International Journal of All Research Education and Scientific Methods (IJARESM),
ISSN: 2455-6211, Volume 11, Issue 10, October-2023, Available online at: www.ijaresm.com

Formulation Development and In-Vitro Evaluation of Deflazacort Fast Dissolving Tablets

G. Srujana[1], Jimidi Bhaskar[2]

[1,2]Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Hyderabad

ABSTRACT

The aim of the current research to develop fast dissolving tablets (FDTs) of Deflazacort by direct compression method. Deflazacort goes under Biopharmaceutical Classification System(BCS) II drug i.e., less dissolvability and high vulnerability which brings about less bioavailability of drug. The target of the existing work is expected to develop FDTs by utilizing superdisintegrants. Precompression and postcompression parameters of FDTs were evaluated. Out of 6 formulations DF6 containing sodium starch glycolate as disintegrant shows highest drug release in 15min. which is considered as optimized formulation. Accelerated stability study indicates no variation in parameters.

Keywords: Deflazacort, FDTs, direct compression, BCS.

INTRODUCTION

The advances in novel drug delivery systems for designing dosage forms like orodispersible tablets[1,.2] for convenient to be manufactured and administered free side effects, offering immediate release and enhance bioavailability so as to achieve better patient compliance. Oral drug delivery systems preferably tablets are most widely used dosage forms for being compact offering uniform dose and painless delivery. But elderly and pediatric patients suffer in dysphasia because of physiological changes is associated with those groups[3,4]. Generally dysphasia is observed nearly 35% of population and associated with a number of conditions like parkinsonism, mental disabilities, motion sickness, unconsciousness, unavailability of water etc..To overcome such problems certain innovative drug delivery system[5,6] like mouth dissolving tablets have been developed.

The concept of orodispersible tablets emerged from the desire to provide patient with conventional mean of taking their medication. It can be disintegrated, dissolved or suspended by saliva in the mouth resulting in easy swallowing can provide significant benefits to the pediatric and geriatric populations as well as other patients who prefer convenience of easily swallow able dosage form. Orodispersible tablets disintegrate instantaneously when placed on tongue, releasing the drug that dissolves or disperses in the saliva.The orally disintegrating tablets are also called as orodispersible tablets, quick disintegrating tablets, fast disintegrating tablets, porous tablets, rapimelts.The mouth dissolving tablets are absorbed from the mouth, pharynx and esophagus as saliva passes down into the stomach[7].The solution containing active ingredients is absorbed through gastrointestinal epithelium to reach the target and produce desired effect. In these cases the bioavailability of drugs are significantly greater than those observed from conventional solid dosage forms such as tablets and capsules[8].In the present study FDT of Deflazacortwere designed using direct compression method.

MATERIALS AND METHODS

Materials

Deflazacortwas received as a gift sample from Suzikem Labs Pvt Ltd., cherlapally, A.P, Magnesium stearate, talc, micro crystalline cellulose(MCC),and potassium dihydrogen-o-phosphate were procured from SD fine chem. Ltd Mumbai. Superdisintigrants are gifted from DFE Pharma.

Drug excipient studies:

The FTIRspectroscopy allows identification of functional groups in various chemicals as well as incompatibilities between the drug and excipients. From the FTIR spectroscopy study it can be concluded that the major peaks of drug remains intact and no interaction was found between the drug and excipients.

International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211, Volume 11, Issue 11, November-2023, Available online at: www.ijaresm.com

Role of Insulin in Management of Type 2Diabetes Mellitus - Review Article

V. Hari Kishore Reddy[1], Tanuku Ritika[2], Telukuntla Teja Reddy[3], Sobiya Ammara[4], Jimidi Bhaskar[5]

[1,2,3,4,5]Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Hyderabad – 501510

ABSTRACT

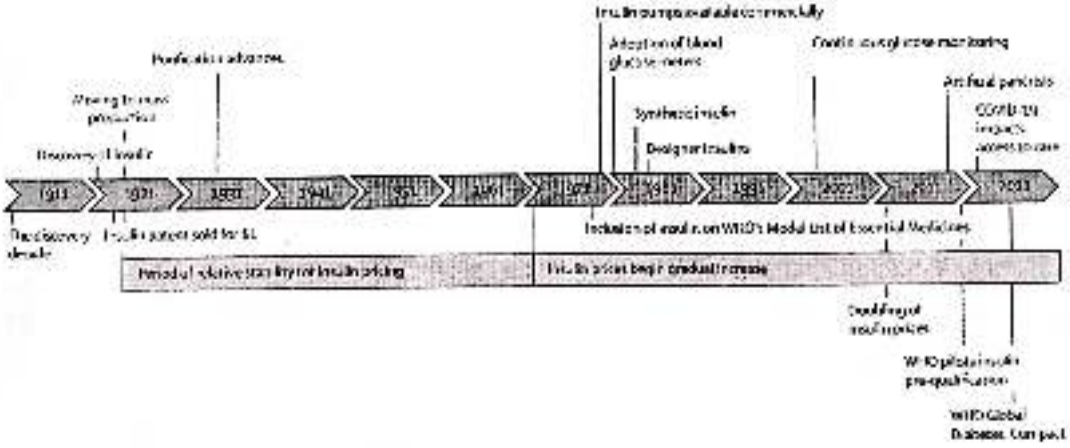
High blood sugar levels brought on by inadequate insulin synthesis are the hallmark of type 2 diabetes mellitus. Type 2 diabetes mellitus is becoming more common, and with it comes a rising amount of morbidity and mortality. Strict glycolic management plays a major role in lowering the micro vascular problems associated with diabetes. Even in individuals who take oral anti-diabetic medications on a regular basis, extra insulin therapy is still necessary. There are numerous insulin preparations on the market, and each offers benefits and drawbacks of its own. The purpose of developing the current insulin was to address some of the drawbacks of the earlier formulations. The function of insulin in the treatment of type 2 diabetes is discussed in this review.

