ISSN 0974-3618 (Print) 0974-360X (Online) www.rjptonline.org



RESEARCH ARTICLE

Pharmacokinetic Evaluation of Flavonoid compound (acacetin) Isolated from Gmelina arborea roxb

Bhabani Shankar Nayak14, Harekrishna Roy2, Subas Chandra Dinda3, P. Ellaiah4

¹Department of Pharmaceutics, Institute of Pharmacy and Technology, Salipur, Cuttack-754202, Odisha, India.

²Department of Pharmaceutics, Nirmala College of Pharmacy, Mangalagiri Mandal, Guntur – 522503, A.P., India.

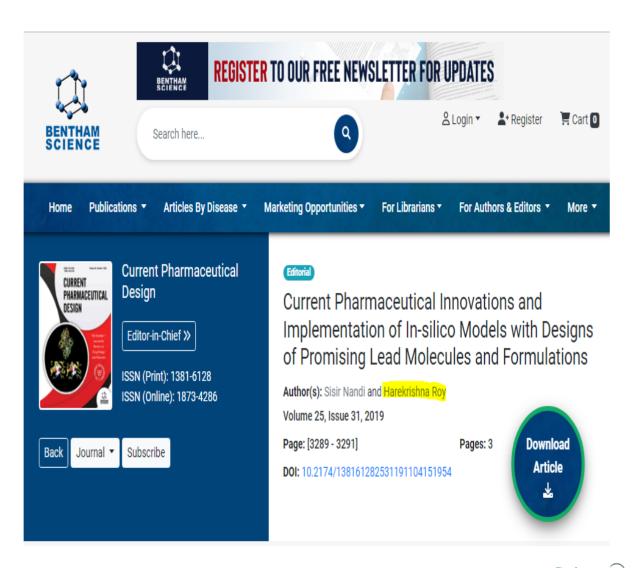
³Department of Pharmacy, College of Health Sciences, Mekelle University - 1871, Mekelle, Ethiopia.
 ⁴Department of Pharmaceutical Technology, Jeypore College of Pharmacy, Rondapalli, Jeypore -764002, Koraput, Odisha, India.

*Corresponding Author E-mail: hareroy92@gmail.com

ABSTRACT:

Aim: The flavonoid compound (Acacetin) isolated from fruits of Gmelina arborea was investigated for its pharmacokinetic evaluation to find out the suitability of this compound to be formulated in any suitable dosage form. Method: The acacetin was administered intravenously and orally in Wistar rats at a dose of 2 and 10 mg/Kg body weight respectively. In a regular interval of specified time, blood samples were collected and bioanalyzed to quantify the drug concentration in the blood sample by using LC-MS. The C_{max}, T_{max}, T_{1/2}, K_E, K_a, and bioavailability (F) of acacetin were determined by mathematically and graphically from plasma concentration-time profile data. Absorption rate constant was determined by the method of residual. Results: From the i.v. Bolus administration data, acacetin had an area under curve (AUC) is 1.542 μg.h/ml, elimination rate constant (K_E) is 0.423 h⁻¹, and half-life (T_{1/2}) is two hour. The oral administration of acacetin showed the peak plasma concentration (C_{max}) of 1.668 μg/ml, T_{max} is 1 h, AUC is 6.44 μg h/ml, K_E is 0.416 h⁻¹, T_{1/2} is 2 h, absorption rate constant (K_a) is 1.6 h and bioavailability of acacetin was found to be 84 %. Conclusion: From the study it could be concluded that the acacetin possessed relatively greater bioavailability; thus this drug exhibited significant satisfactory pharmacokinetic profile which would be helpful for successful designing of a suitable dosage form formulation.









Review > Curr Pharm Des. 2019;25(31):3292-3305. doi: 10.2174/1381612825666190903155935.

In-Silico Modeling in Drug Metabolism and Interaction: Current Strategies of Lead Discovery

Harekrishna Roy 1. Sisir Nandi 2

Affiliations + expand

PMID: 31481001 DOI: 10.2174/1381612825666190903155935

Abstract

Background: Drug metabolism is a complex mechanism of human body systems to detoxify foreign particles, chemicals, and drugs through bio alterations. It involves many biochemical reactions carried out by invivo enzyme systems present in the liver, kidney, intestine, lungs, and plasma. After drug administration, it crosses several biological membranes to reach into the target site for binding and produces the therapeutic response. After that, it may undergo detoxification and excretion to get rid of the biological systems. Most of the drugs and its metabolites are excreted through kidney via urination. Some drugs and their metabolites enter into intestinal mucosa and excrete through feces. Few of the drugs enter into hepatic circulation where they go into the intestinal tract. The drug leaves the liver via the bile duct and is excreted through feces. Therefore, the study of total methodology of drug biotransformation and interactions with various targets is costly.

Methods: To minimize time and cost, in-silico algorithms have been utilized for lead-like drug discovery. Insilico modelino is the process where a computer model with a suitable algorithm is



Research J. Pharm. and Tech. 12(6): June 2019

ISSN 0974-3618 (Print) 0974-360X (Online)

www.rjptonline.org



RESEARCH ARTICLE

Development of Rizatriptan Mouth Dissolving Films: A Fast Absorbing Drug Delivery System for Effective Treatment of Migraine

Sudhir Maddela¹, Buchi N. Nalluri^{2*}

¹Research Scholar, Department of Pharmacy, Krishna University, Machilipatnam-521001, AP, India
²Director, Siddhartha Pharma Innovation and Incubation Centre, KVSR Siddhartha College of Pharmaceutical Sciences, Vijayawada, 520010.

*Corresponding Author E-mail: buchinalluri@yahoo.com

ABSTRACT:

The aim of this investigation was to develop Rizatriptan (RIZ) mouth dissolving films (MDFs) and evaluate the effect of formulation variables like film thickness, plasticizers, film formers and solubilizing agents on physicomechanical, chemical and drug release properties of MDFs. MDFs were prepared (using wet film applicator, a commercially scalable technique) using Hydroxy propyl methyl cellulose (HPMC) of different viscosity grades (E3, E5 and E15) as film former, PEG 400 and glycerol as plasticizers. FTIR studies showed no RIZ-excipient interactions in the MDF formulations. Photomicrographs together with DSC and X-RD studies confirmed the absence of RIZ recrystallization within the MDFs. MDFs of higher film thickness were brittle with low tensile strength values indicating an inverse relationship between film thickness and tensile strength. Whereas, increase in polymer viscosity increased the tensile strength of MDFs and about a 2.6fold increase in tensile strength was obtained with HPMC E15 MDFs compared to E3. In vitro drug release studies revealed that higher film thickness and polymer viscosities delayed the RIZ release from MDFs and the release was in the order of E3>E5>E15. Addition of solubilizing agents (PVP K30 and SLS) to the E3 formulations resulted in 2 and 1.43 fold faster RIZ release compared to formulations without them. Overall, F11 formulation (1% w/w RIZ+7.5% w/w HPMC E3+0.04% w/w PVP K30+0.5% w/w PEG 400) showed faster disintegration (within 8sec) and RIZ

GUNTUR DI





Vol 12, Issue 4, 2019

Online · 2455-3891 Print · 0974-2441 Research Article

DEVELOPMENT OF ZOLMITRIPTAN MOUTH DISSOLVING FILMS: FORMULATION VARIABLES, MECHANICAL PROPERTIES, AND IN VITRO DRUG RELEASE STUDIES

SUDHIR MADDELA1, BUCHI N. NALLURI28

Department of Pharmacy, Krishna University Machilipatnam - 521 001, Andhra Pradesh, India. Siddhartha Pharma Innovation and Incubation Centre, KVSR Siddhartha College of Pharmaceutical Sciences, Vijayawada - 520 010, Andhra Pradesh, India.

Email: buchinalluri@vahoo.com

Received: 30 January 2019, Revised and Accepted: 15 March 2019

ABSTRACT

Objective: The objective of the present investigation is to prepare zolmitriptan (ZOL) mouth dissolving films (MDFs) and to investigate the influence of formulation variables on physicomechanical, chemical, and drug release properties of the prepared MDFs.

