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Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the last five years

(ACADEMIC YEAR 2018-19)



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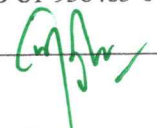
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Faculty publications - Conference

2ND INTERTIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING, SCIENCES AND MANAGEMENT

ACADEMIC YEAR 2018-2019

S. No	Author	Dept.	Title of the paper	Type of publications (national/ International)	Name of the journal	Date	ISBN no.
1	Dr. L. Siva Sanker Reddy	Pharmacy	Stability indicating analytical method development and validation for the determination of fidaxomicin in bulk and its pharmaceutical dosage form by UV spectrophotometry	International	2 nd International Conference on Emerging Trends In Engineering, Sciences And Management	21 to 22 DEC 2018	978-81-938463-0-8
2	Mr.R Niranjan kumar	Pharmacy	Drug utilization pattern in anemic pregnant women	International	2 nd International conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8
3	N.D.V.R. Saradhi	Pharmacy	A new analytical method development and validation for simultaneous estimation of naltrexone and oxycodone in API and formulations by RP-HPLC	International	2 nd national conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8
4	Dr. P. Praveen kumar	Pharmacy	Cardioprotective effect of labetalol in presence of piperine on isoproterenol induced myocardial infraction rats"	International	2 nd International conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8
5	Dr. M. Sreenivasulu.	Pharmacy	Stability indicating method development and validation for cefixime by visible, zero order, first order derivative spectroscopy	International	2 nd International conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8
6	Mr.G. Mahaboob. Basha	Pharmacy	Synthesis, Characterization and Evaluation of Azitidinone derivatives of 5-Bromo-6- MethoxyIndanone	International	2 nd International conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8


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7	Dr. M. Sekar	Pharmacy	Acute and sub acute toxicity studies of <i>Momordica charantia</i> fruit on experimental animals.	International	2 nd International conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8
8	MR. N. Madana gopal	Pharmacy	A new separation technique for method development and validation of metformin and dapagliflozin in its pure and pharmaceutical dosage form by RP-HPLC"	International	2 nd International conference on emerging trends in engineering, sciences and management	21 to 22 DEC 2018	978-81-938463-0-8

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**STABILITY INDICATING ANALYTICAL METHOD DEVELOPMENT AND
VALIDATION FOR THE DETERMINATION OF FIDAXOMICIN IN BULK AND ITS
PHARMACEUTICAL DOSAGE FORM BY UV SPECTROPHOTOMETRY**


Dr. L. Siva Sanker Reddy, D. RESHMA

ABSTRACT

Fidaxomicin is an antibiotic which is used for the treatment of Clostridium difficile-associated diarrhea and intestinal bacterial infections. The different methods available for estimation of Fidaxomicin are RP-HPLC methods. As there are only RP-HPLC methods, we have made an attempt to quantify it by UV-Visible Spectrometry. A new method was developed by determining λ_{max} and performing linearity for all the three methods and later validated by using the parameters like assay, precision, accuracy, specificity, robustness, limit of detection, limit of quantification and degradation studies were also performed.

In UV-Spectrometry method the solvent used was methanol: water in 2:1 ratio. 10 μ g/ml Fidaxomicin API was scanned in range of 200nm-400nm and λ_{max} was found to be 235nm. Linearity was performed at 1, 1.5, 10, 15, 20 μ g/ml and correlation coefficient was found to be 0.999. The proposed method was validated by using Fidaxomicin suspension which was formulated in house. The LOD and LOQ were found to be 0.2532 μ g/ml and 0.8440 μ g/ml respectively. The method was also applied for the quantification of drug in degradation studies. In Visible spectrometry a coloured solution was prepared using Folin-Ciocalteu reagent. 500 μ g/ml solution was prepared and scanned in the visible range of 400nm-800nm and λ_{max} was found to be 748nm. Linearity was performed at 50, 275, 500, 750, 1000 μ g/ml and correlation coefficient was found to be 0.999. The proposed method was used to perform the assay of Fidaxomicin suspension.

Keywords: Fidaxomicin, UV-Spectrometry, Colorimetry, First order derivative spectroscopy, Folin-Ciocalteus reagent.


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DRUG UTILIZATION PATTERN IN ANEMIC PREGNANT WOMEN

Mr.R.NIRANJAN KUMAR, Ms. M. SUMA PRAVALLIKA, Ms. P. KEERTHI

ABSTRACT:

Background: Anemia is one of the most common nutritional deficiency diseases observed globally affecting both developed and developing countries with major consequences to human health as well as socio economic development. Anemia is the major cause of maternal morbidity and mortality in developing countries. Drug use (DU) in pregnant women should be viewed as a public health problem, since there is lack in knowledge and the consequences for both the fetus and the mother in knowledge of the consequences for both the mother and the fetus. **Methods:** We analysed 120 patients who are using iron supplements for anemia in pregnancy in Obstetrics and Gynecology department of Santiram medical college and general hospital, Nandyal from June 2019 to November 2019. **Results:** Among 120 patients, according to age wise distribution 23 -27 age people are more prone for anemia during pregnancy which are about 33.3%. As part of therapy elemental iron with vitamin C combinations (79 prescriptions) were mostly prescribed followed by blood transfusion (12 prescriptions). The patients are suggested to include iron rich foods & vitamin C rich foods in their diet. **Conclusion:** This study clearly showed that prescribing pattern of drugs, Tab Dutafer-XT and Tab. Limcee were the most prescribed combination. To address the issue of anemia, the patient awareness should be enhanced.