INTRODUCTION

Human insulin is a synthetic form of the hormone that is produced in labs to mimic human insulin. It was developed in the 1960s and 1970s and was eventually licensed for medicinal use in 1982. Physicians used animal and porcine insulin prior to the development of human insulin. Diabetes mellitus is a chronic illness that affects many people worldwide. It is typified by a failure to maintainglycolic control and increasing beta cell loss. Diabetes burdens healthcare systems with both direct and indirect expenses and is a major source of morbidity and mortality. Insulin doses are needed fortreatment when multi-drug therapies and lifestyle changes are ineffective in lowering blood sugar levels.

History of Insulin

Dr. Teusches created the first human insulin synthetic in Switzerland in 1975. The US Food and Drug Administration authorized the first synthetic human insulin in 1982. A more sophisticated version ofhuman insulin was created in the 1990s. Analogue insulin was the name given to this.



Pharmacological Action of Insulin

With a molecular weight of 6000 and 51 amino acids, insulin is a two-chain polypeptide. Insulin plays a key role in the treatment of type 1 diabetic patients with progressive beta cell insufficiency. Unlikeother oral hypoglycemic medications that depend on the existence of enough endogenous insulin to function as insulin sensitizers, insulin secretagogues, incretion mimics, amylin analogues, and other factors, insulin acts directly on tissues to regulate glucose homeostasis. The anabolic action of insulin and the promotion of the uptake, utilization, and storage of importantnutrients such as glucose, lipids, and

MS.ID-IJPBS-2771
International Journal of Pharmacy and Biological Sciences-IJPBS™ (2023) 13 (4): 18-27
Online ISSN: 2230-7605, Print ISSN: 2321-3272
Review Article | Pharmaceutical Sciences | OA Journal | MCI Approved | Index Copernicus

Pulmonary Drug Delivery System: A Review

Jukanti Harika Goud and Jimidi Bhaskar

Department of Pharmaceutics, Bharat Institute of Technology, Mangalally, Ibrahimpatnsm, Ranga Reddy-501510

Received: 02 Jul 2023/ Accepted: 9 Aug 2023 / Published online: 1 Oct 2023
*Corresponding Author Email: bhaskarbehappy@gmail.com

Abstract

Growing attention has been given to the potential of pulmonary root as an alternative for noninvasive systemic delivery of therapeutic agents. Pulmonary drug delivery can be used as an alternative to oral delivery. The system can be best utilized for both local and systemic actions. Pulmonary Drug Delivery System (PDDS) is an important research area which impacts the treatment of illness including asthma, chronic obstructive pulmonary disease (COPD) and various other diseases. Inhalation gives the most direct access to the drug target. This route can be used to deposit the drug to the target site at the high concentration reducing the amount of drug given to the patient and help in reducing systemic side effects and first pass metabolism. Generally, half of all pharmaceuticals are not soluble in water, but are soluble in lipid. As the lungs can absorb both water and oil into the tissue this is not a restriction of pulmonary delivery.

Keywords

Pulmonary Drug Delivery System, COPD, Systemic, Inhalation

*****

INTRODUCTION

Pulmonary drug delivery systems (PDDS) have been used for decades to deliver drugs for treatment of respiratory disorders [1] as well as other disorders. The lungs provide a huge surface area of alveoli with rich capillary network which acts as an excellent absorbing surface for administration of drugs. Throughout the past several years, rapid onset of action and higher efficiency has been responsible for the success of pulmonary delivery system for symptomatic relief in treatment of asthma and chronic obstructive pulmonary disease (COPD). Research in the area of pulmonary drug delivery has gathered momentum in the last several years, with increased interest in using the lung as a means of delivering drugs systemically. Delivery of locally acting drugs directly to the site of action reduces the amount of dose needed to produce the pharmacological effect but now the lung has been studied as a possible route to administer the treatment of systemic diseases, like diabetes mellitus. The site of deposition that is on central or peripheral airways and whether the distribution of the inhaled drug is uniform or non-uniform may play a vital role in an inhaled drug's effectiveness [2].

Pulmonary delivery of drugs has become an attractive target in the health care industry as the lung is capable of absorbing pharmaceuticals either for local deposition or for systemic delivery. Some pharmaceuticals are not soluble in water but are soluble in lipids. As the lung is able to absorb both water and oil into the tissue, this is not a limitation of pulmonary delivery. Targeted drug delivery to the lungs has evolved to be one of the most widely investigated systemic or local drug delivery approaches [3].

