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3.3.2

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 2019-20)

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Faculty Publications- Conference

NATIONAL CONFERENCE ON EMERGING TRENDS IN MANAGEMENT IN PRESENT ERA

ACADEMIC YEAR 2019-2020

S. No	Author	Dept.	Title of the paper	Type of publications (National/ International)	Name of the journal	Date	ISBN No.
1	N.D.V.R Saradhi	Pharmacy	A new analytical method development and validation for simultaneous estimation of aspirin and rosuvastatin in API and formulations by RP-HPLC	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
2	Dr. N. Dora Babu	Pharmacy	Evaluation of anti-diabetic activity of a polyherbal formulation	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
3	Dr. Y. Dasta Giri Reddy	Pharmacy	Design and evaluation of mouth dissolving tablets of flurbiprofen	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
4	Mr.K.Pavan Kumar	Pharmacy	Formulation and evaluation of olsalazinemicrosponge tablets	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
5	Dr.L.Shiva Sankar Reddy	Pharmacy	Method development and validation of esomeprazole along with degradation studies by using U.V spectrophotometer	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
6	Mr.T.Venkat Ramaiah	Pharmacy	Insilico design and synthesis of novel anthraquinone derivatives and their biological screening for therapeutical activity	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
7	Dr.P.Praveen Kumar	Pharmacy	Cerebroprotective activity of aloe-emodin nanoparticles on cerebral ischemic injury reperfusion model	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5
8	Mr. V. Vijay Kumar	Pharmacy	A study on impact of pharmacist interventions on therapeutic outcomes in type ii diabetic patients	National	National conference on Emerging trends in management in present Era	13 June 2020	978-81-945588-3-5

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3rd National Conference

On

EMERGING TRENDS IN MANAGEMENT IN THE PRESENT ERA

NCETM - 2020

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Santhiram Engineering College (SREC) is sponsored by M/s Sri Shirdi Sai Educational Academy, Nandyal. SREC is established under the able guidance of Dr. M. SANTHIRAMUDU, Chairman in the year 2007 with a noble motto "Education for peace and progress". SREC is approved by AICTE, New Delhi: Recognized by UGC under 2(f) and 12 (B): Permanently Affiliated to JNTUA, Anathapuramu: Certified to an ISO 9001:2015. The college is ranked as one of the Best Engineering Colleges of JNTUA. Ananthapuramu.

SREC is situated on NH-40, 12 KM away from Nandyal, Kurnool Dist. Andhra Pradesh. It is a learning abode for 1600+ Students. The Campus is pollution free and its serene environment is ideally suited for academic activities. Our goal is to produce Engineers and Managers who can contribute to the progress of the Nation and the World through excellent Scientific, Technical Innovations and Research Activities.

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- SREC received **BEST FASTEST GROWING ENGINEERING COLLEGE IN AP** Award in 2014 from **Dr. Smt. NAJMA HEPTULLA,** Ministry of Minority Affairs, New Delhi.
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- More than **500 RESEARCH ARTICLES** published in reputed publications
- Signed **MOU** with **LINCOLN UNIVERSITY, Malaysia** for bilateral R&D activities.
- Signed **MOU** with **NUCLEUS VISION (Eleven 01 Labs)** to promote Block chain Technology across Indian college students.
- Our student won the **GOLD MEDAL** in the **3rd HEROES TAEKWONDO INTERNATIONAL CHAMPIONSHIP, Thailand in 2017.**
- Secured 2nd prize in **AICTE CHHATRA VISWAKARMA AWARD, 2018**

ISBN 978-81-945588-3-5

A NEW ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR SIMULTANEOUS ESTIMATION OF ASPIRIN AND ROSUVASTATIN IN API AND FORMULATIONS BY RP-HPLC

N.D.V.R SARADHI, MANDLA HYMAVATHI

ABSTRACT

Development and validation of simple, rapid, precise, accurate and sensitive HPLC method for the simultaneous estimation of Rosuvastatin and Aspirin in bulk and in capsule dosage form. The mobile phase consisting of ACN: OPA (80:20v/v) and wavelength of detection 240nm was used. The linearity of the calibration curves for Rosuvastatin and Aspirin in the desired concentration range is good (r2 =0.999) by this method. The result of analysis has been validated statistically and recovery study confirmed the accuracy of proposed method. This method was successfully applied to the routine determination of these drugs in bulk and in its pharmaceutical dosage form.