Keywords: Anemia, Drug utilization, Pregnancy, Iron supplements.


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**A NEW ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR
SIMULTANEOUS ESTIMATION OF NALTREXONE AND OXYCODONE IN API AND
FORMULATIONS BY RP-HPLC**

N.D.V.R SARADHI, PABBU SOUJANYA B.

ABSTRACT

A simple and selective LC method is described for the determination of NALTREXONE and OXYCODONE in API and formulations. Chromatographic separation was achieved on a symmetry c18 4.6*150mm column using mobile phase consisting of a mixture of 50 volumes of OPA and, 50 volumes of methanol with detection of 225 nm. Linearity was observed in the range 25-125 µg/ml for NALTREXONE ($r^2 = 0.999$) and 40-200 µg /ml for OXYCODONE ($r^2 = 0.999$) for the amount of drugs estimated by the proposed methods was in good agreement with the label claim. The proposed methods were validated. The accuracy of the methods was assessed by recovery studies at three different levels. Recovery experiments indicated the absence of interference from commonly encountered pharmaceutical additives. The method was found to be precise as indicated by the repeatability analysis, showing %RSD less than 2. All statistical data proves validity of the methods and can be used for routine analysis of pharmaceutical dosage form.

Keywords: Naltrexone and Oxycodone, Reverse phase HPLC.


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CARDIOPROTECTIVE EFFECT OF LABETALOL IN PRESENCE OF PIPERINE ON ISOPROTERENOL INDUCED MYOCARDIAL INFRACTION RATS”

Dr. P.Praveen Kumar, B.Naga Gayathri, B.Sucharitha

Abstract

The cardiovascular or circulatory system supplies the body with blood. It's consists of the heart, arteries, veins and capillaries. Now the most common cause of death worldwide is CVD. There are also ways, however to decrease the risk of acquiring these disorders there are several different forms of CVD. Disorders and conditions that affect the heart include angina a form of chest that arises due to reduced blood flow to the heart. There are also ways, however to decrease the risk of acquiring these disorders. CVD comprises many different types of condition. diseases and conditions that affect the heart include:Malonyl-CoA is a coenzyme A derivative of malonic acid. Malonyl-CoA is a key regulator of fatty acid oxidation in the heart. It is a potent inhibitor of carnitine palmitoyltransferase (CPT1), a key enzyme involved in the mitochondrial uptake of fatty acids.Although absolute bioavailability in one study reportedly ranged from 11-86% (mean: 33%) following oral administration of a single 100 mg dose in fasted adults, the considerable interindividual variability in this study may have resulted from use of a relatively insensitive spectrofluorometric assay. Food delays GI absorption of labetalol hydrochloride but increases absolute bioavailability of the drug, possibly by decreasing first pass metabolism and/or hepatic blood flow. Following oral administration of a single 200 mg dose in healthy adults in one study, absolute bioavailability of the drug averaged 26 and 36% in the fasted and nonfasted state, respectively. First pass metabolism may also be reduced and bioavailability substantially increased in geriatric patients and in patients with hepatic dysfunction. However, in one study in patients with hepatosplenic schistosomiasis, mean absolute bioavailability of the drug was reportedly decreased when compared with healthy individuals.

Keywords; Malonyl-CoA, carnitine palmitoyltransferase


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**STABILITY INDICATING METHOD DEVELOPMENT AND VALIDATION FOR
CEFIXIME BY VISIBLE, ZERO ORDER, FIRST ORDER DERIVATIVE
SPECTROSCOPY**

Dr. M. SREENIVASULU, MullaRehana

Abstract

The present study was an attempt to develop a simple, accurate, sensitive, economical, and less time consuming, method and validates the same for determination of cefixime. The solvent used was Methanol: Water(20:80), maximum absorbance(λ_{max}) was found to be 744nm, 288.20nm, 277nm for Visible, zero and first orders respectively. Beers law obeyed at the concentration range of 0.8- 16 μ g/ml, 1-28 μ g/ml, and 9-45 μ g/ml respectively. The correlation coefficient for all of them of was within the limit, and % recovery was found to be 99.39, 99.7, 100.63% for zero, visible and first order respectively. The proposed method has been validated as per ICH guidelines for Linearity, Accuracy, Precision, Specificity, LOD, and LOQ. The method was also applied for the degradations studies. The developed method was validated successfully for the estimation of Cefixime in bulk and dosage form.

Keywords: UV-Visible spectroscopy, Cefixime, Stability studies, Zero Order, colorimetry, First order derivative


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**SYNTHESIS, CHARACTERIZATION AND EVALUATION OF AZITIDINONE
DERIVATIVES OF 5-BROMO-6- METHOXYINDANONE**

Mr.G.Mahaboob.Basha, S.Sarojinidevi, S.Mounika

Abstract:

Azitidinone is a β -lactam four member heterocyclic compound involved in research aimed to evaluate new products that possess interesting biological activities. In the last few years 1-indanone and its derivatives are widely used in medicine. Extensive studies on indanones open up more and more new possibilities of its applications as anti-viral, anti-bacterial, anti-Alzheimer's, cardiovascular drugs, fungicides, herbicides and hepatitis C treatment which inhibits HCV replication. Dilemmaone and some other indanones have been isolated from natural products. Anti-microbial were evaluated for their in vitro anti-microbial against Gram positive bacteria and gram negative bacteria. Gram positive bacteria like Bacillus subtilis, Staphylococcus aureus, Pneumococci. Vitamins are also called coenzymes, meaning that they are to the functioning of many enzymes, which are large proteins that catalyze chemical changes in cell. These compounds showed reserved anti-bacterial activity. Moreover these are less potent when compared with standard drugs. These Schiff bases were also evaluated for anti-bacterial activity. All ten intermediate Schiff bases showed potent anti-bacterial activity. Newly synthesized ten derivatives showed negative result and less potent compared to intermediate compounds. Therefore anti-bacterial activity appears to be more for intermediate compounds and less to newly synthesized compounds.