World Journal of Pharmaceutical Science and Research

www.wjpsronline.com

Research Article

ISSN: 2583-6579

SJIF Impact Factor: 2.054

Year - 2023

Volume: 2; Issue: 6

Page: 294-300

PREPARATION AND EVALUCATION OF FAST DISINTEGRATION TABLETS OF POSACONAZOLE

G. Rahul, J. Yashashwini, K. Vikram, K. Ujwala, K. Sai Rupini, *Dr. Jimidi Bhakar and Dr. Reddy Nazeemuddin

Department of Pharmaceutics, Bharat Institute of Technology Ibrahimpatnam (M), Mangalpally(V), Ranga Reddy (D), Telegana (S), India-501510.

Article Received: 24 October 2023 || *Article Revised: 14 November 2023* || *Article Accepted: 06 December 2023*

Corresponding Author: Dr. Jimidi Bhakar
Department of Pharmaceutics, Bharat Institute of Technology Ibrahimpatnam (M), Mangalpally(V), Ranga Reddy (D), Telegana (S), India-501510.

ABSTRACT

Posaconazole is a broad spectrum triazole antifungal agent with potent activity against various fungi, including yeast and moulds Clinical studies have demonstrated that the agent is efficacious as prophylaxis against invasive fungal infections inpatients at hedonist and may also useful in salvage therapy against invasive aspergillosis and mucomycosis However, the bioavallability Posaconazole following administration as oral suspension, which was the only formulation clinically available for many years variable negatively influenced several factors because many by the patients had sub therapeutic levels when the oral suspension was wed, overcome this limitation delayed release tablet was developed and is now available for clinical use. In addition, pharmacokinetic parameters following administration of the tablets were not Significantly affected by medication that increasing gastric motility, and the tablets could also be administrated without regard to food similar results have been found in patients at high risk for invasive fungal who have received.

KEYWORDS: Posaconazole, triazole, aspergillosis, mucomycosis.

INTRODUCTION

Posaconazole tablet formulation and appears to be well tolerated to date, although data regarding clinical efficacy are needed. Posaconazole is a triazole antifungal agent with a spectrum of activity that includes Candida and Cryptococcus specie and some endemic fungi. Posaconazole has received US Food and Drug Administration approval for the treatment of oropharyngeal, candidiasis including infections refractory to itraconazole and/or fluconazole. It is also approved as prophylaxis for invasive Aspergillus and Candida infections in patients aged >13 years who are at high risk of developing these infections, in adult and adolescent hematopoietic stem cell transplant recipients with graft-versus-host disease, and in persons with hematologic malignancies and prolonged neutropenia due to chemotherapy, who are at high risk of developing these infections. Approval for additional indications is being sought. Limited clinical experience suggests efficacy for the treatment of infections due to Zygomycetes and as salvage therapy for patients with invasive aspergillosis and coccidioido mycosis. Currently available only as an oral suspension, Posaconazole which has been well tolerated, requires administration with food or a nutritional supplement to ensure adequate

World Journal of Pharmaceutical Science and Research
www.wjpsronline.com
Research Article
ISSN: 2583-6579
SJIF Impact Factor: 3.454
Year - 2023
Volume: 2; Issue: 6
Page: XX-XX

FORMULATION DEVELOPMENT AND IN-VITRO EVALUATION OF POSACONAZOLE LOADED TRANSFEROSOMES GEL

Amulya Chikoti[1] and Jimidi Bhaskar*[1]

[1]Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Hyderabad-501510.

Article Received: 02 October 2023 || Article Revised: 22 October 2023 || Article Accepted: 29 November 2023

***Corresponding Author:** Jimidi Bhaskar*
Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Hyderabad-501510.
Email ID: [redacted]

ABSTRACT

The goal of the current research was to create Posaconazole (PSZ) transferosome gel that would be effective against fungal infections. The gel was created by thin film hydration method. A study of the interactions between drugs and excipients was then conducted using the Fourier transform infrared (FTIR) spectroscopy method. The formulations were prepared and evaluated for measurement of pH, viscosity, spreadability, % entrapment efficiency, drug content estimation and *in vitro diffusion* study. Eight formulations were developed(PF1-PF8). In a Franz's diffusion cell, *in vitro diffusion studies* were carried out. The PF7 batch demonstrated the highest drug release after 24 hours. The developed formulation was stable, non irritant and provided sustained release over 24 hrs.

KEYWORDS: *Posaconazole*, gel, FTIR, Franz's diffusion cell.

INTRODUCTION

Transdermal drug delivery systems (TDDS), also known as medicated adhesive patches applied to the skin to administer a precise dose of medication via the skin and into the bloodstream, are dosage forms created to transport a therapeutically effective amount of drug across a patient's skin.[1] Since frequent medication intake is not required, transdermal treatment devices may create prolonged, steady, and controlled levels of drug in the plasma, enhancing patient compliance.[2]

The perfect penetration booster diminishes the stratum corneum's barrier resistance in a reversible manner without endangering the skin. The ability to avoid issues with stomach irritation, pH, and emptying rate impacts; avoid hepatic first pass metabolism[3]; and increase the bioavailability of the drug is the safest and most commonly utilized penetration enhancer.