Key words: Aspirin, Rosuvastatin, RP-HPLC.

Principal
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EVALUATION OF ANTI-DIABETIC ACTIVITY OF A POLYHERBAL FORMULATION

Dr. N. DORA BABU, S. MADHAVI

Abstracts

Diabetes is a chronic endocrine metabolic disorder of a multiple aetiology characterized by micro and macro vascular complications that results in chronic hyperglycemia with disturbances of carbohydrate, fat and protein metabolism resulting from defects in insulin secretion by pancreas. The characteristic symptoms of diabetes are poly urea, polydypsia, polyphagia and unexpected weight loss. Defects in carbohydrate metabolism and consistent efforts of physiological system to correct the imbalance in carbohydrate metabolism causes over exertion on endocrine system, which lead to the deterioration of endocrine control. Increased deterioration of endocrine control by metabolic disturbances lead to hyperglycemia. In diabetes hyperglycemia generates reactive oxygen species(ROS) which in turn cause lipid peroxidation and protein glycation. This leads to oxidative damage of cell membranes and thus plays an important role in production of secondary complication in diabetes mellitus such as kidney, eye, blood vessel and nerves damage.

"Polyherbal formulation made up of Momrdicacharantia, Coriandrumsativum, Trigonellafoenumgraceum& Cassia auriculatapossess a wide range of therapeutic utilities. So in the present investigation we have made an attempt to find out "Anti-diabetic activity of Polyherbal formulation in Alloxan induced diabetes". **Group-I** animals were treated with 1ml normal saline orally for 21 days. **Group-II** animals served as untreated control. **Group-III** animals were treated with Standard drug (Glimeperide) for 21 days. **Group-IV, Group-V** animals were treated with 200mg/kg, 400mg/kg of ethanolicpolyherbal formulation for 21 days Similarly, **Group –VI, Group –VII** animals were treated with 250mg/kg, 500mg/kg of aqueous polyherbal formulation for 21 days respectively

Keyword: Momrdicacharantia, Coriandrumsativum,

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DESIGN AND EVALUATION OF MOUTH DISSOLVING TABLETS OF FLURBIPROFEN

Dr. Y. DASTA GIRI REDDY, .Mr. J. VEERASEKHAR

ABSTRACT

The purpose of this research was to develop mouth dissolving tablets of Flurbiprofen. Mouth dissolving tablet offers a solution for antipyretic and analgesic activity seen in pediatrics and geriatrics patients and those have difficulty in swallowing tablets/capsules resulting in improved patient compliance. Flurbiprofen is most commonly used in treatment rheumatoid arthritis or osteoarthritis. This is because Flurbiprofen is a non-selective COX inhibitor and inhibits the activity of both COX-1 and -2. The aim is to formulate different formulations of oral dispersible tablets of Flurbiprofen using different superdisintegrants (sodium starch glycolate, crospovidone, croscarmellose sodium and L- hydroxy propyl cellulose) by direct compression method. The tablets were evaluated for hardness, thickness, friability, weight variation, uniformity of content, wetting time, disintegration time and dissolution studies. In vitro dissolution studies show the release is in the following order of superdisintegrants: croscarmellose sodium >crospovidone> L-hydroxyl propyl cellulose > sodium starch glycolate. Maximum in vitro dissolution was found to be with formulation FF11 which contains the 6% croscarmellose sodium. From the above data it has been found and concluded, croscarmellose sodium at a concentration of 6% is suitable for preparing immediate release tablets of Flurbiprofen

