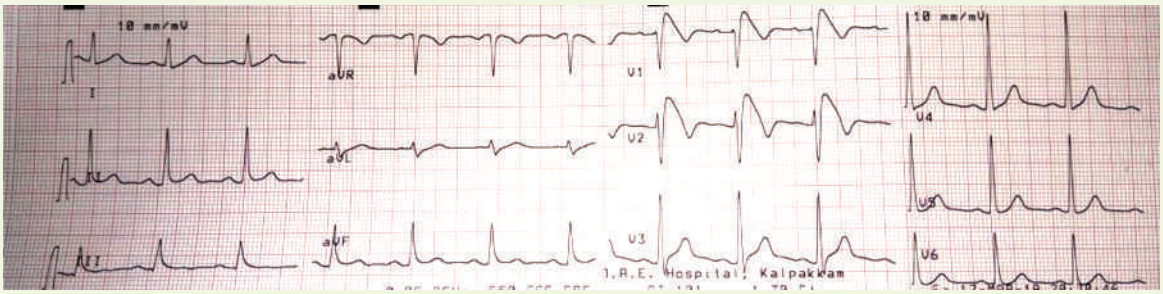
Materials and Methods : The study was conducted in chettinad hospital in the Department of General Medicine as a prospective case–control study. The cases included were thrombotic ischemic stroke patients with controls as diabetic, hypertensive and dyslipidemiapatients without stroke.

Results: A rise in PDW > 14 [(95% C.I 0.906 to 0.967) with sensitivity of 92.13% and 92.13% specificity (P<0.0167)] were found to have a strong association for cerebrovascular events.

Conclusion: A significant relationship exists between platelet distribution width and stroke. Hence, patients with risk factors for atherosclerosis need to have their platelet indices assessed periodically and followed up closely for the development of cerebrovascular events.

Key words: Cerebrovascular events, Platelet distribution width, Atherosclerosis.

Image Challenge - 4



Answer :Coved ST segement elevation V1-V3 Type I Brugada pattern

A Case Series of Polycythemia Vera

Senthilpriyan* ,Balamanikandan**, Mohammad Hassan Maricar**
*Post Graduate ,**Assistant Professor
Institute of Internal Medicine, Madras Medical College, Chennai, India
Corresponding author - Senthilpriyan(drpriyan02@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 66

Abstract

Introduction : Polycythemia Vera is a clonal disorder of multipotent stem cells, where phenotypically normal red cells, granulocytes, and platelets accumulate in absence of obvious physiologic stimuli.

Materials and Methods : Patients included in this series based on hemoglobin levels after hydration, Erythropoietin level and peripheral smear study. Patient are subjected to USG Abdomen, MRI brain with MRA/MRV, JAK 2/STAT mutation study.

Results: Since this is a rare condition 7 patients are studied. Of these two of them presented with CVA with total occlusion of the Internal Carotid Artery. One patient presented with seizures, had cerebral venous thrombosis, one presented with Refractory Hypertension, one patient with recurrent chest pain found to have CAD, one patient with splenomegaly, other with Claudication of lower limbs and has aorto iliac occlusion. All the seven had normal or low Erythropoietin levels. JAK2 mutation was done for 4 patients, of whom 3 were positive, one is negative

Conclusion: Polycythemia Vera is associated with thrombosis of arteries, veins, hypertension, vertigo, tinnitus, visual disturbances. This presentation throws light on variable presentations of Polycythemia Vera.

Key words: Polycythemia vera, Cerebral venous thrombosis, Refractory hypertension

Image Challenge - 5

Answer : Triphalangeal thumb, Polydactyly
Holt Oram Syndrome

A Cross Sectional Study on Prevalence of Subclinical Hypothyroidism in Patients with Syndrome X

M Shivanathan*, S Mayilvahanan**
* Postgraduate, ** Professor
Institute of Internal Medicine, Madras Medical College, Chennai,India
Corresponding author - M.Shivanathan (drshiva6788@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 67

Abstract

Introduction : Syndrome X or metabolic syndrome (MS) and thyroid dysfunction are characterized by a cluster of common abnormalities such as central obesity, insulin resistance, hypertension, hypertriglyceridemia and reduced HDL-C. Both the disorders are recognized independent risk factors of Atherosclerotic Cardiovascular Disease (ASCVD). Thyroid dysfunction in patients with metabolic syndrome has been shown to be associated with more severe coronary artery disease.