Posaconazole (PSZ) is a triazole antifungal drug of BCS Class-II medication with a high lipid solubility and low water solubility. Posaconazole is an antifungal medication that comes in a variety of forms, including injections, oral suspensions, and delayedrelease tablets. When taken orally, these formulations can cause patient incompliance,

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

STABILITY INDICATING RP-HPLC METHOD DEVELOPMENT AND VALIDATION OF DAPTOMYCIN

Dr.Namratha Sunkara*[1], Kabita Banik [2], ,P.Twila Pushpa[3],B.Swathi[4],Azka Fathima[5]

[1]Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Rangareddy Telangana India

ABSTRACT: A simple, Accurate, precise method was developed for the estimation of the Daptomycin in Tablet dosa form. The detection was carried out by using PDA detector at 223nm.Phenomenex IB-SIL C_8 column was used for the stu as this yield peak of good shape.Buffers of different pH were tried. 3.4g/L $NH_4H_2PO_4$ adjust PH to 3.1 ± 0.05 with H_3PO_4 v finally used because of the good symmetrical peaks.. Injection volume used was 25µl .This has yielded peaks of good sha without any splitting. The flow rate was fixed at 0.9ml/min. This has eluted the drug around 37min.By using the method retention time of the Daptomycin was found to be 37.74min.System suitability conditions meet the recommend criterion.Linearity of the solution was demonstrated between 0.1506 mg/ml and 0.4519 mg/ml concentration range.Accura was demonstrated as reported. Recovery and % of RSD are within the recommended limits.Limit of detection value is 0.0000154mg/ml and limit of quantification is at 0.0000467mg/ml. Under forced degradation studies, the peak single pe threshold is always lower than purity index for Daptomycin peak and all degradant peaks were well resolved. Retention tim were decreased and run time was decreased, so the method developed was simple and economical that can be adopted regular Quality control test inIndustries.Hence the method can be adopted as a stability indicating method..

Keywords: Quality control, Daptomycin, Recovery, Wavelength.

INTRODUCTION:

Pharmaceutical Analysis is that centre branch of drug store training and research, which is advancing speedy. It can arranged as union of new medications particles and pharmaceutical investigation.The liquid chromatographic techniques, pivoted arrange systems in perspective of balanced silica offers the most imperative probability of triumphs. In any case, number of (structure) factors (parameters) impact the selectivity and the assurance. Trade legitimate methods the prescription thing to diminish the cost and time[1]. Then evaluate the best division condition from trial runs. In the separation condition, favour the procedure for release to routine research focus.Daptomycin arep both the medicine are freely soluble in methanol and practically insoluble in wat Them aptomycinisdistinctfromthatofanyotherantibiotic. Daptomycin bindstobacterialmembranesandcau arapiddepo membranepotential inbothgrowingandstationaryphasece

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

www.rjptonline.org

RJPT

RESEARCH ARTICLE

Evaluation of Antibacterial and Antioxidant potential of *Melia. Azedarach* linn. and *Psidium guajava* linn. Leaf extracts

Gade Kalyani[1]*, Azka Fathima[2], Guddeti Venkateshwarlu[3], D. Ravi Sankar Reddy[4], Shaik Harun Rasheed[5]

[1]Associate Professor, Department of Pharmacology, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam - 501510, Telangana, India.

[2]Assistant Professor, Department of Pharmaceutical Analysis, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam - 501510, India.

[3]Assistant Professor, Department of Pharmacology, School of Pharmacy, Guru Nanak Campus, Ibrahimpatnam - 501506, Telangana, India.

[4]Professor, Department of Pharmaceutical Chemistry, University College of Pharmaceutical Sciences, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur, Andhra Pradesh, India - 522510.

[5]Professor, Department of Pharmacy, School of Pharmacy, Guru Nanak Campus, Ibrahimpatnam - 501506, Telangana, India.

*Corresponding Author E-mail: gadekalyani1989@gmail.com

ABSTRACT:

The present study is intended to evaluate and analyze *in-vitro* antibacterial and antioxidative activities of leaf extracts of *Melia azedarach* Linn (*M. azedarach* L.) and *Psidium guajava* Linn (*P. guajava* L.). *In-vitro* antibacterial activity was measured using agar well diffusion assay against *Pseudomonas aeruginosa* and *Staphylococcus* aureus strains. *In-vitro* antioxidant activity was estimated using 2,2-diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging method. Among both plants high minimum inhibitory concentration values are observed with *P. guajava* L. ethanol extract at 47.6µg/ml for *S. aureus and* 43.7µg/ml for *P. aeruginosa*, respectively. The results revealed that 20µg/ml ethanol extracts of *P. guajava* L. exhibited the highest radical % scavenging activity (76.24%) succeeded by methanol extracts (72.78%), respectively indicating they are effective solvents to extract phenolic compounds. We demonstrated that for both bacterial strains, ethanol followed by methanol extracts showed significant antibacterial activity in *P. guajava* L.in dose dependent manner indicating the presence of high flavonoids, tannins, and steroids. Our results revealed that both plants are vital reservoirs of phytochemicals with both antibacterial and antioxidant capacities.

KEYWORDS: *Melia azedarach* L., *Psidium guajava* L., Antioxidant activity, Antibacterial activity, *In-vitro*.

INTRODUCTION:

Inflammation is characterized by edema due to fluid accumulation, heat, and which leads to hyperalgesia and involved in production of fever during these infections. Current medicine, however, necessitates the separation and purification of the active compounds.