Key words: Mouth dissolving tablets, Flurbiprofen, super disintegrants

FORMULATION AND EVALUATION OF OLSALAZINEMICROSPONGE TABLETS

Mr.K.Pavankumar, SK.Parveen, P.Satishkumar

ABSTRACT

osalazine is an aminosalicylic acid derivative used for the treatment of ulcerative colitis. Olsalazine was loaded in microsponges to enhance its stability and reduction of drug dose. These microsponges were prepared by Quasi emulsion solvent diffusion method and Oil-Oil emulsion solvent diffusion method respectively. Evaluation parameters for microsponges prepared by both the methods were conducted. precompression parameters were conducted for blends prepared by two methods. Colon targeted tablets were designed using Microbial degradation polymers like Inulin, Locust bean gum and chitosan at different concentrations. Post compression parametres were conducted for all tablets prepared by two methods. All the formulations showed the desired physicochemical properties as per the official limits. The drug release studies were performed for all formulations prepared by two methods according to the USP paddle method by using 0.1N HCL for 2 hrs, pH 7.4 phosphate buffer for 3 hrs and pH 6.8 phosphate buffer upto 11 hrs.Among all formulations prepared by two methods A better controlled drug release of 98.56% was shown for OF3 using Inulin as polymer. Comparative drug release studies were conducted for OF3 and Marketed formulation. OF3 showed better Drug release of 98.56% compared to Marketed formulation(90.13%).Kinetic studies were conducted for Optimized formulation OF3 for Drug release mechanism. The release kinetics of the Optimized formulation (OF3) indicated that the formulation followed zero order kinetics and the diffusion exponent 'n' value is 0.808 indicating that it follows Non fickian type of mechanism.

Key words :Olsalazine, Ulcerative colitis, Diffusion Exponent, Non fickian mechanism

METHOD DEVELOPMENT AND VALIDATION OF ESOMEPRAZOLE ALONG WITH DEGRADATION STUDIES BY USING U.V SPECTROPHOTOMETER

Dr.L.ShivaSankarReddy, D.SIDDAIAH, E.SRAVANI

ABSTRACT

A simple, sensitive and selective UV method was developed and validated for the estimation of Esomeprazole.The method was developed on UV spectrometry, λmax was attained at 300 nm and optimized concentration was 25µg and absorbance was 0.506.The assay method was validated and linearity range was 0.995 µg -1.0 µg. The % RSD of precision and accuracy was found to bee<2. The %RSD of recovery studies were found to be in between 98-102%. Different stability studies were performed on themethodLOQ,LOD, Robustness. Limits of LOD and LOQ<10. Limits of % assay of robustness were found to be 98-102%.The method was proved as stable towards all stability studies. Degradation studies were carried out in different condition acid, base. The limit of % assay was found to be 98-102%, % degradation was <10. The method was used for the routine analysis of Esomeprazole by using UVSpectrophotometry. The LOD, LOQ, values were found to be, 0.2508µg/ml,0.8368µg/ml

Keywords: UV-Visible spectroscopy, Esomeprazole, Stability studies, Degradationstudies.

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INSILICO DESIGN AND SYNTHESIS OF NOVEL ANTHRAQUINONE DERIVATIVES AND THEIR BIOLOGICAL SCREENING FOR THERAPEUTICAL ACTIVITY

Mr.T.VenkatRamaiah, G.Pravallika, G.Manogna

ABSTRACT:

The present work deals with the synthesis of novel Anthraquinone derivatives and biological screening for their In-vitro anti-microbial activity.The development of new anti-microbial resistance which is a growing global healthcare problems due to the loss of efficacy of first line antibiotics. Many pathogens are developing resistance to multiple drugs. The major resistance overall issues being related to the Enterococcus faecium ,Staphylococcus aureus, klebsieuapneumoniae, Acinetobacterbaumannil, Pseudomonas aeruginose pathogens etc..,More than 2.8 million antibiotic resistance infectious occurs in the US each year and more than 3500 people die as a result. In the present study various Anthraquinone derivatives were prepared by the condensation process with various acylated aromatic and aliphatic amines in the presence of ethanol as solvent. The acylated aromatic and aliphatic amines are prepared from various aromatic and aliphatic by treating with chloroacetylchloride .Ten Anthraquinonederivatives[1-10] are synthesized and characterized by NMR and IR spectral data. All the synthesized compounds were tested for in-vitro anti-microbial activity by taking Phenol as standard. Compounds 1,3,6,8,9 are showing moderate antimicrobial activity.