Keywords: Staphylococcus aureus, Pneumococci


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**ACUTE AND SUB ACUTE TOXICITY STUDIES OF *MOMORDICACHARANTIA LINN*
FRUIT ON EXPERIMENTAL ANIMALS,**

Dr. M. SEKAR, V.Sreenath Reddy, A.Manideep Reddy

Abstract

Sub acute toxicity studies of both aqueous ðanolic extract of MomordicaCharantia fruits on experimental rats at dose levels of 200&400mg/kg body weight for 28 days of administration didn't show any toxicity on body weight,relative organ weight& bio chemical parameters(Total cholesterol, triglycerides, HDL, LDL, VLDL, Urea , Glucose, creatinine and Direct bilirubin). The oral administration of Aqueous &Ethanolic extract of Momordicacharantia at dose of 800mg/kg,b.w for 28 days showed Hepato toxicity, Nephro toxicity, Partial cardio toxicity &Neuro toxicity. At the administered dosesit reduced Glucose&HDLconsiderably . It elevate the level of total cholesterol, triglycerides,LDL,VLDL,Creatinine , urea and Direct bilirubin. Histopathologically the inflammation , fibrosis & necrosis with accumulation dead debris was noticed in liver. Multi focal, moderate tubular nephritis and tubular degeneration in the kidney were observed. At higher doses of Ethanolic and Aqueous extract of Momordicacharantia (800mg/kg) showed inflammation in cerebral hemisphers of brain & Myocardium in heart. Hence their is urgent need to evaluate the safety margin of the preparation made from Momordicacharantia

Keywords:triglycerides,LDL,VLDL,Creatinine


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**A NEW SEPERATION TECHNIQUE FOR METHOD DEVELOPMENT AND
VALIDATION OF METFORMIN AND DAPAGLIFLOZIN IN ITS PURE AND
PHARMACEUTICAL DOSAGE FORM BY RP-HPLC”**

MR. N.MADANA GOPAL, SHAIK HABEEB BASHA

Abstract

The estimation of Metformin and Dapagliflozin was done by RP-HPLC. The assay of Metformin and Dapagliflozin was performed with tablets and the % assay was found to be 99.81 and 100.44 which shows that the method is useful for routine analysis. The linearity of Metformin and Dapagliflozin was found to be linear with a correlation coefficient of 0.999 and 0.999, which shows that the method is capable of producing good sensitivity. The acceptance criteria of precision is RSD should be not more than 2.0% and the method show precision 0.5 and 0.3 for Metformin and Dapagliflozin which shows that the method is precise. The acceptance criteria of intermediate precision is RSD should be not more than 2.0% and the method show precision 0.5 and 0.3 for Metformin and Dapagliflozin which shows that the method is repeatable when performed in different days also. The accuracy limit is the percentage recovery should be in the range of 98.0% - 102.0%. The total recovery was found to be 99.1% and 99.99% for Metformin and Dapagliflozin. The validation of developed method shows that the accuracy is well within the limit, which shows that the method is capable of showing good accuracy and reproducibility. The acceptance criteria for LOD and LOQ is 3 and 10. The LOD and LOQ for Metformin was found to be 3 and 9.8 and LOD and LOQ for Dapagliflozin was found to be 2.98 and 10 The robustness limit for mobile phase variation and flow rate variation are well within the limit, which shows that the method is having good system suitability and precision under given set of conditions.

Keywords: Metformin, Dapagliflozin, LOD and LOQ


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Faculty publications- Conference

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ACADEMIC YEAR 2018-2019

S. No	Author	Dept.	Title of the paper	Type of publications (National/ International)	Name of the journal	Date	ISBN no.
1	Dr. Y. Dasthagiri Reddy	Pharmacy	Design and evaluation of self emulsifying drug delivery system of gliclazide.	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
2	Dr.K.Sivaiah	Pharmacy	A prospective observational study on drug utilization pattern of antibiotics during pregnancy and delivery	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
3	Mr.L. Siva sankar Reddy	Pharmacy	Stability indicating method development and validation of emtricitabine and tenofovirdf by RP-HPLC	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
4	N. Madan gopal	Pharmacy	A new analytical method development and validation for simultaneous estimation of aspirin and omeprazole in bulk and pharmaceutical dosage forms by RP-HPLC	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
5	Dr. M Sreenivasulu	Pharmacy	'Stability indicating analytical method development and validation for the determination of betrixaban in bulk and its tablet dosage forms by RP-HPLC'	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
6	Dr. B. Mohaamed Ishaq	Pharmacy	Method development & validation for estimation of related substances in tiloronedihydrochloride tablets	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2