Methods: The MDFs were prepared by solvent casting technique using wet film applicator. The impact of hydroxypropyl methylcellulose of different viscosity grades (hydroxy propyl methyl cellulose [HPMC] E3, E5, and E15), plasticizers (glycerol and polyethylene glycol [PEG]-400), and solubilizing agents (polyvinyl pyrrolidone [PVP K30] and sodium lauryl sulfate [SLS]) on physicomechanical, chemical, and drug release properties were evaluated. The MDFs were also characterized by Fourier-transform infrared spectroscopy, differential scanning calorimetry, and Xray diffractometry studies.

Results: The MDFs prepared were transparent and smooth and showed no recrystallization. The tensile strength of the MDPs increased significantly

GUNTUR DI

International Journal of Pharma Research and Health Sciences

Available online at www.pharmahealthsciences.net



Original Article

Formulation and Characterization of Fast Dissolving Films Containing Aceclofenac

M Sudhir 1.*, Buchi N Nalluri 2, M V Basaveswara Rao 3

- Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India.
- ² Director, Siddhartha Innovation & Incubation Centre, Siddhartha College of Pharmaceutical Sciences, Vijayawada.

³ Dean, Faculty of Sciences, Krishna University, Machilipatnam.

ARTICLE INFO

ABSTRACT

Received:09 Dec 2018 Accepted:24 Dec 2018 The present work was aimed with the objective of formulating fast dissolving films of accclofenac to enhance the convenience and compliance by the elderly and pediatric patients. The films were prepared by incorporating the prepared accclofenac physical mixtures so as to achieve the aimed percent drug release (using cyclodextrins, sucrose and polaxomer 188) in different film forming agents (hydroxyl propyl methyl cellulose E5 &E15). Particular attention was given to the selection of the suitable taste masking agents. The large dose of the drug offered the greatest challenge in optimization of film formula leading to the thickness of the film and further altering the drug release from the film. The films were characterized in term of accclofenac content, mechanical properties, and disintegration time and dissolution test. The promising film F2 having the optimal formula showing the greatest dissolution and satisfactory in in-vitro disintegration time and physico-mechanical properties compared with a reference marketed product (accclan tablets). FT-IR studies revealed that there is no interaction between the drug and the polymers used in the study. Statistical analysis revealed significant difference between the test films and the reference product, indicated that the test formulations F1, F3, F4, andF5 exhibited enhanced



FORMULATION AND EVALUATION OF MUCOADHESIVE LOSARTAN POTASSIUM BUCCAL FILMS

S. SWATI* ¹, ²B.SARANYA, ²B. NEEHARIKA, 2R. SAI SUMA LALITHA, ³M.RAHUL JOSHI, ³B. SAI DURGA CHARAN

Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India-522503. Email id: swathi0854@gmail.com

ABSTRACT

The aim of this work was to develop buccal film and enhance the bioavailability of losartan potassium by using solvent casting method. In the present study losartan potassium buccal films were prepared by solvent casting method using different film forming polymers like HPMC, PVP K30 and Propylene glycol as plasticizer. Buccal films of losartan potassium formulated from F1 to F10 are smooth, transculent with good flexibility were evaluated and characterized. Among all formulations of buccalfilms, F7 formulation exhibited good physical appearance, uniformity in weight, thickness, folding endurance, and surface pH.It showed better drug release of 86.24% for losartan potassium in 60 minutes. The drug content is 97.72% for losartan potassium.

KEYWORDS: Bioavailability, Losartan potassium, solvent casting method, HPMC, PVP K30, Propylene glycol.

INTRODUCTION

Among the different routes of drug delivery transmucosal drug delivery consists of various advantages over peroral administration for systemic effect on comparing to other transmucosal routes buccal mucosa is most suited for local, as well as systemic delivery of drugs. Buccal films have more importance as efficacious

GUNTUR DI

Sr. Nirmala Jyothi. G et al. Int. Res. J. Pharm. 2018, 9 (3)



INTERNATIONAL RESEARCH JOURNAL OF PHARMACY

www.irjponline.com

ISSN 2230 - 8407

Research Article

EFFECT OF SOLID DISPERSIONS, HP- β & γ - CYCLODEXTRIN INCLUSION COMPLEXES ON THE DISSOLUTION RATE OF SIMVASTATIN AND FORMULATION DEVELOPMENT & EVALUATION OF SIMVASTATIN ODTs

Sr. Nirmala Jyothi. G *, A Rajendra prasad, S. Swati, Pratyusha Gandrapu

Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India *Corresponding Author Email: srjocsa@gmail.com

Article Received on: 13/02/18 Approved for publication: 17/03/18

DOI: 10.7897/2230-8407.09341

ABSTRACT

The objective of the present work was to study the effect of solid dispersions prepared. Hydroxy Propyl - β (HP- β) & γ - cyclodextrin (CD) inclusion complexes and poly ethylene glycols(PEG) 3550 and 6000 on the dissolution rate of simvastatin and formulation & evaluation of simvastatin orally disintegrating tablets (ODTs). Simvastatin, a hypolipidemic drug is widely used in the treatment of hyperlipidemia. Simvastatin is a BCS Class II drug having low solubility (1.45µg/mL) and therefore low oral bioavailability. In the present study, Solid dispersions were prepared with drug and PEG 3350 & 6000. These two polymers are used in 1:2 ratio (drug: polymer) and in combinations (Drug: PEG 3350:PEG 6000) in the ratio 1:2:1 & 1:1:2 respectively solid dispersions of simvastatin with HP- β , (1:1,1:2,1:3) & γ cyclodextrins (1:1,1:2) with different drug: carrier ratios were prepared by



Title:	Hepatoprotective studies of floral extracts of Gomphrena serrata L. and piperic acid on CCI4 induced hepatotoxicity
Authors:	Vani, Mamillapalli Rahaman, Shaik Abdul Rani, Avula Prameela
Keywords:	Gomphrena serrata L.;G. serrata extracts;Hepatoprotective;Piperic acid
Issue Date:	Dec-2019
Publisher:	NISCAIR-CSIR, India
IPC Code:	Int. cl. (2015.01)- A61K 36/00, A61K 36/21, A61K 133/00, A61P 1/00, A61P 1/16

Abstract:

The present investigation aims to isolate, characterise and evaluate the phytoconstituents of *Gomphrena serrata* L. responsible for hepatoprotective activity in carbon tetrachloride-induced hepatotoxicity models both *in vitro* and *in vivo*. The plant species has not been explored for various therapeutic activities. HPLC analysis of subfraction of plant extract showed the presence of piperine, which was isolated and further hydrolysed to piperic acid. The results of the study indicate that the plant hydroalcoholic, acetone extracts at 500 mg/kg and compound piperic acid at 0.5 mg/kg exhibited better results in the regeneration of damaged hepatocytes and reduction of biochemical marker enzymes. The hepatoprotective activity might be due to inhibition of cytochrome P450 2E induced ER and oxidative stress. The present study reveals that the hepatoprotective activity of floral extracts might be due to *in situ* conversion of piperine into piperic acid. As piperic acid showed the



Research Article

STUDY OF PIPERIC ACID FOR ANTIASTHMATIC ACTIVITY IN GUINEA PIGS

Vani Mamillapalli *1, Abdul Rahaman Shaik 2, and Prameela Rani Avula3

1Jawaharlal Nehru Technological University, Research Scholar, Department of Pharmacy, Kakinada-533003, East Godavari (Dt.), Andhra Pradesh, India, +919704625782

2 Nirmala College of Pharmacy, Faculty, Department of Medicinal Chemistry, Atmakur, Mangalagiri-522503, Guntur (Dt.), Andhra Pradesh, India, +919849702527

3 Acharya Nagarjuna University, Faculty, Department of Pharmaceutics, Nagarjuna Nagar, Guntur-522510, Andhra Pradesh, India, +919440056759

For Correspondence:

Vijaya Institute of Pharmaceutical Sciences for Women, Faculty, Department of Pharmacognosy & Phytochemistry, Enikepadu, Vijayawada, Krishna (Dt.), Andhra Pradesh, India, +919704625782

Received: 07.06.2019 Accepted: 22.12.2019

Access this article online

Website:

www.drugresearch.in

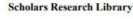
Quick Response Code:

ABSTRACT

Piperic acid an aromatic acid, usually a metabolite of piperine exists naturally in piperaceae and amaranthaceae families. The synthetic derivatives of pipericacid act as promising bioactive molecules. They are anti- oxidant and anti-inflammatory agents. Antihistaminic and anticholinergic studies are used as a part of antiasthmatic study. In the current study antihistaminic and anticholinergic studies were carried out using guinea pig bronchi and ilei in naturally isolated compound piperic acid from the acetone flower extracts of the plant Gomphrena serrata. The results indicate that the compound (2 mg/kg 10.89 ± 2.01*** at p<0.001) showed profound anticholinergic activity significantly in acetylcholine induced bronchospasm model compared to standard drug atropinesulphate (2 mg/kg 11.60±1.24). The compound can be further studied for antiasthmatic activity by various other ways to establish its mechanism of action as well as drug development studies to render it a









Der Pharmacia Lettre, 2019, 11 (2): 29-39 (http://scholarsresearchlibrary.com/archive.html)



Stability-Indicating RP-UPLC Method for the Simultaneous Determination of

Dolutegravir and Rilpivirine in Bulk and Pharmaceutical Dosage Form

Khaleel N1* and Abdul Rahaman SK2

¹Department of Pharmaceutical Sciences, Acharya Nagarjuna University, Nagarjunanagar, Guntur, Andhra Pradesh, India

²Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India

*Corresponding author: Khaleel N, Department of Pharmaceutical Sciences, Acharya Nagarjuna University,

Nagarjunanagar, Guntur, Andhra Pradesh, India, E-mail: khaleelnoorbasha@gmail.com

ABSTRACT

Specific stability-indicating reversed-phase ultra-performance liquid chromatography (UPLC) method has been developed and validated for the simultaneous quantification of dolutegravir and rilpivirine in bulk drugs and pharmaceutical dosage forms. The optimized conditions for the developed UPLC method are SB C8 column (100 × 3 mm, 1.8 mm) maintained at 30°C with mobile





Current Development on Chitosan-based Antimicrobial Drug Formulations for the Wound Healing

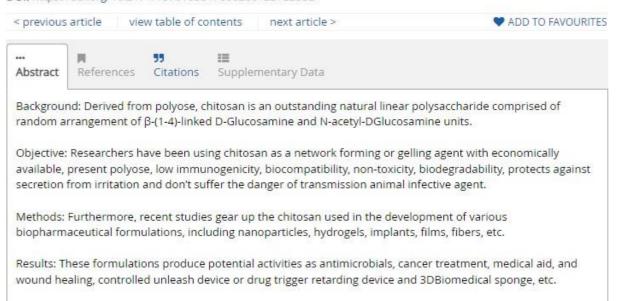


Authors: Roy, Harekrishna; Rahaman, Shaik A.; Kumar, Theendra V.; Nandi, Sisir

Source: Current Drug Discovery Technologies, Volume 17, Number 4, 2020, pp. 534-541(8)

Publisher: Bentham Science Publishers

DOI: https://doi.org/10.2174/1570163817666200123122532





Prevalence and General Medications Utilization, Cost Minimization Analysis of Drugs in Hepatic Impairment Patients at A Tertiary Care Hospital

V. Sathish Kumar*¹, SK. Abdul Rahaman², T. Deepika¹, CH. Manoj kumar³

¹Pharm.D, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India.

²Professor and Principal, Department of Pharmacy Practice, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India.

³Consultant Physician of General Medicine, Manipal Hospitals, Vijayawada, Andhra Pradesh, India.
*Corresponding Author E-mail: sathishvivek345@gmail.com

ABSTRACT:

Background: General medications utilization also called drug utilization mainly focuses on the parameters related to the prescribing, dispensing, and administering of medications, its therapeutic efficacy or adverse effects. Aim: To analyze the general medications utilization, cost minimization analysis of antibiotics in hepatic impairment patients at a tertiary care hospital. Methodology: This prospective and observational based study was undertaken in the general medicine wards of the Manipal Super Specialty Hospital. Each patient age, sex, diagnosis (only hepatic impairment) and prescribed generic and brand names of the drugs were recorded. The collected data was analyzed in MS Excel and descriptive statistics were used for analyzing the result of the study. Results: The results are evident that maximum cases of Hepatic Impairment were found to be pancreatitis 61(30.5%). The majority of the patients out of 200 were in the age group 31-40 (n=46, 23%) followed by 51-60 (n=36, 18%). some drugs that are having cost percentage greater than 30 have to minimize the cost. Conclusion: The prevalence of pancreatitis in this current study was reported as 30.5% (n=61). By performing Cost minimization analysis it is evident that same drug molecule with the same strength varying in costs in different brands which will give similar clinical outcomes. Clinical pharmacologist or clinical pharmacist should be instituted for a better drug prescription, medications utilization control and cost minimization of drugs in a healthcare organization.

KEYWORDS: Antibiotics, Drug Utilization Studies, Clinical Pharmacist, Pancreatitis, Rationality.



PHARMACOTHERAPEUTIC PROPERTIES OF BLACK PEPPER: A SYSTEMATIC REVIEW

Y. Suvarna*1 and SK. Abdul Rahaman1

^{1*}Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Andhra Pradesh, India.

ABSTRACT

Alkaloids are the natural products that are produced during secondary metabolism in living organisms. Alkaloids are classified into different types. Among them Piperidine and pyrrolidine alkaloids form one of the largest groups of alkaloids. *Piper nigrum* (family Piperaceae) is one of the most commonly used spices and considered as "The King of spices". It contains major pungent alkaloid Piperine (1-peperoyl piperidine) which is known to possess many interesting pharmacological actions like antihypertensive, antiplatelets, antioxidant, antitumor, antiasthmatic, antipyretic, anti-inflammatory, anti-diarrheal, antispasmodic, anxiolytic, hepato-protective, immuno-modulatory, antibacterial, antifungal, anti-thyroids, antiapoptotic, antimutagenic, anti-spermatogenic, anti-colon toxin, insecticidal and larvicidal activities etc. Along with the pharmacologically diversified activities, piperine can also act as bioavailability enhancer.

KEYWORDS

Piperine, Alkaloids, Piper nigrum and Pharmacological activity.

GUNTUR DI

Estimation of Rucaparib in Biological Matrices By LC-ESI-MS/MS

Author(s): *Saiempu Ravi Kishore and SK. Abdul Rahman

Abstract: A simple, sensitive and specific liquid chromatography-tandem mass spectrometry (LC-MS/MS) method was developed for the quantification of Rucaparib (RP) in human plasma using Rucaparib-d3 (RPD3) as an internal standard (IS). Chromatographic separation was performed on Zorbax SB-C18, 4.6×75 mm, $3.5 \mu m$, 80 Å column with an isocratic mobile phase composed of, 5mM ammonium acetate: methanol (30.70 v/v), at a flow-rate of 0.7 mL/min. RP and RPD3 were detected with proton adducts at m/z $323.4 \rightarrow 170.1$ and $328.4 \rightarrow 170.1$ in multiple reaction monitoring (MRM) positive mode respectively. Liquid-Liquid extraction method was used to extract the drug and IS. The method was validated over a linear concentration range of 10.0 - 10000.0 pg/mL with correlation coefficient (r2) ≥ 0.9997 . Rucaparib (RP) was found to be stable throughout freeze-thawing cycles, bench top and postoperative stability studies.



Research Article

Stability Indicating LC-MS/MS Method for Estimation of Brigatinib in Biological Matrices.

Saiempu Ravikishore*a, Sk. Abdul rahmanb

aResearch Scholar, Nagarjuna university, Guntur, Andhrapradesh, India.