Keywords: chloroacetylchloride, Enterococcus faecium ,Staphylococcus aureus

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CEREBROPROTECTIVE ACTIVITY OF ALOE-EMODIN NANOPARTICLES ON CEREBRAL ISCHEMIC INJURY REPERFUSION MODEL

Dr.P.Praveen Kumar, K.Mamatha, C. Naresh

ABSTRACT

Stroke is defined as interruption of blood supply to the brain associated with rapid clinical signs of focal or global cerebral disruption, lasting 24 hrs. or longer may leading to death of no obvious sign other than vascular origin. Mainly there 3 forms of strokes; temporary ischemic attack, a TIA is triggered by something that momentarily prevents blood supply to the brain; ischemic stroke due to blood flow, and hemorrhagic stroke due to bleeding. Signs and symptoms of a stroke can include an inability to lift or feel on one side of the body, problems with understanding or speech, dizziness, or lack of vision on one side.Superoxide dismutase(SOD) is endogenous antioxidant enzyme present in detoxification of superoxide radicals.Superoxide formation is elevated during normal glycemic cerebral ischemia and reperfusion.Reactive anion is toxic to neurons and may initiateCatalase is an antioxidant enzyme formed naturally within the body, such as superoxide dismutase (SOD) and glutathione peroxidase (Liddell *et al.*, 2004). In almost all living organisms.

KEY WORDS: Superoxidedismutase(SOD),glutathione peroxidase,

A STUDY ON IMPACT OF PHARMACIST INTERVENTIONS ON THERAPEUTIC OUTCOMES IN TYPE II DIABETIC PATIENTS

Mr. V. Vijay Kumar, Dr. G. Lokendranath, Mr. A. Hemanthreddy and Mr. J. Sudharshan

Abstract

Diabetes mellitus is a chronic metabolic disease that directly affects the wellbeing and possess a high morbidity risk. The management of type 2 diabetes mellitus is a complex, requiring continuous medical care by health care professionals and considerable self-care efforts by patients. Pharmacist interventions programs delivered by the pharmacists are known to help the patients with diabetes succeed in achieving treatment goals, improving outcomes.To study the impact of pharmacist interventions on therapeutic outcomes, determined by hemoglobin A1c (HbA1c), and secondarily on blood glucose levels, blood pressure, medication adherence, self-care activities and health relatedquality of life.. The main outcome measure was change in HbA1c and secondary outcomes were changes in fasting blood glucose, post prandial blood glucose, blood pressure, medication adherence, self-care activities andhealth related quality of life.A total of 150 patients completed the study. The intervention patients showed a significant reduction in HbA1c values than the control group, and also the intervention group showed a greater reduction in fasting blood glucose, post prandial blood glucose levels and blood pressure levels between baseline and end of the 4 months than the control group. Improvements were observed in selfreported medication adherence and self-care activities in the intervention group.A pharmacist interventions program resulted in better glycemic control, quality of life, medication adherence and self-care in type 2 diabetic patients over a 4-monthperiod.

Key words: Type 2 Diabetes, Pharmacist interventions, Glycosylated hemoglobin (HbA1c)

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Faculty Publications – Conference

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ACADEMIC YEAR 2019-2020

S. No	Author	Dept.	Title of the paper	Type of publications (National/ International)	Name of the journal	Date	ISBN No.
1	Mr. D. Maheswara Reddy	Pharmacy	"Formulation and characterization of azithromycin loaded ophthalmic nanosuspension by using anti-solvent technique	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4
2	Dr.P.Praveen Kumar.	Pharmacy	"Protective effect andrographolide on pentylenetetrazole induced kindling via antikindling and antioxidant activity"	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4
3	Mr. K.R.S.C. Bharath kumar	Pharmacy	"Formulation and evaluation of carbamazepine fast dissloving tablets by using super disintegrants"	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4
4	Mr. B. Venkata Ramana.	Pharmacy	Protective effect of Aloe Emodin on Pentylenetetrazole (PTZ) Induced Kindling via Antikindling and Antioxidant activity	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4
5	Dr.V.Chanukya	Pharmacy	"A study on efficacy and safety of formoterol combination with glycopyrronium and with tiotropium in copd patients	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4
6	Dr.M.Sreenivasulu	Pharmacy	Stability indicating analytical method development and validation for the determination of clindamycin phosphate by U.V spectrophotometric methods.	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4