Natural products have been and remain to be exceptional sources of medicinal agents, which are templates for synthetic agents with the potential for treatments of various diseases and to develop new anti-inflammatory agents which could also be used to treat fever[1]. Algesia, pyrexia and Inflammatory diseases being common with increase in prevalence, still have no proper treatment till today. Medicinal plants constitute one or more components for curing the life threating infections caused by pathogenic microorganisms.

An imbalance between antioxidants and reactive oxygen species results in oxidative stress induced cellular damage. It is linked to most of the diseases such as cancer, diabetes, ageing, atherosclerosis, ischemia

GRADIVA REVIEW JOURNAL

An UGC-CARE Approved Group-II Journal

ISSN NO : 0363-8057 / Website : http://gradivareview.com/
Email : Submitgrjournal@gmail.Com

Certificate of Publication

Paper ID : GRJ/3353

This is to certify that the paper titled

Isoniazid Induced Hepatotoxicity In Spinal Tuberculosis (Pott's Spine) – A Case Report

Authored by

Nahid

From

Bharat Institute of Technology Managalpally,ibrahimpatnam,hyderabad ranga reddy district

Has been published in

GRADIVA REVIEW JOURNAL Volume 8, Issue 5, May 2022.

DOI: 10.37897/GRJ

Teresa Gallart
Editor-in-Chief
Gradiva Review Journal

Nahid

(13)

IMG-20221205-WA0006.jpg

Certificate of Publication

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | ISSN: 2320 - 2882

An International Open Access, Peer-reviewed, Refereed Journal

The Board of

International Journal of Creative Research Thoughts

Is hereby awarding this certificate to

Nahid

In recognition of the publication of the paper entitled

GLIMEPIRIDE- INDUCED HYPOGLYCEMIA IN DIABETIC MELLITUS TYPE 2 - A CASE REPORTGLIMEPIRIDE- INDUCED HYPOGLYCEMIA IN DIABETIC MELLITUS TYPE 2 - A CASE REPORT

Published in IJCRT (www.ijcrt.org) & 7.97 Impact Factor by Google Scholar

Volume 10 Issue 11 November 2022 , Date of Publication: 25-November-2022

UGC Approved Journal No: 49023 (18)

EDITOR IN CHIEF

PAPER ID : IJCRT2211470

Registration ID : 228064

Scholarly open access journals, Peer-reviewed, and Refereed Journals, Impact factor 7.97 (Calculate by google scholar and Semantic Scholar | AI-Powered Research Tool), Multidisciplinary, Monthly Journal

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | IJCRT

An International Scholarly, Open Access, Multi-disciplinary, Indexed Journal

Website: www.ijcrt.org | Email id: editor@ijcrt.org | ESTD: 2013

IJCRT | ISSN: 2320-2882 | IJCRT.ORG

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

(14)

FORMULATION AND EVALUATION OF POLY HERBAL HAND WASH

P.Twila Pushpa[1*], Namratha Sunkara[2], Kabita Banik [3] Nahid[4]

Bharat Institute of Technology, Mangalpally, Hyderabad, 501510.

Corresponding author: P. Twila Pushpa, Email: twila.palaparthi@gmail.com,9908236572.

ABSTRACT

The aim of the present study is to formulate and evaluate herbal hand wash gel byUsing extracts of Azadirachta indica (neem powder), Ocimum tenuiflorum (Tulsi powder), Mentha (mint powder), Syzygium aromaticum (clove oil), Sapindus mukorossi (ritha powder), carbopol 940 (gelling agent), methyl paraben (preservative), Glycerin (softening agent), distilled water, (vehicle), Turmeric (colorant) Rose oil (perfume), Saponin Extract. To select the plant materials. To extract powders from plants by sun drying method to get particle free extract. To prepare herbal hand was gel by using suitable agents. To evaluate herbal hand wash gel. Like cosmetics and cosmeceuticals (a cosmetic that has claimed medicinal properties) are topically applied but they have ingredients that influences the biological actions of skin. The WHO estimates that most of the population of Asian country presently use herbal medicine for the purpose of hand hygiene includes preparation of hand washe.the present study was carried out to formulate polyherbal hand wash gel containing herbal extract which is used not only for the purpose of cleaning hands but also for the prevention of bacterial growth.its composition was prepared according to skin delicateness so that it cannot cause any type of irritation.Hence it can be concluded that polyherbal hand wash gel are much better than the plain soaps or existing marketed hand wash due to their ingredient's and effectiveness on our skin of hands as well a suitable for all type of skin.

Key Words:

Azadirachta indica, Ocimum tenuiflorum , Mentha, Syzygium aromaticum, Sapindus mukorossi, carbopol 940, methyl Paraben.

FORMULATION AND EVALUATION OF POLYHERBAL HAND WASH

1. Introduction

- Hands are the major route of microbe and illness transfer; hand cleanliness is the most efficient way to prevent the spread of hazardous germs and diseases.In healthcare, hand cleanliness is the best and most effective, simplest, and affordable technique to prevent nosocomial infections. Contaminated hands can function as vectors for the spread of germs. Outbreaks are conveyed fromone human to another when a food handler contaminates his or her hands andthen transfers these bacteria to customers via hand contact with food or drinks. The user is exposed after ingesting these germs, which might cause gastrointestinal disease. Microorganisms infiltrate the food supply when people handle ready-to-eat foods.