^bNirmala college of pharmacy, Mangalagiri, Andhrapradesh, India.

Received 27 February 2019; received in revised form 22 March 2019; accepted 23 March 2019

*Corresponding author E-mail address: ravikishorepharma@gmail.com

ABSTRACT

The validated protein precipitation method was applied for estimation of brigatinib in human plasma with brigatinib-D6 as an internal standard (ISTD) by using HPLC-ESI-MS/MS. The chromatographic separation was achieved with 0.1% formic acid in combination with acetonitrile (50:50 v/v) using the ZORBAX SB-C18, 80Å, 1,8 μ m, 3 x 50 mm. The total analysis time was 3 min and flow rate was set to 0.6 ml/min. The mass transitions of brigatinib and brigatinib-D6 obtained were m/z 570.3 \rightarrow 484.6 and 585.1 \rightarrow 484.6. The standard curve shows correlation coefficient (r²) greater than 0.999 with a range of 15.00-120.00 pg/ml using the linear regression model.

.......

GUNTUR DI

Hepatoprotective activity of 2-piperidone isolated from leaf extracts of *Talinum portulacifolium* (Forssk.) Asch. ex Schweinf in carbon tetrachloride induced hepatotoxicity

[Actividad hepatoprotectora de 2-piperidona aislada de extractos de hojas de *Talinum portulacifolium* (Forssk.) Asch. ex Schweinf en hepatotoxicidad inducida por tetracloruro de carbono]

Vani Mamillapalli^{1,2*}, Abdul Rahaman Shaik³, Prameela Rani Avula⁴

Department of Pharmacy, Jawaharlal Nehru Technological University, Kakinada, Pin code 533003, East Godavari (Dt.), Andhra Pradesh, India.

Department of Pharmacognosy & Phytochemistry, Vijaya Institute of Pharmaceutical Sciences for Women, Enikepadu, Pin code 521108, Vijayawada, Krishna (Dt.),
Andhra Pradesh, India.

³Department of Medicinal Chemistry, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Pin code 522503, Guntur (Dt.), Andhra Pradesh, India.

⁴Department of Pharmaceutics, Acharya Nagarjuna University, Nagarjuna Nagar, Pin code 522510, Guntur, Andhra Pradesh, India.

*E-mail: vijayapharmacyfw@gmail.com

Abstract

Context: Liver disorders have become common problem worldwide. The drugs available currently for the treatment are few with serious side effects. Since phytochemicals have proven to be potential therapeutic agents, an attempt has been made to screen novel hepatoprotective agents from the leaves of the medicinally ignored plant Talinum portulacifolium.

Aims: To evaluate the phytoconstituents of Talinum portulacifolium responsible for hepatoprotective activity in carbon tetrachloride-induced hepatotoxicity models both in vitro and in vivo.

Methods: The hepatic damage was assessed in vitro by serum marker enzymes alanine aminotransferase, aspartate aminotransferase, and alkaline phosphatase followed by in vivo histopathological examination.

Results: The results of the study indicate that the plant hydroalcoholic and acetone extracts at 500 mg/kg and compound 2-piperidone at 0.5 mg/kg exhibited equipotent results in the reduction of biochemical marker enzymes (p<0.01. p<0.05 and p<0.001) significantly compared to standard drug silymarin. The histopathological studies further supported that compound 2-piperidone showed better regeneration of damaged hepatocytes compared to standard. The possible mechanism

Resumen

Contexto: Los trastornos hepáticos se han convertido en un problema común en todo el mundo. Los medicamentos disponibles actualmente para el tratamiento son pocos con efectos secundarios graves. Dado que los fitoquímicos han demostrado ser agentes terapéuticos potenciales, se ha intentado seleccionar nuevos agentes hepatoprotectores de las hojas de Talinum portulacifolium.

Objetivos: Evaluar los fitoconstituyentes de Talinum portulacifolium responsables de la actividad hepatoprotectora en modelos de hepatotoxicidad inducida por tetracloruro de carbono tanto in vitro como in vivo.

Métodos: El daño hepático se evaluó in vitro mediante las enzimas marcadoras séricas alanina aminotransferasa, aspartato aminotransferasa y fosfatasa alcalina, seguido de un examen histopatológico in vino.

Resultados: Los resultados del estudio indican que los extractos hidroalcohólicos y de acetona de la planta a 500 mg/kg y el compuesto 2-piperidona a 0,5 mg/kg mostraron resultados significativos (p<0,01. p<0,05 y p<0,001) equipotentes en la reducción de las enzimas marcadoras bioquímicas en comparación con la droga estándar de



Sakinala et al., IJPSR, 2020; Vol. 11(4): 1757-1767.

E-ISSN: 0975-8232; P-ISSN: 2320-5148

IJPSR (2020), Volume 11, Issue 4





INTERNATIONAL JOURNAL PHARMACEUTICAL SCIENCES AND RESEARCH



Received on 03 June 2019; received in revised form, 25 October 2019; accepted, 30 November 2019; published 01 April 2020

DEVELOPMENT AND VALIDATION OF STABILITY INDICATING ASSAY FOR SIMUL-TANEOUS DETERMINATION OF PENTAPRAZOLE, DICLOFENAC, CHLOROXAZONE IN PHARMACEUTICAL DOSAGE FORM BY USING RP-HPLC

Padmavathi Sakinala , Harini Vahika, K. Santhosh and Sandeep Attinti

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Guntur - 522503, Andhra Pradesh, India.

Keywords:

Chlorzoxazone, Pantoprazole, Dielofenae, RP-HPLC

Correspondence to Author: Padmayathi Sakinala

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Guntur 522503, Andhra Pradesh, India.

E-mail:Padmavathi.sakinala@gmail.com

ABSTRACT: Objective: A simple, accurate, precise method was developed for the simultaneous estimation of the Chlorzoxazone, Pantoprazole, and Diclofenac in solid dosage form. Method: Chromatogram was run through BDS C18 150 × 4.6 mm, 5 m. Mobile phase containing 0.01% KH₂PO₄ and Acetonitrile in the ratio of 52:48 v/v was pumped through column at a flow rate of 1.0 ml/min. The buffer used in this method was 0.01%. KH2PO4, Temperature was maintained at 30 °C. The optimized wavelength for Chlorzoxazone, Pantoprazole, and Diclofenac was 229.0 nm. Results: Retention time of Chlorzoxazone, Pantoprazole, and Diclofenac were found to be 2.229 min, 2.958 min, and 3.568 min. % RSD of system precision for Chlorzoxazone, Pantoprazole and Diclofenac were and found to be 0.9, 0.6 and 0.6, respectively. % RSD of method precision for Chlorzoxazone, Pantoprazole and Diclofenac were and found to be 0.6, 1.0 and 0.7 respectively. % recovery was obtained as 99.86%, 100.07% and 99.70% for Chlorzoxazone, Pantoprazole, and Diclofenac respectively. LOD values are obtained from regression equations of Chlorzoxazone, Pantoprazole and Diclofenac were 0.14 ppm, 0.24 ppm, 1.83 pm, and LOQ values are obtained from regression equations of Chlorzoxazone, Pantoprazole and Diclofenac were 0.42 ppm, 0.72 pm, 5.53 ppm respectively. The regression equation of Chlorzoxazone was y = 8321.9.x + 1397.8Pantoprazolee was y = 9806.1x +6071.7 and of Diclofenac was y = 2575x + 4338.4. Conclusion: Retention times are decreased so the method developed was simple and economical that can be adopted in regular Quality control test in Industries.

INTRODUCTION: Analytical chemistry is a branch of chemistry that deals with the identification of compounds and mixtures (qualitative analysis) or the determination of the proportions of the constituents (quantitative analysis).



DOI: 10.13040/UPSR.0975-8232.11(4).1757-67

The article can be accessed online on www.ijpsr.com

DOI link: http://dx.doi.org/10.13040/UPSR.0975-8232.11[4].1757-67

The techniques commonly used are titration, precipitation, spectroscopy, chromatography, etc. High-performance liquid chromatography (HPLC) is the fastest-growing analytical technique for analysis of drugs. Its simplicity, high specificity and wide range of sensitivity make it ideal for the analysis of many drugs in both dosage forms and biological fluids.