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7	Mr. N.D.W.R. Saradhi	Pharmacy	Stability indicating method development and validation for the estimation of abacavir in bulk & their dosage form by using spectrophotometry	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4
8	Dr. Siva Sankar Reddy L.	Pharmacy	Stability indicating method development and validation for desvenlafaxine succinate by visible, zero order, first order, second order derivative spectroscopy	National	3rd National Conference On Contemporary Trends In Science & Humanities	13.06.2020	978-81-945588-0-4

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ISBN 978-81-945588-0-4

"FORMULATION AND CHARACTERIZATION OF AZITHROMYCIN LOADED OPHTHALMIC NANOSUSPENSION BY USING ANTI-SOLVENT TECHNIQUE

Mr. D. Maheswara Reddy , P.VARSHINI, S. JASHNAVI

Abstaract

Ophthalmic drug delivery is one of the most interesting and challenging endeavors facing the pharmaceutical scientist. The anatomy, physiology and bio chemistry of the eye render this organ exquisitely impervious to foreign substances. The challenge to the formulator is to circumvent the protective barriers of the eye without causing permanent tissue damage 1 . Ocular diseases require localized administration of drug to the tissues around the ocular cavity. The existing ocular drug delivery systems are fairly primitive and inefficient. However, the design of ocular system is undergoing gradual transition from an empirical to rational basis. In the recent years, this has been explosion of interest the polymer based delivery.. Azithromycin is a poorly soluble drug, to overcome these problems and to enhance solubility of drug prepared as a nanosuspension by anti-solvent techniques. ⟩ Compatibility studies were performed for drug and excipients Physical compatibility study showed drug and excipients were physically compatible with each other. Chemical compatibility study (FT-IR) was carried out. It revealed no interaction between the drug and excipients. ⟩ Standard graph was drawn for Azithromycin and it was found that the solutions showed linearity (R2 =0.999) and obeyed Beer Lambert's law. ⟩ Azithromycin nanosuspensions were prepared using three polymers to determine which polymer enhances the release better. ⟩ The in-vitro release was carried out for all the formulations. The formulation AZ3 (containing 1:1 drug: polymer (HPMCK100M) released 91%. ⟩ Post formulation parameters of nanosuspensions were evaluated and the results were found to comply with the official specifications. The dissolution data of the optimized formulation were fitted to various kinetic models and the formulation AZ3 fitted bestto Zero order kinetics.It is concluded that AZ3 formulation containing 1:1 drug: polymer ratio with HPMCK100M produced Controlled release.

Keywords: Ophthalmic drug delivery, precorneal elimination, Zero order kinetics.

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"PROTECTIVE EFFECT ANDROGRAPHOLIDE ON PENTYLENETETRAZOLE INDUCED KINDLING VIA ANTIKINDLINGANDANTIOXIDANT ACTIVITY"

Dr.P.PraveenKumar, B.VenkataRamana, K.Pavani, J.Vasantha

Abstract

An epileptic seizure is a neurological disorder characterized by rapid and recurrent or synchronous neuronal discharge in the brain. There are two types of seizures, one is unprovoked and another one is acute symptomatic seizures.

The most common treatment for epilepsy is pharmacological treatment and most patients are prescribed AEDs. Great care has to be taken in the decision to prescribe an AED since the treatment is often lifelong. The choice of drug needs to be individualized and based on a careful risk-benefit ratio (Perucca et al., 2011) taking into account factors including but not limited to seizure type, age, sex, child bearing potential, co-morbidities and concomitant medication.

Nano-andrographolides being more pronounced Anti kindling and antioxidant activity than andrographolides is the use of nanoparticles. Here we proved the use of nano-andrographolides as an option to andrographolides is therapy, and its nano-delivery is a successful tool in the therapeutic implementation of neuronal death.This study rationalizes nano-andrographolides as a promising newer formulation in forestalling the process of epileptogenesis and associated comorbidities.