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			using RP-HPLC				
7	Dr. A.Sandeep	Pharmacy	A comparative study to evaluate therapeutic effect of patients with zinc therapy in dermatological diseases	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
8	N.D.V.R. Saradhi	Pharmacy	A new analytical method development and validation for simultaneous estimation of cefotolozone and tazobactam in its api and pharmaceutical dosage forms by RP-HPLC	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
9	Mr. G. Mahaboob basha	Pharmacy	Synthesis, characterization & evaluation of thiazolidinone derivatives of 5-bromo-6-methoxy indanon	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
10	Mr. K. Sampath kumar	Pharmacy	Formulation and evaluation of anthelmintic oral medicated jellies using mebendazole	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
11	Dr. S. V. Suresh kumar	Pharmacy	Preparation and evaluation of an ayurvedic formulation hingvastakachurna	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	
12	Ms. R. Renuka	Pharmacy	Formulation and evaluation of donepezil loaded nasal in-situ gel	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
13	Mr. R. Niranjan kumar	Pharmacy	Drug utilization pattern study in iron deficiency anemic patients	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2
14	Dr. R.E. Ugandar	Pharmacy	A study to evaluate cognitive impairment and peripheral neuropathy in type-ii diabetic patients	National	3 rd National Conference On Advances In Engineering Management & Sciences	19/11/2018	978-81-947249-0-2


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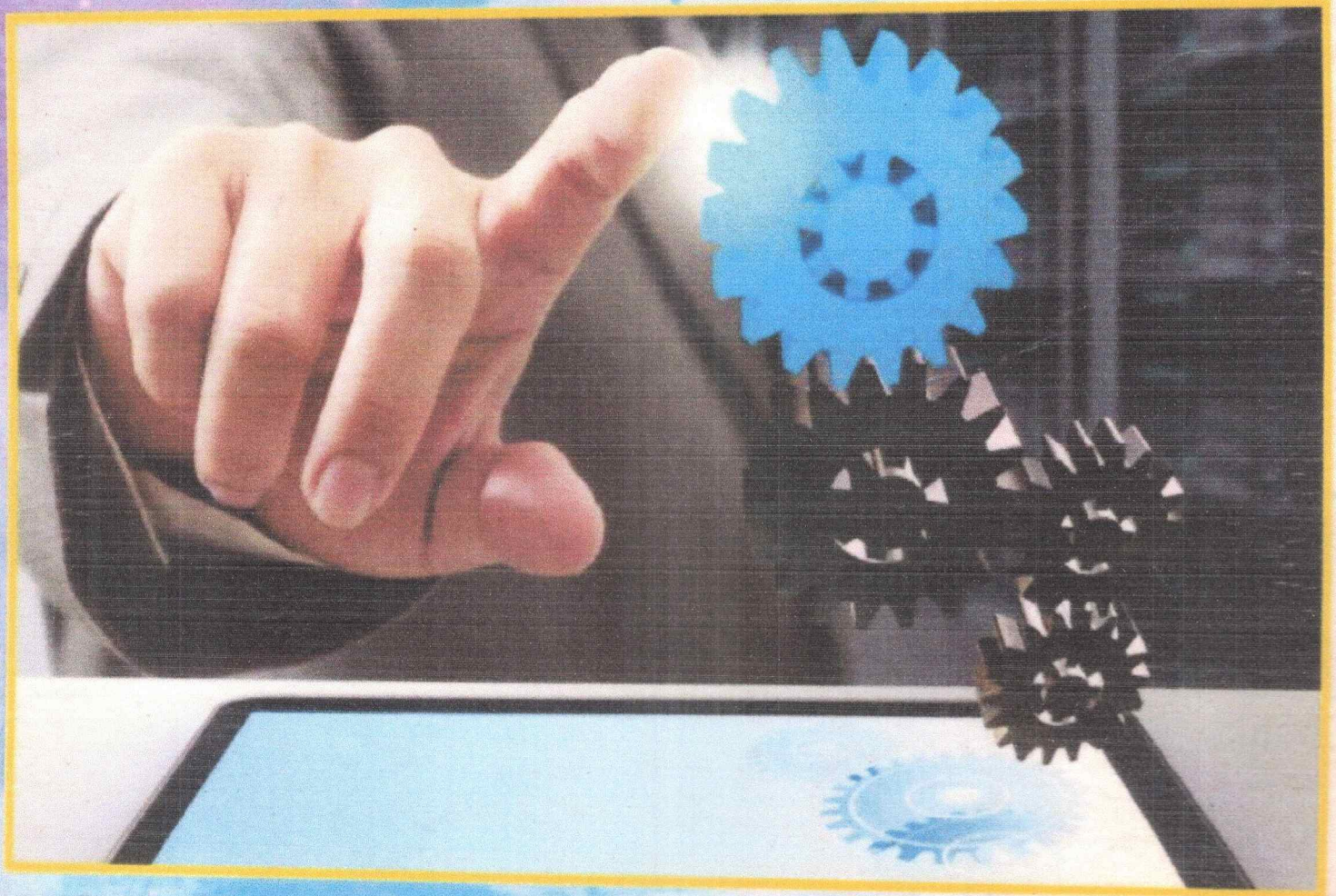
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**DESIGN AND EVALUATION OF SELF EMULSIFYING DRUG DELIVERY SYSTEM
OF GLICLAZIDE.**

Dr. Y. DASTAGIRI REDDY, Mr. T.M.D.SAMEER

Abstracts

In SEDDS formulation consists of oil, surfactant, co surfactant were selected on the basis of solubility and emulsification ability. Castor oil, sunflower oil, Tween 80, PEG 400, was selected on the basis of solubility and emulsification ability for the SEDDS formulation. Gliclazide was formulated as a SEDDS in attempt to increase the solubility. Gliclazide was developed through the construction of pseudo-ternary phase diagram, Droplet size and zeta potential analysis and Evaluation study. The surface morphology (TEM) study confirms the presence of the particle size at 167- 333 nm and the presence of a smooth surface and protective layer around the particle. The particle shown appears to be present in a spherical in shape. Optimal formulations containing 1:1 mixture of PEG 400/Tween 80 showed minimum particle size, higher in-vitro drug release. The dissolution study was performed for 180 mins. Drug dissolution from formulation F1-F12 yields 61.60 ± 0.095 - 92.30 ± 1.0625 % of drug release in 180 mins. Our study indicates that the potential use of SEDDS for the oral delivery of Gliclazide can be alternative to improve its oral bioavailability.