The reasons for the popularity of the method are its sensitivity, its ready adaptability to accurate quantitative determinations, its suitability for separating non-volatile species or thermally fragile ones and its widespread applicability to substances



SURVEY, SCREENING, ANALYSIS OF HEAVY METALS IN SELECTED MEDICINAL PLANTS BY UV-VISIBLE SPECTROPHOTOMETRY METHOD

G. SWAPNA¹, K. SREE DIVYA¹, SK. RAJIYA SULTHANA²

¹Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Atmakuru, Guntur, Andhra Pradesh.

*Corresponding Author E-mail: swapna.goday.gs@gmail.com

ABSTRACT

A simple, precised, accurate method was developed for the estimation of heavy metals incleome viscose, mimusopselangi, milling toniahortensis, gliriciasepium & murraya paniculatamedicinal plants by uv-visible spectrophotometry method. To determine the inorganic ions or heavy metals in the selected medicinal plants, and perform the evaluation studies by the survey, screening and analysis of heavy metals in selected medicinal plants by uv-visible spectrophotometry method. First survey is done in Acharya nagarjuna university, out of the selected plants the phytochemical screening tests are performed to determine the inorganic ions and heavy metals, then the analysis was performed by uv-visible spectrophotometry method. And to determine the medicinal plants selected are consisting of the essential and non essential ions within the acceptance limits of WHO guidelines.

KEYWORDS: Cleome viscose, mimusopselangi, millingtoniahortensis, gliriciasepium and murrayapaniculata, UV visible spectrophotometry

GUNTUR DI

STABILITY INDICATING UPLC METHOD FOR SIMULTANEOUS ESTIMATION OF ALBUTEROL SULPHATE, THEOPHYLLINE AND BROMHEXINE IN BULK AND COMBINED DOSAGE FORM

V. Padmaja * and M. Prasanthi

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Atmakuru, Mangalagiri - 522503, Andhra Pradesh, India.

Keywords:

UPLC, Albuterol sulfate, Theophylline, Bromohexine hydrochloride, ICH guidelines

Correspondence to Author: Vellaturi Padmaja

Assistant Professor, Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Atmakuru, Mangalagiri -522503, Andhra Pradesh, India.

E-mail: vellaturipadmaja@gmail.com

ABSTRACT: A new simple, precise, accurate and selective UPLC method has been developed and validated for stability indicating UPLC method for simultaneous estimation of Albuterol sulfate, Theophylline and Bromhexine HCl in the tablet dosage form. The method was carried out on a Hibra C18, 250mm x 4.6mm, 5μm. a column with a mobile phase consisting of buffer and acetonitrile and buffer in the ratio of (55: 45 v/v/v) and flow rate of 1.0 ml/ min. The detection was carried out at 260mm. The retention time for Albuterol sulfate, Theophylline, and Bromhexine HCl were found to be 5.8, 2.3 and 9.7 min respectively. The method was validated according to the ICH guidelines for specificity, LOD, LOQ, precision, accuracy, linearity and robustness. The method showed good reproducibility and recovery with %RSD less than 2. So the proposed method was found to be simple, specific, precise, accurate and linear than the methods reported earlier. Hence, the method is economical, and it can be applied for routine analysis of Albuterol sulphate, Theophylline and Bromhexine HCl in bulk drug and



Enhancement in Iron Absorption on Intake of Chemometrically Optimized Ratio of Probiotic Strain Lactobacillus plantarum 299v with Iron Supplement Pearl Millet

Shanta Kumari Adiki □, Chandra Kiran Perla, Gargi Saha, Prakash Katakam & Vinaykumar Theendra

Biological Trace Element Research 190, 150–156 (2019) | Cite this article

292 Accesses | 7 Citations | 1 Altmetric | Metrics

Abstract

This research article aims to establish the intake ratio of probiotic $Lactobacillus\ plantarum$ 299v with iron supplement pearl millet by central composite design of response surface methodology so as to enhance iron absorption. In anemic rat models, the food intake patter body weight, hemoglobin content, and hematocrit values were found to be significantly increased on treatment with pearl millet:probiotic; however, incorporation of probiotics at lower dose (0.5 g) was significantly (p < 0.05) effective in enhancing iron absorption, and





INDO AMERICAN JOURNAL OF PHARMACEUTICAL RESEARCH



OPTIMISATION OF DOSING ANTIBIOTICS IN RENAL IMPAIREMENT PATIENTS

Almas Amreen¹, K. Manjula¹, Dr. K. Shanta Kumari²

¹Nirmala College of pharmacy, Mangalagiri, Guntur.

²Head of the Department of Pharmaceutical Analysis, Nirmala College of pharmacy Mangalagiri, Guntur.

ARTICLE INFO

Article history

Received 04/01/2019 Available online 31/01/2019

Keywords Antibiotics,

Dosages, Cockcroft-Gault Equation, Renal Impairement.

ABSTRACT

Aims & Objectives: To study the antibiotics dosage adjustment in renal impairement patients. To evaluate the rationalized use of antibiotics in a givenprescription based on renal dysfunction. Drug dosage adjustment in an individual renal impairement patients can maximize therapeutic afficacy and minimize adverse effects. This dosage adjustment also minimize the therapeutic costs, length of hospital stay and mortality as well as therapeutic effectiveness. Methodology: Prospective Observational Study was conducted on 150 Patients in a Teritiary Care Hospitals. Demographic data were extracted and creatinine clearance was calculated by using Cockcroft-Gault equation. Antibiotic dosages were compared with stanford guidelines dose recommendations to judge whether they were correctly adjusted or not. Results: Among 150 patients ,94 were male &56 were female. Out of all the patients,53 patients are done with dialysis. Totally 220 antibiotics were prescribed. Out of that 127 antibiotics require dosage adjustment,94 antibiotics were adjusted correctly and 33 were incorrectly prescribed. Piperacillin +tazobactam was the most frequently prescribed antibiotic





Assessment and Evaluation of Drug-Drug Interactions in an Intensive Care unit of a Tertiary Care Hospital and Clinical Pharmacist's Intervention Strategies



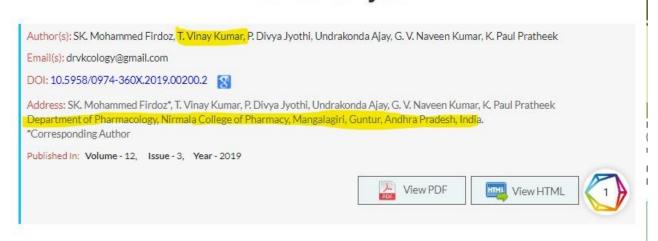


Powered by Scopus





Sulphasalazine Induced Hepatotoxicity, A Risk factor of Meconium Aspiration Syndrome in neonates: A Case Study 8



torialBoard.aspx IT:





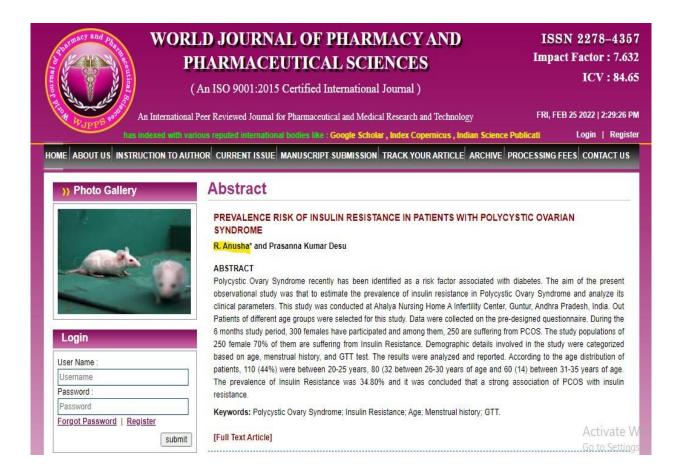
Assessment of Drug Utilization pattern on Cardiovascular patients at a Tertiary Care Hospital in South India