Aims and Objectives: To study the prevalence of Subclinical hypothyroidism in patients with Syndrome X.

Materials and Methods : A Cross sectional study was done at Institute of Internal Medicine, Madras medical college and Rajiv Gandhi government general hospital, Chennai from January 2018 to April 2018. A total of 60 patients, diagnosed to have MS according to WHO criteria were included in this study. Patients were evaluated based on anthropometry, vital parameters, fasting blood sugar, lipid profile and thyroid function test. Statistical analysis were done using SPSS software version 22.0

Results: Among 60 patients included in the study, 45% were male and 55% were females. The prevalence of thyroid dysfunction was 16.7% in patients with MS, of which Subclinical hypothyroidism (SCH) was more common (11.7%) compared to overt hypothyroidism (3.3%) and subclinical hyperthyroidism (1.7%).

Conclusion: There was a significant prevalence of thyroid dysfunction in metabolic syndrome. Hence, thyroid function test (TFT) must be done in all patients with metabolic syndrome, as it influences the outcome and management.

Key words: Syndrome X, Metabolic syndrome, Hypothyroidism, Coronary artery disease

Image Challenge - 6

Answer: Staghorn calculus

Albuminuric Status in Patients with Clinical Diabetic Retinopathy in Type 2 Diabetes Mellitus

Sruthi*Stephen Sudhakar **
*Post Graduate ** Professor
Department of Ophthalmology, Chettinad Hospital & Research Institute, Chettinad Academy of Research & Education, Chennai, India
Corresponding author - Sruthi (sruthi.guttikonda@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 68

Abstract

Introduction : Aim of this study was to correlate diabetic retinopathy and its severity with type of albuminuria and renal status of the patients

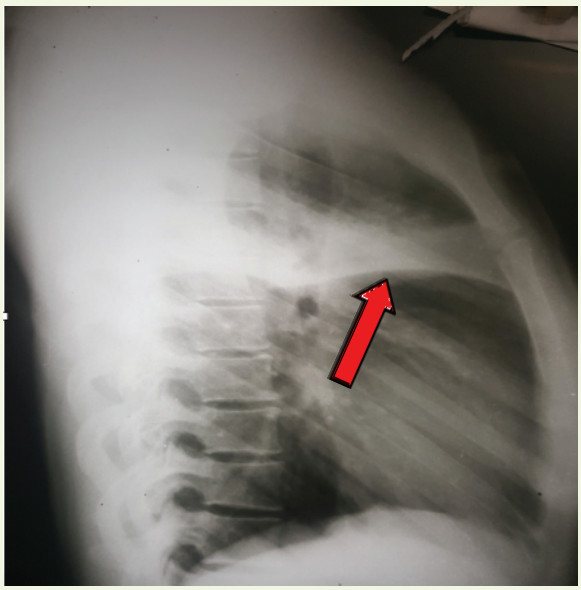
Methods : In this observational correlative study 100 patients suffering from diabetes type II were examined. Fundus examination was performed. Ratio of urinary albumin to creatinine, serum potassium and HbA1C were measured. Fundus fluorescein angiogram was done in patients with clinical maculopathy and in patients with suspected PDR to confirm the diagnosis

Results: Among the study population, 53 participants were male and 47 were female. Majority of patients with clinical diabetic retinopathy of varying grades had microalbuminuria (57%) followed by normoalbuminura (25%) and macroalbuminuria (18%). Among studied population PDR&advanced diabetic eye disease was found in 8% of normoalbuminura patients, 10.5% of microalbuminuria patients and 55.6% of macroalbuminuria patients. The difference in the proportion of grade of diabetic retinopathy across albuminuria was statistically significant (p value <0.001). Urine microalbumin to creatinine ratio increased with severity of grade of retinopathy which was found to be statistically significant (P Value <0.001)

Conclusion: Macroalbuminuria is associated with severe grade of diabetic retinopathy in type II diabetic patients.