Certificate of Publication

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | ISSN: 2320 - 2882

An International Open Access, Peer-reviewed, Refereed Journal

The Board of

International Journal of Creative Research Thoughts

Is hereby awarding this certificate to

Nahid

In recognition of the publication of the paper entitled

A CASE REPORT ON LIPOSOMAL AMPHOTERICIN- B INDUCED ANAPHYLACTIC REACTION

Published in IJCRT (www.ijcrt.org) & 7.97 Impact Factor by Google Scholar

Volume 10 Issue 10 October 2022 , Date of Publication: 19-October-2022

UGC Approved Journal No: 49023 (18)

ISSN 2320-2882 IJCRT

IJCRT

EDITOR IN CHIEF

PAPER ID : IJCRT2210281

Registration ID : 226563

Scholarly open access journals, Peer-reviewed, and Refereed Journals, Impact factor 7.97 (Calculate by google scholar and Semantic Scholar | AI-Powered Research Tool) , Multidisciplinary, Monthly Journal

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | IJCRT

An International Scholarly, Open Access, Multi-disciplinary, Indexed Journal

Website: www.ijcrt.org | Email Id: editor@ijcrt.org | ESTD: 2013

IJCRT | ISSN: 2320-2882 | IJCRT.ORG

ROLE OF LEUCOVORIN IN MONITORING HIGH DOSE OF METHOTREXATE IN B CELL-ACUTE LYMPHOBLASTIC LEUKEMIA (B-ALL) PATIENT – A CASE REPORT.

J.Pravalika[1], Asha raj[2], Tahoor Fatima[3], Nahid[4]

J. Pravalika1, Pharm.d student Bharat School of Pharmacy Managalpally, ibrahimptnam, Hyderabad Ranga Reddy district, 501501

Asha raj[2] Pharm.d student Bharat School of Pharmacy Managalpally, ibrahimptnam, Hyderabad Ranga Reddy district, 501501

Tahoor Fatima[3] Pharm.d student Bharat School of Pharmacy Managalpally, ibrahimptnam, Hyderabad Ranga Reddy district, 501501

Nahid[4] Assistant professor Bharat Institute of Technology Managalpally, ibrahimptnam, Hyderabad Ranga Reddy district, 501501

Corresponding author-
J. Pravalika
Email.id- pravalika14350@gmail.com
Ph.no- 9160256751

ABSTRACT: Methotrexate is an anticancer drug belongs to antimetabolites class (folate antagonist). Methotrexate interferes with the growth of certain cells of the body, especially cells that reproduce quickly, such as cancer cells, bone marrow cells and skin cells. Methotrexate is taken only once a week or 2-4 times a week. High dose intravenous methotrexate is an important component of many effective chemotherapeutic regimens for childhood acute lymphoblastic leukemia (ALL). Leucovorin is a form of folic acid belongs to class of antidotes. It is used with methotrexate to avoid side effects. The dosage range of leucovorin is 5-500 mg and the effective dosage range in treating high dose methotrexate in B-ALL patient is 10mg-15mg /ml iv or oral every 6 hours for 10 doses. A 4 years old male patient was admitted in general ward of oncology department in a tertiary care hospital, Hyderabad with chief complaints of cycle-2 high dose methotrexate. On examination, he had Temperature-98.4F, PR-70/min, BP-100/60mmHg, Spo2-98%. His lab investigation was Hb count-10.5gm%, WBC count-4950cells/cumm, Lymphocytes-45%. Earlier he was diagnosed with B-ALL, chromosomal analysis-Translocation of 1 and 3 chromosome and multiplication of long arm of chromosome and was on methotrexate medication. His 1st induction chemotherapy was started on 18/06/2022 and neutropenia was recovered. Followed by consolidation phase on 20/07/2022 Post cycle BFM-2000 protocol-phase B on 30/08/2022, post BFM-2000 protocol-MC on 20/09/2022- high dose methotrexate cycle-1 Permacath insertion was done on 23/09/2022. He was admitted for BFM-2000 protocol-MC-High dose methotrexate cycle-2 on 12/10/2022. High dose methotrexate is managed by leucovorin 10mg/ml iv 6 hourly for 10 doses. Leucovorin works by protecting healthy cells from the effects of methotrexate and kills cancer cells.

KEYWORDS: Methotrexate, Leucovorin, B-acute lymphoblastic leukemia (B-ALL).

INTRODUCTION: Acute lymphoblastic leukemia is a type of cancer of the blood and bone marrow that affects white blood cells. B-ALL is the most common type of leukemia in children of age in between 2-9 years and can also occur in elder adults. Acute lymphoblastic leukemia also known as acute lymphocytic leukemia B-ALL is caused by sequential alterations in proto-oncogenes, tumor-suppressor genes and micro-RNA genes of hematopoietic stem cells. Acute lymphoblastic leukemia is one of the first human cancers that responded well to chemotherapy in a series of innovative clinical trials conducted more than 4 decades ago.