Key words: Epilepsy, andrographolides, nano-delivery, epileptogenesis

Principal
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"FORMULATION AND EVALUATION OF CARBAMAZEPINE FAST DISSLOVING TABLETS BY USING SUPER DISINTEGRANTS"

Mr. K.R.S.C. Bharath Kumar, S. Saddam Hussain, N. Tanuja Reddy

Abstract:

According to the Indian pharmacopoeia pharmaceutical tablets are solid, flat or biconvex unit dosage form, prepared by compressing a drug or the mixture of drugs , with or without excipients. Hence to enhance solubility of the drug it is formulated as fast dissolving tablets. ♣ The main objective of our present research work is the preparation and evaluation of fast dissolving tablets using super disintegrants by direct compression technique.The aim of this study was to improve the dissolution profile there by increase solubility from the results obtained from executed experiments it can be concluded that : tapped density of carbamazepine (F6) had showed the better result compared to other formulations. The peaks obtained in each combination of drug and super disintegrants are similar to the peaks of the drug's spectrum. Therefore, it indicated that there is no incompatibility between drug and excipients. All the prepared formulations (F1-F9) showed the acceptable and comparable evaluation results like friability (0.5-1.0%), hardness (2-4kg/cm2), thickness(3-3.5mm), weight variation(5-7mg), wetting time (<20sec), disintegration(12-20 sec), water absorption ratio(22-32sec), dissolution(highest range of 92.24) and percentage of drug content (85-96). Among all the prepared formulations, F6 Showed the better drug release of 92% hence it can be stated that F6 is having satisfactory results.In-vitro drug release and disintegration compacts of F6 showed increase in dissolution rate and better disintegration time.From the results it was clearly understood that as the concentration of super disintegrant(croscarmellose sodium) increases to certain extent the release rate of drug was also rapid improved solubility.

Keywords: carbamazepine, croscarmellose sodium, super disintegrants

PROTECTIVE EFFECT OF ALOEEMODIN ON PENTYLENETETRAZOLE (PTZ) INDUCED KINDLING VIA ANTIKINDLING AND ANTIOXIDANT ACTIVITY.

Mr. B. Venkata Ramana, S.ShameemAzra, S.C.Nazia

Abstract

An epileptic seizure is a neurological disorder characterized by rapid and recurrent or synchronous neuronal discharge in the brain. There are two types of seizures, one is unprovoked and another one is acute symptomatic seizures. Former one has no responsible condition, whereas acute seizures occur in temporal lobe in association with brain trauma, metabolic abnormalities, intoxication, drug withdrawal and Central Nervous System infections. Epilepsy can also be defined as a disorder of the brain to generate epileptic seizures along with neurobiological, cognitive, psychological and social consequences (Fisher et al., 2005).There are lots of advancements in the treatment of epilepsy and drugs available for epilepsy treatment in recent decades. But, still there are a lot of imperfections associated with their application. The conventional AEDs do not provide adequate control on seizure. Furthermore, chronic use of conventional AEDs related to several systemic and central nervous system adverse effects like loss of appetite, anxiety, hair loss, megaloblastic anemia, blurred vision, gingival 2 hyperplasia, hirsutism, hepatitis, loss of libido, erectile dysfunction, weight gain, teratogenicity, depression and memory impairment etc. (Singh et al., 2014).

Aloe emodin being more pronounced Anti kindling and antioxidant activity on PTZ induced kindling rats. This study rationalizes Aloe emodin as a promising newer formulation in forestalling the process of epileptogenesis and associated co-morbidities.

Keywords: Epilepsy, intoxication, brain trauma, Aloe emodin

"A study on efficacy and safety of Formoterol combination with Glycopyrronium and with Tiotropium in COPD patients

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ABSTRACT

Chronic obstructive pulmonary disease (COPD) is a common, preventable, and treatable disease that is characterized by repeated respiratory symptoms and chronic airflow limitation due to alveolar abnormalities and it is a range of pathological changes, significant extrapulmonary effects and some important co-morbidities that may lead to severity of disease in particular patients. Centrilobular – dilation and destruction of respiratory bronchioles (commonly found in smokers and predominantly in upper zones Panacinar- the destruction of the whole acinus (commonly found in α1 antitrypsin deficiency and more common in lower zones)

Most of the COPD cases associated with a current or past history of Tobacco smoking and usually caused by exposure to noxious particles or gases. Based on the demographic details of our study, we infer that male patients are more than female patients at an age group of 41 to 70 years because of their smoking history. Patients of group 21 to 30 years were prone to COPD because of alpha-1- antitrypsin deficiency, due to exposure of environmental and occupational hazards. From this prospective observational study, we concluded that, both the combinations were found to be efficacious in COPD patients, but when compared to Formoterol + Tiotropium and Formoterol + Glycopyrronium, it was evident from the results that Formoterol + Glycopyrronium was efficacious and safe in treating patients with COPD.