Key words: Gliclazide, SEDDS, of pseudo-ternary phase diagram, surface morphology


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A Prospective Observational Study on Drug utilization pattern of antibiotics during Pregnancy and Delivery

Dr.K.SIVAIAH, Miss. S. Nagajyothi and Mr.S.Sunil Kumar


ABSTRACT

Background: Antibiotic use during pregnancies and in Breastfeeding mothers is typically used to treat community borne infections. The drugs prescribed for pregnant woman is to be safe, efficacious and have to be rationalised by perfect utilisation pattern of Antibiotics during Pregnancy and Delivery can avoid unnecessary usage, reducing the risk of drug resistance, adverse effects and side effects.

Objectives: The objective of the study was safety utilisation of antibiotics during the third trimester and to study the usage pattern of antibiotics in both normal vaginal and caesarean delivery. Here the Antibiotics included Beta-lactam antibiotics, Beta lactamase enzyme inhibitors, Cephalosporin's, Antiprotozoal and Urinary antiseptics. The Drug utilization of Antibiotics in Delivery, Amoxicillin + Clavulanic acid with Metronidazole has the highest frequency of utilisation 39 [52%] followed by Ceftriaxone[iv] ,Cefpodoxime proxetil [oral]with Metronidazole [46.6%]. The least utilized category of Antibiotic was cephalosporin's Cefperazone + Sulbactam with Metronidazole[1.3%]. In Pregnancy, the Cephalosporin's had the highest frequency of utilization i.e. Cefpodoxime proxetil 31 [41.3%] followed by Penicillin's + Beta-lactamase enzyme inhibitors i.e. Amoxicillin + Clavulanic acid 21 [28%] and Antiprotozoal i.e. Metronidazole 22 [29.3]

Conclusion: The study shows that Drug utilisation pattern of Antibiotics in Delivery women with combination of Amoxicillin + Clavulanic acid, Ceftriaxone/Cefpodoxime proxetil and Cefperazone + sulbactam along with Metronidazole and the utilisation pattern of Antibiotics during pregnancy was Cefpodoxime proxetil, Amoxicillin + clavulanic acid Metronidazole and Nitrofurantoin.

Keywords: Antibiotics, RTI, UTI, Delivery, Pregnancy, Utilization


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**STABILITY INDICATING METHOD DEVELOPMENT AND VALIDATION OF
EMTRICITABINE AND TENOFOVIR DF BY RP-HPLC**

MR.L. SIVA SHANKAR REDDY, RAJAMMAGARI JAMEELA

Abstract

The estimation of Emtricitabine and Tenofovir DF was done by RP-HPLC. The assay of Emtricitabine and Tenofovir DF was performed with tablets and the % assay was found to be 99.77 and 99.04 which shows that the method is useful for routine analysis. The linearity of Emtricitabine and Tenofovir DF was found linear with correlation coefficient of 0.999 and 0.999, which shows that the method is capable of producing good sensitivity. The acceptance criteria of precision is RSD should be not more than 2.0% and the method has precision of 0.22% and 0.5% for Emtricitabine and Tenofovir DF which shows that the method is precise. The acceptance criteria of intermediate precision is RSD should be not more than 2.0% and the developed method has precision 0.6% and 0.69% for Emtricitabine and Tenofovir DF which shows that the method is repeatable when performed in different days also. The accuracy limit is the percentage recovery should be in the range of 97.0% - 103.0%. The total recovery was found to be 100.35% and 100.24% for Emtricitabine and Tenofovir DF. The validation of developed method shows that the accuracy is well within the limit, which meant that the method is capable of showing good accuracy and reproducibility. The acceptance criteria for LOD and LOQ are 3 and 10. The LOD and LOQ for Tenofovir DF were found to be 2.98 and 9.98 and LOD and LOQ for Emtricitabine was found to be 2.96 and 9.96. The robustness limit for mobile phase variation and flow rate variation are well within the limit, which shows that the method is having good system suitability and precision under given set of conditions.

Key words: Emtricitabine and Tenofovir, RSD, LOD and LOQ, robustness



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**A NEW ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR
SIMULTANEOUS ESTIMATION OF ASPIRIN AND OMEPRAZOLE IN BULK AND
PHARMACEUTICAL DOSAGE FORMS BY RP-HPLC**

N. MADAN GOPAL, SANGU SUNEETHA

Abstract

The estimation of Aspirin and Omeprazole was done by RP-HPLC. The linearity of Aspirin and Omeprazole was found to be linear with a correlation coefficient of 0.999 and 0.999, which shows that the method is capable of producing good sensitivity. The acceptance criteria of precision is RSD should be not more than 2.0% and the method show precision 0.8 and 0.3 for Aspirin and Omeprazole which shows that the method is precise. The acceptance criteria of intermediate precision is RSD should be not more than 2.0% and the method show precision 0.8 and 0.4 for Aspirin and Omeprazole which shows that the method is repeatable when performed in different days also. The accuracy limit is the percentage recovery should be in the range of 97.0% - 103.0%. The total recovery was found to be 100.43% and 100.50% for Aspirin and Omeprazole. The validation of developed method shows that the accuracy is well within the limit, which shows that the method is capable of showing good accuracy and reproducibility. The acceptance criteria for LOD and LOQ is 3 and 10. The LOD and LOQ for Aspirin was found to be 3.02 and 9.98 and LOD and LOQ for Omeprazole was found to be 3.00 and 10.00. The robustness limit for mobile phase variation and flow rate variation are well within the limit, which shows that the method is having good system suitability and precision under given set of conditions. The assay of Aspirin and Omeprazole was performed with tablets and the % assay was found to be 100.08 and 100.04 which shows that the method is useful for routine analysis.