ABSTRACT

Objective: The objective of this study was to elucidate the pattern of drug utilization in cardiovascular patients at a tertiary care hospital. Methods: It is a prospective-observational study in the period of Six month in tertiary care hospital in Andhra pradesh, India. Among 200 patients were included Carried and ethical approval was also obtained; the study was followed inclusion and exclusion criteria's. Results and Discussion: The highest number of male patients have seen in the gender distribution and age







0975-234X (Print) 0975-4377 (Online) DOI:

Vol. 11 Issue-03 July- September, 2019

Available on line at www.anvpublication.org

Research Journal of Pharmaceutical Dosage Forms and Technology

Home page www.rjpdft.com

REVIEW ARTICLE

Formulation and Evaluation of Mucoadhesive Buccal Tablets of Captopril

Asha Begum Sk*1, Ramya Sri Sura2, Phanindra. B3, Pavan Kumar. P4, Chandrasekhar5, Naveen⁶, Reshma⁷

1.2.4.5.8.7 Nimra College Pharmacy, Ibrahimpatnam, Vijayawada, Krishna District, Andhra Pradesh-521456 ²Department of Pharmacy, University College of Technology, Osmania University, Hyderabad, Telangana, India.

*Corresponding Author E-mail: rajinisuralabs1@gmail.com

ABSTRACT:

The objective of this study was to develop effective mucoadhesive buccal tablets of Captopril, Tablets of Captopril were prepared by direct compression method using bioadhesive polymers like Acritamer 940, Manugel, Hypromellose K100. Buccal tablets were prepared by taking polymers in different ratios. Buccal tablets were evaluated by different parameters such as thickness, hardness, weight uniformity, content uniformity studies. The tablets were evaluated for in vitro release in pH 6.8 phosphate buffer for 8 hr in standard dissolution apparatus. In order to determine the mode of release, the data was subjected to Zero order, first order, Higuchi, Korsmeyer and Peppas diffusion model. The formulation F2 showed maximum drug release (98.56%) in 8 hrs. Captopril mucoadhesive tablets for buccal delivery could be prepared with required in-vitro release properties.

KEYWORDS: Captopril, Buccal tablets, Acritamer 940, Manugel, Hypromellose K100, in vitro drug release.

INTRODUCTION:

BUCCAL DRUG DELIVERY SYSTEMS:

Among the various routes of drug delivery, oral route is the most suitable and most widely accepted one by the patients for the delivery of the therapeutically active drugs. But after oral drug administration many drugs are subjected to presystemic clearance in liver, which often leads to a lack of correlation between membrane • Drug absorption can be terminated in case of permeability, absorption and bioavailability. (1.5) Within the oral route, the Buccal cavity is an attractive site for drug delivery due to ease of administration and avoids Disadvantages: (17,22,23) nossible drug degradation in the gastrointestinal tract as

Advantages (17-21)

- Significant reduction in dose related side effects.
- It provides direct entry of drug into systemic circulation.
- Drug degradation in harsh gastrointestinal environment can be circumvented by administering the drug via buccal route.
- emergency.

Once pleased at the charmtion site the decays form

International Journal of Current Advanced Research

ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact Factor: 6.614

Available Online at www.journalijcar.org

Volume 8; Issue 02(C); February 2019; Page No. 17273-17276

DOI: http://dx.doi.org/10.24327/ijcar.2019. 17276.3231



A REVIEW ON HYDROGEL PHARMACEUTICAL PREPARATIONS

Sri Kala kamireddy, padmavathi sakinala, Iswarya obilineni, kameswara Rao.sankula and Mayuri.P

Department of Pharmaceutics, Nirmala College of Pharmacy, Mangalagiri, Guntur -522503

ARTICLE INFO

Article History:

Received 4th November, 2018 Received in revised form 25th December, 2018 Accepted 23rd January, 2018 Published online 28th February, 2019

Key words:

Hydrogels, Preparation, Mechanism

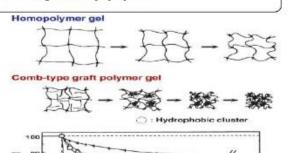
ABSTRACT

Hydrogels are very important formulations in the pharmacy. They were having the swelling property and varying degree of flexibility similar to the natural tissue. They are trapping large quantities of water in their net like structure and can shrink when they were dried. Hydrogels are having good transport properties when they are given in parenteral route. Hydrogel are expensive and non- adherent. They are employed in developing transdermal drug delivery systems, tissue engineering's, and regenerative medicines. Hence hydrogels are having very important role in pharmacy. Many drugs are formulated by using this technique.

Copyright®2019 Sri Kala kamireddy et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Hydrogels are three dimensional network of hydrophilic cross linked polymer that do not dissolve but can swell in water or can respond to the fluctuations of the environment stimuli. Hydrogels are highly absorbent natural or synthetic polymer networks. Hydrogels also possess a degree of flexibility very similar to natural tissue, due to their significant water content. They have both solid, liquid like properties and they are highly biocompatible. They can trap large quantities of water in the network structure and can shrink when dried.





LAUGHING SEIZURES- A RARE DISORDER IN PEDIATRIC PATIENTS

Dr.Anjana Male1x, V.Swathi2, Gotru srilekha3, P. Anthony sravya4, Y.Sunisha5

¹Professor and HOD, Department of pharmaceutical chemistry, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

²Depatment of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

³Depatment of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

⁴Depatment of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

⁵Depatment of pharmacology and pharmacy practice, <mark>Nirmala college of pharmacy,Atmakuru(v)</mark>, Mangalagiri

DOI https://doi.org/10.15520/ijmhs.v9i9.2642

Reviewed By: Dr.

ABSTRACT

Daniel V.

Department: Medical

Gelastic epilepsy or laughing seizures have been historically related to children with hypothalamic hamartomas. Gelastic seizures are rare; they are usually associated with other seizure types and can be restricted to a limited period during the evolution of an epileptic syndrome early-onset gelastic epilepsy, hypothalamic harmatoma, and precocious puberty syndrome". This condition typically results in a catastrophic epileptic encephalopathy, which is usually refractory to antienilentic therapy, but in most cases, it is reversed

for i1.rgstatic.net...

nocoagulation, or gamma-knife





A Review On Genetical Modified Food

Anjana Male*1, A. Vinay Mohan1 and T. Theresa Manaswi1

¹Nirmala College of Pharmacy, Atmakuru (V), Mangalgiri, Guntur District, Andhra Pradesh-522503.

Received: 12 Oct 2018 / Accepted: 11 Nov 2018 / Published online: 1 Jan 2019 Corresponding Author Email: anjana.male@gmail.com

Abstract: Genetic engineering is modifying the genome of the plants and animals to make them more resistant to the draught or pests. Future aspects of GMF Increasing Food Production, herbicide tolerance, improved in quality, improved production. Methodology: The GMF Methods are crossbreeding, mutagenesis, protoplast fusion, polyploidy, genome editing, transgenesis and also include DNAextraction, genecloning, transformation, selection of breed. Conclusion: One need to think of fossil fuelled industrial revolution versus global warning. Certainly many of the risks of genetically modified crops are speculative but they are scientifically plausible and offered in good faith.

Keywords

Genetically modified food, Gene insertion.