Keywords: Centrilobular – dilation, COPD, alpha-1- antitrypsin deficiency.

STABILITY INDICATING ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR THE DETERMINATION OF CLINDAMYCIN PHOSPHATE BY U.V SPECTROPHOTOMETRIC METHODS.

Dr.M.SREENIVASULU, M.APARNA

ABSTRACT.

A Simple, accurate, precise, reproducible, requiring no prior separation and economical procedures for the estimation of clindamycin phosphate have been developed. Three methods employees formation and solving using Buffer solution (disodium hydrogen phosphate& potassium di hydrogen phosphate) solution using pH-6.8 at 205nm.it shows the linearity range in the concentrations of 50-100µg/ml.,70-1400 µg/ml, 70-1400 µg/ml, respectively. the slope of intercept and regression co-efficient of clindamycin phosphate is y=0.0083x+0.0016 (r2=0.999), y=0.006x+0.0098 (r2=0.9999) and y=0.004x+0.0101 (r2=0.9998) pH=6.8 respectively. The accuracy of these methods were determined and validated according to ICH guidelines. This method had good reproducibility and recovery with % RSD less than 1. The proposed methods were validated satiscally and recovery studies were performed.

Key words: UV –visible spectroscopy,clindamycin phosphate ,first order,second order

STABILITY INDICATING METHOD DEVELOPMENT AND VALIDATION FOR THE ESTIMATION OF ABACAVIR IN BULK & THEIR DOSAGE FORM BY USING SPECTRO PHOTOMETRY

Mr. N.D.V.R. SARADHI, SYEDA AYESHA AFREEN

ABSTRACT

A Simple and highly sensitive UV-Spectrophotometric method has been developed for the determination of Abacavir as an anti-retro viral drug. The proposed method is based on the measurement of light absorption in UV-region using different solvents in their different absorption spectra. Present investigation involves development & validation of UV-spectroscopic method for Abacavir as per ICH guidelines. The method was validated for Accuracy, Precision, Linearity, Robustness, Specificity. The wavelength scan of UV-Spectroscopic method showed absorbance maximum at 282.20nm obeying Beer's law with linearity range of 0-14mcg/ml for UV-Spectroscopic method & for first order 10-30mcg/ml & co-efficient correlation was 0.9991 & 0.9993 respectively. The accuracy was passed with the mean recovery % 100.86%, 99.76%, 101.09% for UV-spectroscopy & 100.45%, 100.45%, 99.34% for first order derivative at 50%, 100%, 150% respectively. The percentage assay for UV and first order derivative was found to be 98.87% and 99.44% respectively. Common excipients used as additives in the pharmaceutical dosage form didn't interfere in the proposed method. The results of analysis have been validated statistically & recovery studies confirmed the accuracy of this method.

Key words: Abacavir, Ethanol: Water, HIV-inhibitor, Accuracy, Linearity and Absorbance.

STABILITY INDICATING METHOD DEVELOPMENT AND VALIDATION FOR DESVENLAFAXINE SUCCINATE BY VISIBLE, ZERO ORDER, FIRST ORDER, SECOND ORDER DERIVATIVE SPECTROSCOPY

Dr. SIVA SANKER REDDY.L, CH. HARIPRIYA

Absract:

A medication is a substance which is proposed with the end goal of conclusion, cure, alleviation, aversion or treatment of the illnesses in people or creatures or for modifying structure or capacity of the collection of individuals or creatures expecting nourishment articles.An attempt was made to develop and validate different UVSpectrophotometric methods for the estimation of Desvenlafaxine succinate in bulkand pharmaceutical dosage form.The proposed Spectrophotometric methods were found to be simple, accurate, preciseand rapid. By comparing the results of both UV & Visible spectroscopic methods.They were found to be less accurate and precise than the first derivative zero crossingmethod. All the Spectrophotometric methods can be successfully utilized for theestimation of Desvenlafaxine succinate in the pharmaceutical dosage form withoutany prior separation of drug from the excipient matrix. So, these methods can beroutine used for the estimation of Desvenlafaxine succinate in bulk and its dosageforms.

Keywords: UVSpectrophotometric