Key words: Aspirin and Omeprazole, correlation coefficient, system suitability and precision



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**'STABILITY INDICATING ANALYTICAL METHOD DEVELOPMENT AND
VALIDATION FOR THE DETERMINATION OF BETRIXABAN IN BULK AND ITS
TABLET DOSAGE FORMS BY RP HPLC'**

Dr. M SreenivasuluM.Pharm, Miss. S. AneeshaParveen

ABSTRACT

High Performance Liquid Chromatography (HPLC) is a modern technique for the analysis of drugs. Present project attempts to develop new assay methods of different classes of drugs based on the use by RP HPLC. Assay method development is highly significant in therapeutic drug monitoring and pharmaceutical industries. It is always desirable to select and develop simple, accurate, precise and economical method for the determination of drugs in pharmaceutical dosage forms and biological fluids samples. Analytical method development and validation play important roles in the discovery development and manufacture of pharmaceuticals. This thesis describes about the determination of an anti-Parkinson's drug (Betrixaban) in bulk and in pharmaceutical dosage forms. Betrixaban was analyzed in bulk and in pharmaceutical formulation with Water's C18 (250X4.6X5), Water: ACN (88:12) mobile phase at 1ml/min and analytes was detected at 272 nm. Good results with respect to precision, accuracy and selectivity were obtained in the concentration range of 70.00 to 210.00 µg/ml. The lower detection limit was found to be 4.96 µg/ml and quantification limit was 16.52 µg/ml.

Key words: Betrixaban, RP-HPLC, Validation etc.


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METHOD DEVELOPMENT & VALIDATION FOR ESTIMATION OF RELATED SUBSTANCES IN TILORONE DIHYDROCHLORIDE TABLETS USING RP-HPLC

Dr. B. MOHAAMED ISHAQ, Mechanic ZebaBaktiyar

ABSTRACT

A simple, precise, rapid, accurate, specific, reproducible RP- HPLC method was developed for the estimation of related substances in Tiloronedihydrochloride tablet dosage form. The quantification was carried out using column Zorbax SB-Phenyl (150 × 4.6 mm, 5 μ) in an isocratic mode with mobile phase A (Buffer) mobile phase B (Water:Methanol:Acetonitrile (20:20:60)%v/v) at a flow rate of 1.0ml/min. Detection was carried out at 269nm using a UV detector with 10 μ l as injection volume. The retention time for Tiloronedihydrochloride was found to be 58minutes respectively. The correlation co-efficient was $r^2=0.999$. The proposed method has been validated as per ICH guidelines for Linearity, Accuracy, Precision, LOD and LOQ, Solution Stability studies. The method was also applied for the degradations studies. All the degradation studies were found to be within the limits. The proposed method was validated successfully for the estimation of the TiloroneDihydrochloride in dosage form.

Key words: TiloroneDihydrochloride, RP-HPLC, Degradation studies, Validation.


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**A COMPARATIVE STUDY TO EVALUATE THERAPEUTIC EFFECT OF PATIENTS
WITH ZINC THERAPY IN DERMATOLOGICAL DISEASES**

DR.A.SANDEEP, MISS. C.RESHMA, MISS. M.S.SIMRAN KOUSAR

Abstract

Zinc has been used in various forms as a therapeutic modality for centuries topical preparations like calamine, Zinc oxide, and zinc pyrithione have been used as photo protecting smoothening agents or as active ingredients of antidandruff shampoos. Zinc use as also expanded over the years for a number of dermatological conditions including infections (Warts, Leishmaniasis), Inflammatory Dermatoses (Acne vulgaris, Rosacea), Pigmentary disorders (Melasma) and Neoplasia (Basal cell carcinoma) although the role of oral zinc is well established in human zinc deficiency syndromes including acro dermatitis. Zinc alone as an adjuvant has been found used full in many dermatological infections owing to its modulating actions on macrophage and neutrophil functions. Among all the cases collected i.e., 127, we studied that the therapeutic effect of zinc in dermatology is effective and was concluded by comparison of Zinc therapy with non zinc therapy patients. This study suggest that zinc will produce higher efficacy compare with non -zinc. Zinc is effective in female patients than male patients. Zinc is more effective in children when compared to adults. Zinc therapy declines the symptoms of particular disease and improves the period of recovery when compare to non zinc therapy.

Key words: Zinc oxide, zinc pyrithione, Pigmentary disorders, neutrophil functions.


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**A NEW ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR
SIMULTANEOUS ESTIMATION OF CEFTOLOZONE AND TAZOBACTUM IN ITS
API AND PHARMACEUTICAL DOSAGE FORMS BY RP-HPLC**

N.D.V.R SARADHI, MEKALA RAMATHOLISAMA

ABSTRACTS:

The estimation of Tazobactum and Ceftolozone was done by RP-HPLC. The assay of Tazobactum and Ceftolozone was performed with tablets and the % assay was found to be 99.72 and 99.80 which shows that the method is useful for routine analysis. The linearity of Tazobactum and Ceftolozone was found to be linear with a correlation coefficient of 0.999 and 0.999, which shows that the method is capable of producing good sensitivity. The acceptance criteria of precision is RSD should be not more than 2.0% and the method show precision 0.60 and 0.30 for Tazobactum and Ceftolozone which shows that the method is precise. The acceptance criteria of intermediate precision is RSD should be not more than 2.0% and the method show precision 0.40 and 0.30 for Tazobactum and Ceftolozone which shows that the method is repeatable when performed in different days also.