Key words: Albuminuria, Maculopathy, Retinopathy, Type II diabetes mellitus

Image Challenge - 7



Answer:Collapse lung,
Bow sign

A Study of Comparision of TIMI Risk Score and GRACE Risk Score in Patients with non ST Elevation Myocardial Infarction

Srikaranuddeshtanugula*, Akesh Pallem**
*Postgraduate ,**Senior Resident
Department of General Medicine, Sri Ramachandra University and Research Institute, Chennai ,India
Corresponding author - Srikaranuddeshtanugula (srikaran10@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 69

Abstract

Introduction: NSTEMI is one of the common diagnosis encountered in emergency medical care. It is prudent to develop a comprehensive risk assessment to categorize these patients to low, intermediate and high risk in order to plan proper management. Comparative studies to support choices between alternative strategies and evaluation of the impact of prognostic indexes on patient's long term outcome is lacking.

Aim : The present study was done to compare the TIMI risk score and GRACE risk score in predicting the severity and prognosis of NSTEMI, to compare the risk scores with respect to hospitalization outcome and 30 days outcome.

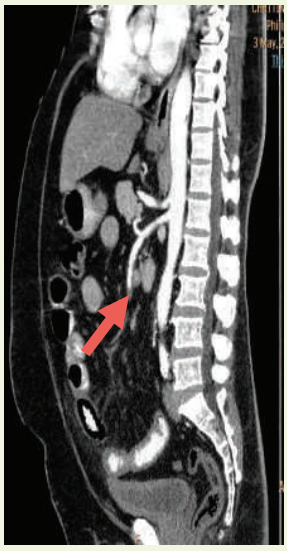
Method : It is a Prospective observational study comprising of 150 patients done at Department of General Medicine and Cardiology, Sri Ramachandra Medical College& RI from August 2016 – August2017.

Results: Risk distribution differed significantly for the two scoring systems. The TIMI score classified more patients as low risks (33.3% vs. 12.7% GRACE) and fewer patients as high risk (23.3% vs. 50.7% GRACE) Both the TIMI risk score and the GRACE risk score can be applied to unselected patients with suspected cardiac pain to identify those individuals at higher risk of major cardiac events.

Conclusion: The GRACE risk score was superior to the TIMI risk score in predicting long term outcome (30 days).

Key words: NSTEMI, TIMI risk score, GRACE score

Image Challenge - 8



Answer: Superior mesenteric artery thrombosis

A Study of Hematological Indices and their Correlation with in Hospital Mortality and Morbidity Among Patients with ACS

Suresh kumar S* Arunprasath K**
*Post Graduate **Associate Professor
Department of General Medicine, Sri Balaji Vidyapeeth University, MGMCRI Pondicherry, India
Corresponding author - Suresh kumar S (ssureshsrimushnam@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 70

Abstract

Introduction : ACS is a life threatening manifestation of CAD.Haematological indices has significant associations in predicting outcomes of CAD.Cross-sectional study was done among ACS patients to find the association of Red Cell Distribution Width (RDW),Haemoglobin Corrected RDW (HbCRDW),Red Cell Width Volume Index (RWVI),Neutrophil/Lymphocyte Ratio(NLR) and Platelet Distribution Width (PDW)with in-hospital Major Cardiac Adverse Events (MACEs)such as Recurrent Angina, Clinical LVF,LV Dysfunction by ECHO,Arrhythmias and Death.

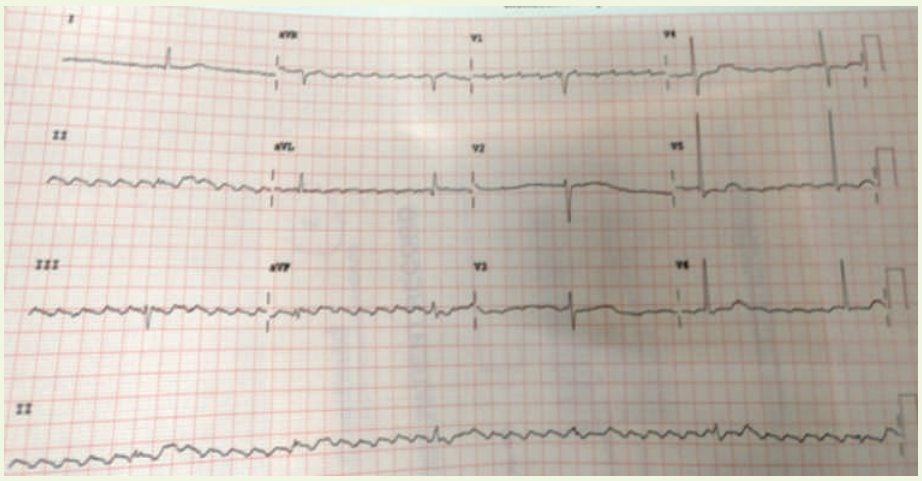
Methods : A total of 100 patients diagnosed to have ACS were considered. The significance of association with the MACEs were found using Fisher Exact Test.