CAUSES: Acute lymphoblastic leukemia occurs when a bone marrow cell develops mutations in its DNA. In ALL mutation takes place in bone marrow cell leads to abnormal growing and dividing of cells. Due to this blood cell production becomes out of control. The bone marrow produces immature cells that develop into leukemic white blood cells called lymphoblasts. Combination of genetic and environmental factors develop ALL.

RISK FACTORS: Factors that may increase the risk of acute lymphocytic leukemia include- previous cancer treatment, exposure to radiation, genetic disorders (Down syndrome), smoking

ISSN NO : 0363-8057

An observational study on the practice followed in India for dispensing antibiotics in community pharmacy

Nahid [1], Namratha Sunkara[2], kabita Banik[3], Twila Pushpa[4]*

Bharat institute of technology, Mangalpally, Hyderbad, 501510

Corresponding author: Nahid

***ABSTRACT**: India has one of the highest rates of antimicrobial resistance (AMR) Worldwide. Despite being prescription drugs, antibiotics are commonly available Over-the-counter (OTC) at retail or community pharmacies. We aimed to gain insight into the OTC sale of antibiotics at community pharmacy and to elucidate its underlying drivers. We conducted face-to-face, in-depth interviews using convenience sampling with the pharmacists and informal dispenser from the community pharmacy in Telangana. The subjects received a questionnaire aimed to collect data on the practice followed in India for dispensing the antibiotics. Analysis revealed that antibiotics were often dispensed OTC for conditions e.g., fever, cold, and acute diarrhea, which are typically viral and self-limiting. In our study total 150 subjects were enrolled and we found that many pharmacy shops are handled and managed by other workers rather than the pharmacists the community pharmacy has developed much and growing their business. Many patients came to buy antibiotics without prescription for many reasons like cold, ear infection, throat infections, diarrhea and fever. In our study the dispensing of antibiotic according to the demographic profile Mostly sold antibiotic is Azithromycin with the percentage of 13.33%and the least sold antibiotic is Cefadroxil with the percentage of 0.66%.We found that mostly dispensed antibiotics was for the age group between 18-5 and when comparing the gender Males (53%) and females (47%) are administrating the antibiotics.*

INTRODUCTION

Antibiotics are medicines used to prevent and treat bacterial infections. An antibiotic is a type of antimicrobial substance active against bacteria. It is most important type of antibacterial agent for fighting bacterial infections, and antibiotics medications are widely used in the treatment and prevention of such infections. [1] They may either kill or inhibit the growth of bacteria. They act as Bactericidal and bacteriostatic. Antibiotics have been used since ancient times.. The first Person to directly document and treat infections was John Parkinson (1567–1650). Antibiotics revolutionized medicine in the 20th century. Alexander Fleming (1881–1955) discovered modern day penicillin in 1928, the widespread use of which proved significantly beneficial during wartime [2]. However, the effectiveness and easy access to antibiotics have also leaded to their overuse and some bacteria have evolved resistance to them.

ISSN NO: 1869-9391

(18)

A Case Report in Wallenberg syndrome

Nahid[1], Dr.Namratha sunkara[2], kabita Banik[3], Twila Puspha[4]

Bharat Institute of Technology, Mangapally, Hyderabad, 501510

Corresponding author: Nahid

Introduction-

Wallenberg syndrome is also known as lateral medullary syndrome or the posterior inferior cerebellar artery syndrome. Wallenberg described the first case in 1895. This neurological disorder is associated with a variety of symptoms that occur as a result of damage to the lateral segment of the medulla posterior to the inferior olivary nucleus. It is the most typical posterior circulation ischemic stroke syndrome in clinical practice.

The primary pathology of Wallenberg syndrome is occlusion of the posterior inferior cerebellar artery (PICA) or one of its branches. The syndrome can also be due to occlusion of the vertebral artery, or the inferior, middle, or superior medullary vessels. Anatomically the infarcted area in Wallenberg syndrome is supplied by the posterior inferior cerebellar artery (PICA). The majority of cases are caused by occlusion of the vertebral artery, which gives rise to the PICA and the anterior spinal artery before it joins with the opposite vertebral artery to form the basilar artery the most common mechanism of occlusion of the vertebral artery or PICA is atherothrombosis. [1]

The symptoms of Wallenberg syndrome vary depending on the cause and location of the brain damage trouble swallowing (dysphagia),Feeling hoarse,Dizziness,Nausea and vomiting,Rapid involuntary eye movements (nystagmus),Difficulty with balance and gait (walking),Problems with body temperature sensation,Lack of pain and temperature sensation on one side of the face and the other side of the body, Vertigo, Hiccups. Horner syndrome [2]

All patients with suspected Wallenberg Syndrome should receive immediate care and neuroimaging in order to exclude differential diagnoses and to screen for any contraindications to suggested stroke therapies.In most cases, patients are initially prescribed medication in order to combat chronic/long-lasting pain. In cases of ischemic stroke, blood-thinners such as heparin or warfarin can also be prescribed to lessen the blockage in the arteries that supply the lateral medulla

Treatment management in Wallenberg syndrome include Intravenous (IV) thrombolysis with IV tissue plasminogen activator (TPA) within 3 to 4 1/2 hours of the onset of the ischemic stroke with slightly different exclusion criteria., General medical therapy, IV fluid, blood pressure management[1]. A feeding tube may be necessary if swallowing is very difficult. Speech/swallowing therapy may be beneficial. [3]