KEY WORDS: Tazobactum and Ceftolozone, RP-HPLC, intermediate precision, RSD


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**SYNTHESIS, CHARACTERIZATION & EVALUATION OF THIAZOLIDINONE
DERIVATIVES OF 5-BROMO-6-METHOXY INDANON**


MR. G. Mahaboob Basha, Jaini Chidvilasini, Kypa Yashoda

ABSTRACT

Novel Thiazolidinone derivatives are synthesized characterized by the IR, NMR and Mass spectra and screened for anti-microbial activity by Agar diffusion method for antibacterial activity. The synthetic scheme of indanone involves the reaction between 5-bromo-6-methoxy indanone with hydrazine. The formed intermediate was further treated with aldehydes derivatives, resulting in indanone Schiff base derivatives. The Schiff base was reacted with Thioglycolic acid in the presence of Di-methyl formamide, resulting in novel Thiazolidinone derivatives. IR spectroscopy is performed by using pressed pellet technique and it is useful in determining the important functional groups of the compound as a part of its structural identification and NMR spectra is performed for identifying type and number of protons. All the spectral studies were consistent to original values. Biological screening was performed on bacteria among which compounds exhibited less activity than Standard drugs.

The Thiazolidinones were synthesized in a facile procedure. All the compounds synthesized were characterized by IR and NMR spectra and best reports were obtained which are matching with derivatives. These compounds showed reserved anti-bacterial activity. Moreover these are less potent when compared with standard drugs. The Schiff bases were also evaluated for anti-bacterial activity. All ten intermediate Schiff bases showed potent anti-bacterial activity. Newly synthesized ten derivatives showed negative result and less potent compared to intermediate compounds. Therefore anti-bacterial activity appears to be more for intermediate compounds and less to newly synthesized compounds.

KEY WORDS: Novel Thiazolidinone, Agar diffusion method, IR spectroscopy


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**FORMULATION AND EVALUATION OF ANTHELMINTIC ORAL MEDICATED
JELLIES USING MEBENDAZOLE**

Mr. K. Sampath Kumar, G.V. Bhargav Goud, C. Zohra Almas

ABSTRACT

In these current research , Mebendazole (MBZ) Oral medicated jellies were Formulated. Due to bulky nature of tablets, patients feel difficult in swallowing especially pediatric and geriatrics. The main feature of oral jelly is that it is easily chewable , doesn't require water and due to the use of flavoring and sweetening agents these may increase the patient compliance and acceptance. Mebendazole is used for the treatment of different Intestinal Helminthic Infections (IHI) and Extraintestinal Helminthic Infections (EIHs). In these mebendazole jellies are prepared by using the different gelling agents like Gelatine, Pectin and Sodium Alginate in nine formulations by Heating and Congealing method and the prepared jellies were evaluated by their Physical Appearance, Stickiness, Grittiness, Syneresis, pH, Viscosity, Spreadability, Content Uniformity, In-vitro Dissolution study and stability study. Among the prepared nine formulations , F8 formulation is considered as the best one , since it has shown the highest drug release of 98.34% and this formulation has shown the satisfactory result in other Evaluation tests. Stability study of F8 formulation also considered that the jellies were stable in nature. The prepared jelly can be good alternative dosage form in pediatric and geriatrics to resolve the swallowing difficulty.

KEYWORDS: Oral medicated jellies , Mebendazole, Gelling agents, Helminthic infections


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**PREPARATION AND EVALUATION OF AN AYURVEDIC FORMULATION
HINGVASTAKA CHURNA**

DR. S. V. SURESH KUMAR, C.PRANEETH, M.AJAYKUMAR

ABSTRACTS:

In present investigations an Ayurvedic formulation Hingwashtak churna was prepared in the laboratory and subjected for standardization using various organoleptic, physical and chemical parameters including fingerprinting and marker compound analysis. The results are compared with the two marketed formulations. On the whole, these findings offer a standardization data for the formulation with regard to preparation and use of the formulation in alternative system of medicine. The presence of different chemical constituents in the formulations were detected by subjecting them to successive extraction using solvents in the order of increasing polarity and subjecting the successive extracts so obtained to qualitative tests for various chemical constituents. The formulations were found to contain, terpenoids, steroids, alkaloids and flavonoids, the presence of which was confirmed by TLC studies. The selected formulations were found to contain the ingredients that contains terpenoids (Volatile oils-mono and sesqui terpenoids) and hence subjected for HPTLC fingerprinting studies to get the fingerprints of terpenoids as their presence were detected by qualitative tests and TLC studies. As the formulation contains two common ingredients i.e. Piper nigrum and Piper longum which mainly contains alkaloid piperine, considering it as marker, an attempt was made to determine the concentration of piperine the selected formulations using UV spectroscopy.