Results: The distribution of ACS was a majority with STEMI ,than Unstable Angina and NSTEMI.MACEs were Clinical LVF and LV Dysfunction more than Recurrent angina, Arrhythmias.RDWhad significant association with Recurrent Angina and LV Dysfunction Higher tertiles of HbCRDW& RWVI had significance in predicting Recurrent Angina.

Conclusion: RDW andHbCRDW , RWVI are strong predictors of in-hospital Recurrent Angina.Higher values of RDW are also useful in predicting LV dysfunction.NLR is found significant in predicting clinical LV failure and arrhythmias.

Key words: RDW, HbCRDW, RWVI, ACS

Image Challenge - 9



Answer:Atrial flutter with fibrillation

Changing Urine Culture Sensitivity Pattern and Trend of Antibiotic Resistance

Uma Ravishankar *Sathyamurthy**
*Post graduate **Associate Professor
Department of General Medicine, Sri Ramachandra Medical College, Porur, Chennai,India.
Corresponding author - Uma (umaravishankar2011@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 71

Abstract

Introduction : Urinary Tract Infections are the most common diseases in developing countries. The widespread use of antimicrobial agents has led to the emergence of drug resistant strains. It has been observed that bacterial resistance keeps changing over time and from hospital to hospital. This study reflects the changes in the susceptibility pattern of uro- pathogens in our hospital.The estimation of local etiology and susceptibility profile could help us select the most effective empirical treatment.

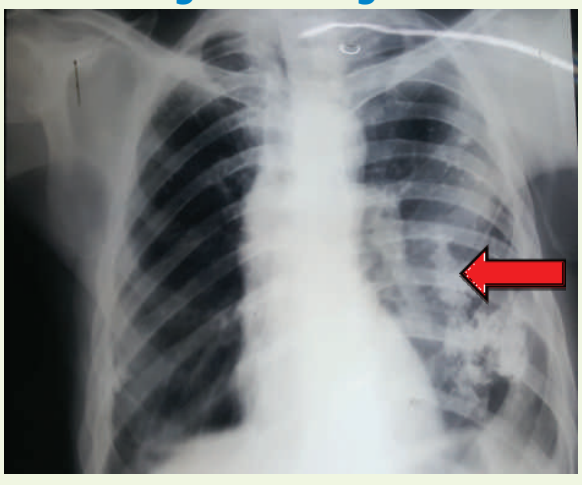
Materials and Methods : Retrospective record based study was carried out in the Department of Medicine in collaboration with the Department of Microbiology of tertiary care teaching hospital in South India.This study was carried out based on the culture and sensitivity reports of both in-patients and out-patients with Urinary Tract Infections in January 2011 and January 2017.

Results: A total of 513 cases of community acquired urinary tract infections were analysed in this study. E.Coli was the most common organism causing UTI followed by Klebsiella in both 2011 and 2017.There was a decline in sensitivity pattern for Amikacin ,Nitrofurantoin, Imipenam, meropenam, Ertapenam, Ciprofloxacin between the two study periods.There was an increase in the prevalence of pan-resistant uropathogens in 2017 as compared to 2011.

Conclusion: Regular surveillance is necessary to combat emerging strains of drug resistant uropathogens.

Key words: E.Coli, Klebsiella

Image Challenge - 10



Answer: Pleural Calcifications in left mid and Lower Zone

A Study on Evaluation of Asymptomatic Peripheral Neuropathy in Alcoholic Dependance Syndrome

Vishnupriya* ,Nikitha** , Lanord Stanley jawahar***
*Postgraduate,**Senior Resident,*** Professor
Department of General Medicine, Chettinad Hospital & Research Institute, Chettinad Academy of Research & Education, Chennai, India
Corresponding author - Vishnupriya (vishnuchewt@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 72

Abstract

Introduction : Alcoholic neuropathy is the most common manifestation of excessive alcohol intake. According to DSM-IV, studies involving clinical and electro-diagnostic criteria prove that neuropathy is present in 25-66% of the chronic alcoholics. Neuropathy due to alcohol consumption depends on duration and extent of total lifetime of alcohol consumption.