INTRODUCTION:

Definition:

Despite of the green revolution introduced in Genetic modification or genetically modified foods





Open Access &



Journal of Advancements in Plant Science

REVIEW ARTICLE

ISSN: 2639-1368

A Review on Momordica dioica Fruits

Anjana M1, Swathi V24, Ramya Sai A2, Divya N2 and Sunisha Y2

¹Department of Pharmaceutical Chemistry and Phytochemistry, Nirmala College of Pharmacy, Atmakuru (v), Manglagiri, Andhra Pradesh, India

Department of Pharmacology, Nirmala College of Pharmacy, Atmakuru (v), Manglagiri, Andhra Pradesh, India

'Corresponding author: Swathi V, Department of Pharmacology, Nirmala College of Pharmacy, Atmakuru (v), Manglagiri, Andhra Pradesh, India, Tel: 9491719011, E-mail: anjana.male@gmail.com

Citation: Anjana M, Swathi V, Ramya Sai A, Divya N, Sunisha Y (2019) A Review on Momordica dioica Fruits. J Adv Plant Sci 2: 201

Abstract

Momordica dioica Roxh ex Willd. is a perennial, dioceous climb creeper happiness to the gourd family. Its common referred to as kakora, parora that is mature in each tropical and sub-tropical country. Apart from its use as curative agent for diseases it is widely used as vegetable with nutritional quality Phytochemical screening ends up in the presence of alkaloids, steroids, triterpenoids, flavonoids, glycosides, saponins, triterpenes of urisolic acid dark brown semidrying oil and saturated fatty acids, ascorbic acids, vitamin A, thiamine, riboflavins, niacin, supermolecule carbohydrates, lectins, ascorbic acids, carotenes, bitter principles, oleanoic acid, saturated fatty acid, gypsogenin, alpha-spiranosterolhederagenin, momordicaursenol however studies indicate that solely a really very little analysis activity has been done on this plant. In this review gathered the information about the drug profile, phytochemical constituent and medical specialty activities done thereon.

Keywords: Cucurbitaceae; Curative Agent; Nutritional Value

Introduction

Momordica dioica Roxb. Ex. Willd is a perennial, dioceous climbing creeper belonging to the family cucurbitaceae. It is pra [1]. Flowering occurs during June to July and fruiting during September to raneous, broadly ovate in outline, variable in length of about 3.8 to 10cm by 3.2

GUNTUR DI

IJMHS 9 (8), 598-602 (2019)

ISSN (O) 2277:4939 | (P) 2589:9341

LAUGHING SEIZURES- A RARE DISORDER IN PEDIATRIC PATIENTS

Dr.Anjana Male^{1*}, V.Swathi², Gotru srilekha³, P. Anthony sravya⁴, Y.Sunisha⁵

¹Professor and HOD, Department of pharmaceutical chemistry, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

²Department of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

³Department of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

⁴Depatment of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

⁵Depatment of pharmacology and pharmacy practice, Nirmala college of pharmacy, Atmakuru(v), Mangalagiri

DOI https://doi.org/10.15520/ijmhs.v9i9.2642

Reviewed By: Dr.

ABSTRACT

Daniel V. Department: Medical Gelastic epilepsy or laughing seizures have been historically related to children with hypothalamic hamartomas. Gelastic seizures are rare; they are usually associated with other seizure types and can be restricted to a limited

period during the evolution of an epileptic syndrome early-onset gelastic cocious puberty syndrome". This

or x.bidswitch.net...

epileptic encephalopathy, which



Journal of Global Biosciences

ISSN 2320-1355

Volume 8, Number 12, 2019, pp. 6579-6599

Website: www.mutagens.co.in

DOI: www.mutagens.co.in/jgb/vol.8/12/081205.pdf



Research Paper

COMPARATIVE IMMUNE STIMULANT AND QUALITY CONTROL PARAMETER OF BUFFALO MILK AND GOAT MILK

G. Jyothi Vamsi Krishna¹, Anjana Male² and S.Kavya¹

¹Department of pharmaceutical Analysis, ²Department of Pharmaceutical Chemistry and Phytochemistry, Nirmala College of Pharmacy, Atmakuru (V), Mangalagiri, Andhra Pradesh, India.

Abstract

Milk is used by humans from childhood as a nutrient and growth promoter but the other therapeutic value of milk is it also promotes immunity. As we know immunity plays an important role in human health. In this we worked to know about the immunity from different milk samples. Two different milk samples were tested for immunostimulant activity in that one is buffalo milk and $2^{\rm nd}$ sample is goat milk and these milk samples were given to mice y and test group is compared with control group . The immunity parameters of the 2 groups were checked by Hematology instrument . From the results of the



Available online at www.ijmrhs.com



ISSN No: 2319-5886

International Journal of Medical Research & Health Sciences, 2019, 8(7): 38-47

A Prospective Study on Prescription Analysis of Anaemic Condition with Pharmacist Intervention at Tertiary Care Hospital

Anjana Male¹*, Anuhya Chinta² and Kolli Sri Sai Tanuja²

Nirmala College of Pharmacy, Andhra Pradesh, India
 Department of Pharmacy Practice, Nirmala College of Pharmacy, Andhra Pradesh, India
 *Corresponding e-mail: anjana.male@gmail.com

ABSTRACT

As per the World Health Organization (WHO), anaemia is defined as a condition in which the number of red blood cells gets decreased which leads to decreased levels of haemoglobin (Hb). The study provides an overview of the prescription analysis of anemic condition with pharmacist intervention in tertiary care hospital. This study was conducted in the duration of 6 months (August 2017-January 2018) which includes patients of different conditions based on their range of haemoglobin categorized according to age, gender, and social habits. Our results imply that initially patients were found to be anemic at the time of admission but the anemic condition is not treated as they concentrated more on treating the pathological condition and according to prescription analysis we found that they became more anemic during the treatment process which may be due to their pathological condition such as Chronic kidney disease (CKD), Coronary artery disease (CAD), cancer, Chronic liver disease (CLD) or due to the usage of prescribed drugs like antibiotics, analgesics, NSAID's. The observed disease conditions and the drugs may also show significance in the occurrence of anaemia and in most of the prescriptions appropriate treatment for anaemia was not provided during the hospital stay which includes our intervention regarding the study. As per the literature females were prone to be anemic, surprisingly in our hospital study we have found that males were found to be anemic in the



© 2019 JETIR February 2019, Volume 6, Issue 2

www.jetir.org (ISSN-2349-5162)

Fibrinolytic Enzyme Produced from *Bacillus subtilis* and media optimization, Purification and Characterization

*Lakshmaiah pallepati¹, Ch. Siva sai², G. Reshma Reddy³, U. Spandana⁴
¹.².³Vishwabharathi college of pharmaceutical sciences perecherla, Guntur, A.P
²Nirmala college of pharmacy, atmakur, mangalagiri, Guntur, A.P
Corresponding Author: Dr. Lakshmaiah Pallepati

Abstract

Streptokinase is an extracellular protein, novel fibrinolytic enzymes which are isolated from *Bacillus subtilis*, it is a non-protease plasminogen activator that activates plasminogen to plasmin, the enzyme that degrades fibrin cloth through its specific lysine binding site; it is used therefore as a drug in thrombolytic therapy. The rate of bacterial growth and streptokinase production was studied in condition of excess glucose addition to culture media and its pH maintenance. The streptokinase product of the bacterial culture was preliminary extracted by salt precipitation and then purified by affinity chromatography on plasminogen substituted sepharose-4B in a condition that the plasminogen active site was protected from streptokinase-induced activation. The purity of streptokinase was confirmed by SDS-PAGE and its biological activity determined in a specific streptokinase assay. The results showed that in the fed-batch culture, the rate of streptokinase production increased over two times as compared with the batch culture while at the same time, shortening the streptokinase purification to a single step increase

Key words: Plasminogen, Purification, Streptokinase, fibrinolytic enzymes, bacillus subtilis



© 2019 JETIR February 2019, Volume 6, Issue 2

www.jetir.org (ISSN-2349-5162)

GREEN CHEMISTRY: REDUCTION OF HARMFUL SUBSTANCES IN THE CREATION OF CHEMICAL PRODUCTS

L. P VISTAJA SINGAMSETTY, G.LAVANYA PRIYA, NEELIMA RANI SANA, SPANDANA UPPULURI *, NIRMALA COLLEGE OF PHARMACY, ATMAKURU, Mangalagiri, Guntur-522503.
Corresponding Author: Spandana Uppuluri *,

ABSTRACT:

This Review literature provides an overview of twelve principles and applications of Green Chemistry. It is used in the creation of chemical products and also to reduce the production of harmful thus it is also known as sustainable chemistry. It mainly deals with the reduction of negative consequences and harmful substances from the most frequently used chemicals and chemical reactions. All areas of chemistry, including organic, inorganic, biochemistry, polymer, toxicology, environmental, physical, technological, e have been developed by the twelve principles of green chemistry. This paper also explain about t applications, advantages and disadvantages of green chemistry in various fields.