KEY WORDS: Hingwashtak churna, terpenoids, steroids, alkaloids and flavonoids, . Piper nigrum and Piper longum

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FORMULATION AND EVALUATION OF DONEPEZIL LOADED NASAL IN-SITU GEL

Ms. R. Renuka, P. SREE BHAVANA, S. JYOTHI

ABSTRACT

The present study was aimed to develop a mucoadhesive nasal in situ gel delivery system for the treatment of Alzheimer's disease. Nine batches of mucoadhesive nasal in situ gels (F1- F9) were prepared by using carbopol 974P, xanthum gum and sodiungalinate with drug by Cold method. Preformulation study was carried out for crude drug. The initial part of work was started from the identification of drug. Identification of drug was determined by melting point and solubility. The compatibility studies by FTIR and DSC analysis of in situ gels suggest that the drug donepezil with polymers do not interact to form any additional chemical entity but remain as a mixture. Therefore, it could indicate that there was no incompatibility between drug and polymers. The similarity in peaks indicates there is no incompatibility between drug and the polymers. pH of the all formulations were found to be within 5.27-6.26 that is between physiological range of pH of nasal mucosa. The viscosity was directly dependent on the polymeric content of the formulations. It is to be noted that the addition of increasing concentrations of polymer from 5% to 15% increases the viscosity of formulations. From viscosity studies it was found that viscosity increase with concentration of mucodhesive polymer. From in-vitro permeation studies it was concluded that formulation F3 found to be best formulation among other formulations, which showing the most desired drug permeation. It will be considered as best formulation. This formulation was considered as best formulation for nasal in situ gelling system for the treatment of Alzheimer's with respect to its evaluation parameters like clarity, pH, drug content, Gel strength, Spreadability and in-vitro drug release and this formulation may give patient friendly and needle free dosage forms.

KEY WORDS: mucoadhesive nasal in situ gel delivery system, xanthum gum and sodiungalinate, Alzheimer's


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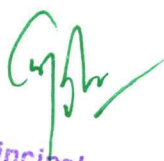
DRUG UTILIZATION PATTERN STUDY IN IRON DEFICIENCY ANEMIC PATIENTS

Mr.R. NIRANJAN KUMAR, Ms. B.SHANMUKI, Ms. A.LAKSHMI JOSHNA

ABSTRACT

Anemia is a major public health problem in India affecting people in all age groups with major consequences for human health as well as economic development. Hence the study aims to assess drug utilization pattern study in iron deficiency anemia in a tertiary care teaching hospital. **METHODS:** A prospective and observational study was carried out on 106 inpatients and 16 out patients were admitted to general medicine department in a tertiary care teaching hospital diagnosed with iron deficiency anemia for 6 months .data was collected from case sheets of patients and assessed for prescribing pattern and direct interview was conducted with patients using standardized KAP questionnaire on anemia. **RESULTS:** Among 122 patients, 103 patients (84.4%) were females and 19(15.5%) were males, according to age wise distribution 21 -40 age people are more prone for iron deficiency anemia which are about 54.9%. As part of therapy elemental iron with vitamin C combinations (81 prescriptions) were mostly prescribed followed by blood transfusion (48 prescriptions). The patients are suggested to include iron rich foods & vitamin C rich foods in their diet. **Conclusion:** This study clearly showed that prescribing pattern of drugs, Tab Livogen and Tab. Limcee were the most prescribed combination. To address the issue of anemia, the patient awareness should be enhanced.

Key Words: IDA, Co morbid Conditions, Tab Livogen, Tab. Limcee, Life style modifications.
Journal site: Indian Journal of Pharmacolog


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A STUDY TO EVALUATE COGNITIVE IMPAIREMENT AND PERIPHERAL NEUROPATHY IN TYPE-II DIABETIC PATIENTS

DR.R.E.Ugandar, G.SaiPrathyusha , P. Lakshmi Sobhitha

ABSTRACT

Diabetes is the leading common cause of vision loss, cardiovascular disease and neuropathy. A less addressed and not as well recognized complication of diabetes is cognitive dysfunction. Type-II diabetes would likely to cause cognitive deficits and diabetic neuropathy that can be attributed to the disease. Diabetes causes a broad spectrum of neuropathic complications, including acute and chronic forms affecting each level of peripheral nerve, from root to the distal axon. To determine the cognitive function and diabetic peripheral neuropathy in Type-2 diabetic patients by using ADDEN BROOKE'S scale and ENMG test respectively. To assess the onset of peripheral neuropathy in diabetic patients. A prospective observational was conducted in the Santhiram medical college and general hospital, Nandyal from June to November 2019, to assess the Cognitive impairment and Peripheral neuropathy in type 2 diabetic patients attending the neurology department of tertiary care teaching hospital. The data was collected by using specialized proforma and questionnaire. Among 150 patients of type 2 diabetes 78 cases have peripheral neuropathy, 72 cases have cognitive impairment and 65 cases have both cognitive impairment and peripheral neuropathy. The time period required for the onset of peripheral neuropathy in type 2 diabetic patients was found to be 6-10 years and 1- 5 years in most of the collected cases of this study. Peripheral Neuropathy is mostly seen in the Males. Sensory symptoms and motor symptoms of peripheral neuropathy are mostly seen in the age group of 51-60 years Sensory symptoms are mostly seen in males and Motor symptoms are mostly seen in females. In this study 51% of the cases have sensory neuropathy, 40% of the cases have motor neuropathy and 65% of the cases have Abstract sensory motor neuropathy based on EMG test. Cognitive impairment is mostly seen in the age group between 41-60 years. It is mostly seen in females when compared to males in this study. Males are mostly affected with peripheral neuropathy than females. It was observed that the onset of peripheral neuropathy was occurred at the very early stages of 1-5 years duration of type-2 diabetes.

KEY WORDS: Peripheral Neuropathy, Cognitive Impairme


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