Aims and Objectives : This study aims to detect the prevalence of asymptomatic peripheral neuropathy and its association with other factors in Alcohol dependent syndrome.

Materials and Methods : This is a cross sectional study conducted among patients with Alcohol dependentSyndrome without symptoms of clinical neuropathy and Nerve conduction study (NCS) was done to detect neuropathy.

Results: In the study population, mean age was 46.16± 7.5 years. Mean duration of alcohol intake was 19.14± 6.7 years and mean alcohol consumption per week was 32.1 ± 8.8 units. NCS showed that there was significant reduction in action potential of median, ulnar and peroneal motor nerves. Prolongation of latency and action potential was found to be reduced in sural nerves. In addition a statistically significant correlation was found between neuropathy and age of the study population, duration and units of alcohol consumption.

Conclusion: Common peroneal and sural nerves are the most common nerves to be involved in neuropathy. Predominantly axonal degeneration is the main pathology.Units of alcohol and CAGE criteria score has a 100% specificity in detecting patients prone for neuropathy.

Key words: Asymptomatic peripheral neuropathy, Alcohol dependent syndrome, Duration and units of alcohol, CAGE criteria score

Image Challenge - 11

Answer: Bowel obstruction, Osteosclerosis, bone expansion (PAGET'S DISEASE)

A Study of Mean Platelet Volume in Acute Ischemic Stroke

Yugandhartummala *Tumbanatham**Ajay Sam Kumar***
*Post Graduate **Professor ***Senior Resident
Department of General Medicine, Sri Balaji Vidyapeeth University, MahatmaGandhi Medical College and Research Institute, Pondicherry, India.
Corresponding author - Yugandhartummala (yugandhar4922@gmail.com)

Chettinad Health City Medical Journal 2018; 7(2): 73

Abstract

Introduction : Stroke is one of the leading cause of death and cause long- term disability. Platelets play an important role in the pathophysiology of ischemic stroke. Platelet volume is a marker of platelet function, and activationcan be measured as a part of routine blood count as MPV can be used to predict impending ischemic stroke.

Aims and Objectives : To study the significance of MPV in stroke patients and compare with the controls.Assessment of ROC curve to find the cut-off points of mean platelet volume for detecting acute ischemic stroke.

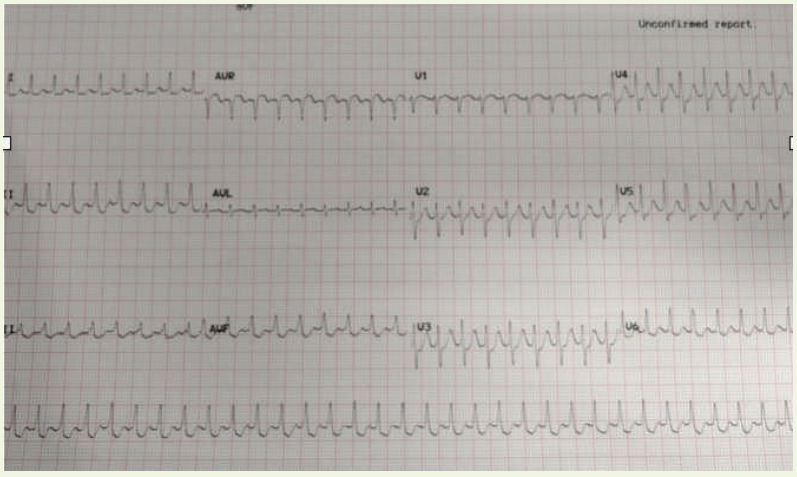
Methods : This study was a hospital based case-control study, done from Jan 2016 to May 2017 and carried out among 40 patients diagnosed with an acute ischemic stroke, 40 patients without acute ischemic stroke.Samples were collected,MPV was measured and compared.

Results: The MPV in stroke patients was 12.9 ± 1.8 fl which was increased compared with controls who had 8.1 ± 1.8fl and found to be significant(p<0.001).

Conclusion: In stroke patients, the MPV were increased compared with controls.

Key words: Stroke, Platelet, MPV

Image Challenge - 12



Answer: Supraventricular Tachycardia