Keywords: Green Chemistry, toxicology, biochemistry, sustainable chemistry.

INTRODUCTION:

The development of resource-efficient and sustainable chemical methodologies and processes has become one of the most important goals of synthetic organic chemistry in the 21st century. Various attempts were undertaken to minimize the adverse environmental impact and maximize the efficiency of chemical







Open with Google Docs ▼

International Journal of Pharmacy and Biological Sciences-IJPBS™ (2019) 9 (1): 1003-1010
Online ISSN: 2230-7605, Print ISSN: 2321-3272

Review Article | Pharmaceutical Sciences | Open Access | MCI Approved UGC Approved Journal

Soft, Fleshy Fruit - Papaya

S. Swati¹, Asif Ali Meer¹, Rakesh Kumar Kodavati¹, lakshmaiah Pallepati² and Uppuluri Spandana¹*

¹Nirmala college of pharmacy, Atmakur, Mangalagiri-522523.

²Viswabharathi college of Pharmacy.

Received: 10 Oct 2018 / Accepted: 8 Nov 2018 / Published online: 1 Jan 2019 Corresponding Author Email: spuppulni@gmail.com

Abstract

Papayas are a soft, fleshy fruit that can be used in a wide variety of culinary ways. Papaya have more on the health benefits, it is a tall herbaceous plant in the genus carica, its edible fruit is also called as papaya. It is native to tropical region of America, mainly from southern Mexico to Central America. chemical constituents like carbohydrates, protein, vitamins, alkanoids, saponins, tannins, steroids, flavonoids, are present. papaya have many biological activities and many pharmacological activities like, Antioxidant activity, Antiulcer activity, Antibacterial activity, Antifungal activity, Anti-amoebic activity, Wound-healing activity, Antihelmintic activity, Antiulcerogenic activity, Hypolipidemic activity, Hypertensive activity, Diuretic activity, Anti-fertility activity.



© 2019 JETIR February 2019, Volume 6, Issue 2

www.jetir.org (ISSN-2349-5162)

Fibrinolytic Enzyme Produced from *Bacillus subtilis* and media optimization, Purification and Characterization

*Lakshmaiah pallepati¹, Ch.Siva sai², G. Reshma Reddy³, U.Spandana⁴
1.2.3 Vishwabharathi college of pharmaceutical sciences perecherla, Guntur, A.P
4Nirmala college of pharmacy, atmakur, mangalagiri, Guntur, A.P
Corresponding Author: Dr. Lakshmaiah Pallepati

Abstract

Streptokinase is an extracellular protein, novel fibrinolytic enzymes which are isolated from *Bacillus subtilis*, it is a non-protease plasminogen activator that activates plasminogen to plasmin, the enzyme that degrades fibrin cloth through its specific lysine binding site; it is used therefore as a drug in thrombolytic therapy. The rate of bacterial growth and streptokinase production was studied in condition of excess glucose addition to culture media and its pH maintenance. The streptokinase product of the bacterial culture was preliminary extracted by salt precipitation and then purified by affinity chromatography on plasminogen substituted sepharose-4B in a condition that the plasminogen active site was protected from streptokinase-induced activation. The purity of streptokinase was confirmed by SDS-PAGE and its biological activity determined in a specific streptokinase assay. The results showed that in the fed-batch culture, the rate of streptokinase production increased over two times as compared with the batch culture while at the same time, shortening the streptokinase purification to a single step increase

Key words: Plasminogen, Purification, Streptokinase, fibrinolytic enzymes, bacillus subtilis

Introduction

GUNTUR DI



Sowjanya K et al /J. Pharm. Sci. & Res. Vol. 11(8), 2019, 2905-2909

ISSN:0975-1459

Journal of Pharmaceutical Sciences and Research

www.jpsr.pharmainfo.in

Review on Oroxylum Indicum

Sowjanya K1, S.swati2, M.manasa3, S. Srilakshmi3, K.mahima3

¹ Associate Professor, Department of Pharmaceutical Chemistry, ² Assistant Professor, Department of Pharmaceutics, ³ Bachelor of Pharmacy, Nirmala College of Pharmacy, Guntur, Andhra Pradesh, India.

Abstract:

Oroxylum indicum which is also known as midnight horror, "Indian calosanthes" belongs to family bignoneaceae found in Indian subcontinent. Scientific explorations of traditional belief of medicinal properties of Oroxylum indicum have got momentum mostly after the middle 20th century. In the present review, efforts have been made to sum up different aspects of scientific studies on this medicinal plant. It was found that it has great importance in medicinal aspects i.e., possess antimicrobial, antidiabetic, hepato-protective, anti-inflammatory, anti-carcinogenic, immunomodulatory, nephroprotective, anticancer and antimutagenic properties.

Keywords: Oroxylum indicum, bignoneaceae, Indian calosanthes.

INTRODUCTION:

During the past decade, the traditional systems have gained importance in the field of medicine. In many developing countries, a large proportion of the population relies heavily on traditional practitioners, who are dependent on medicinal plants to meet the primary healthcare needs. Although modern medicines are available, herbal medicines have often retained popularity for historical and cultural reasons. The present attempt is to review and compile updated information in various aspects of *Oroxylum indicum*, a plant used in Indian system of medicine for variety of purposes.

PLANT PROFILE:

Taxonomical Classification

Kingdom Plantae

DISTRIBUTION

Oroxylum indicum is native to the Indian subcontinent,in the Himalayan foothills with a part extended to Bhutan and southern China, in Indo-China and the Malaysia ecozone. It is visible in the forest biome of Manasa National Park in Assam, India. It is also found in Phillipines . Indonesia and Srilanka

MICROSCOPICAL FEATURES

Microscopic studies of the roots of *Oroxylum indicum* revealed that the root cork consists of polyhedral cells with the fragments of pitted stone cells lying underneath the cork cell. The outer layer of cork is lignified while as the inner layer ofis non-lignified. Cortex is wide and made up of thin walled parechymatous cells. Abundant crystal of calcium oxolate are scattered as such in parenchymatous





In-Vivo Antioxidant Activity of Hibiscus plantifolius Stems

Author(s): Sowjanya, K. R. Ratna Manjula, Vaishnavi, V, B. Keerthi Sai, Divya, K

Email(s): ksowjanya.1504@gmail.com

DOI: 10.5958/0974-360X.2019.00453.0

Address: Sowjanya, K1, R. Ratna Manjula2, Vaishnavi, V3, B. Keerthi Sai4, Divya, K5

1Associate Professor, Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India-522503

2Associate Professor, Department of Pharmaceutical and Phytochemistry, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India-522503

3,4,5Bachelor of Pharmacy, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India-522503.

*Corresponding Author

Published In: Volume - 12, Issue - 6, Year - 2019

Keywords:

In-vivo antioxidant activity hepato protective DPPH nitric oxide Hibiscus plantifolius.



2019 Volume 9 Issue 5



Invitro anti-oxidant Activity of Hordeumvulgare Leaf

Download PDF

K.Sowjanya, B.Pravallika, J.Poojitha, K.Ashok Kumar

Article Link:

https://eijppr.com/52nbAs8

Abstract

Objective: The present study aimed to evaluate the in-vitro antioxidant activity of Hordeum vulgare belonging to family Poaceae. Methods: The shade-dried stem part of H. vulgar (1kg) was powdered and extracted by chloroform, petroleum ether, ethanol, and aqueous extraction methods using soxhlation. The extracts were concentrated using a rotary evaporator under decreased pressure at 40 °C until they were free of solvents. Thereby crude extracts were provided and employed for further studies. The antioxidant activity of Hordeum vulgare leaf using DPPH* radical scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf and stem using Nitric oxide free radical (NO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of Hordeum vulgare lea