CASE REPORT-

A 35 year old male patient got admitted in a tertiary care hospital with the complaints of Giddiness since 02 days, Dysphagia, Not able to stand, Slurring of speech, difficulty in

Certificate of Publication

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | ISSN: 2320 - 2882

An International Open Access, Peer-reviewed, Refereed Journal

The Board of

International Journal of Creative Research Thoughts

Is hereby awarding this certificate to

Dr. Nahid

In recognition of the publication of the paper entitled

A CASE REPORT ON - ATENOLOL AND TELMISARTAN INDUCED ORTHOSTATIC HYPOTENSION IN HYPERTENSION CASE

Published in IJCRT (www.ijcrt.org) & 7.97 Impact Factor by Google Scholar

Volume 11 Issue 2 February 2023 , Date of Publication: 25 February-2023

UGC Approved Journal No: 49023 (18)

PAPER ID : IJCRT2302474

Registration ID : 231490

EDITOR IN CHIEF

Scholarly open access Journals, Peer-reviewed, and Refereed Journals, Impact Factor 7.97 (Calculate by google scholar and Semantic Scholar | AI-Powered Research Tool) , Multidisciplinary, Monthly Journal

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | IJCRT

An International Scholarly, Open Access, Multi-disciplinary, Indexed Journal

Website: www.ijcrt.org | Email id: editor@ijcrt.org

IJCRT | ISSN: 2320-2882 | IJCRT.ORG

ISSN NO : 0363-80

To assess clinical presentation, angiographic profile, and treatment outcome of acute myocardial infarction patients

P.Twila pushpa[1*], Chaitanya sai Ram Chimakurthi[1], Dr.S.Namratha[2], Kabita Banik[2]

[1] *P.Twila Pushpa, Assistant professor, department of pharmacy practice, Bharat institute of technology, managalpally, ibrahimpatnam, hyderabad, ranga reddy district 501510.*

[1] Chaitanya sai Ram Chimakurthi, Clinical project coordinator, IQVIA, Bengaluru, 560103.

[2]Dr.S.Namratha,M.Pharm, Phd, Associate Professor, Bharat institute of technology,Mangalpally,Hyderabad,501510

[2]Kabita Banik,Assistant professor , Pharmaceutics, *Bharat institute of technology, managalpally, ibrahimpatnam, hyderabad, ranga reddy district 501510.*

Corresponding author : P.Twila Pushpa, malikarjunanagar, boduppal,500092.

Abstract: aim & objective: To assess clinical presentation, angiographic profile, and treatment outcome of acute myocardial infarction patients admitted into cardiology department, King George Hospital.

Method: It is a hospital based prospective study, and the data was collected from the in-patients of Cardiology ward, with myocardial infarction who satisfied the inclusion criteria. Patient's demographic data, clinical data was collected from patient's case sheet; personal interview with subjects and 2D echocardiograph, angiographic data was collected from the cardiology department and was conducted for period of six months of sample size of about 64.

Results: The study among the 64 patients most of the persons were males 46 (71.8%) and 18 (28.1%) were females, finally we observed that, the prevalence of myocardial infarction & acute myocardial infarction is more in males 46 (71%). Most of the persons were reported with IWMI 26 (40%). Among the 64 patients, smokers were 17 (26.5%), persons on alcoholic were 11 (17.1%), and persons with both habits (alcohol and smoking) were 19 (29.6%), We found that, most of the persons were reported with both habits 17 (26.5%). we observed that, the persons reported to the hospital were mostly suffering with co morbidities. Among the 64 patients, hypertension is more prevalent in most of the patients 32 (50%) and found that, regional wall motion abnormality of LAD territory 22 (34.3%) is more dominant in most of the patients. The ejection fraction of <55% patients 43 (67.1%) were more dominant. patients diagnosed with different age groups along with altered ejection fractions 7 (10.9%) patients were between the age group (31-40) diagnosed with ejection fraction

ISSN- 2230-7346

Journal of Global Trends in Pharmaceutical Sciences

STUDY OF INCIDENCE OF MALARIA, DENGUE AND CHIKUNGUNYA FEVERS AMONG FEBRILE PATIENTS VISITING TERTIARY CARE HOSPITAL (KING GEORGE HOSPITAL) IN VISAKHAPATNAM

P.Twila pushpa[1*], K.Narendra Kumar[1], Dr.S.Namratha[2], Kabita Banik[3]

1Assistant professor, department of pharmacy practice, Bharat institute of technology, managalpally, ibrahimpatnam, hyderabad, ranga reddy district 501510.

[1] K.Narendra Kumar, M.pharm, Sr.Clinical research Associte, ADVITY RESEARCH PRIVATE LIMITED, kuktpally, Hyderabad, 500072.

[2] Associate Professor, Bharat institute of technology,Mangalpally,Hyderabad,501510

[3]Assistant professor , Pharmaceutics, Bharat institute of technology, managalpally, ibrahimpatnam, hyderabad, ranga reddy district 501510.

***Corresponding author E-mail id : twila.palaparthi@gmail.com.**

ARTICLE INFO

Key words:
Malaria, Dengue, chikungunya.

ABSTRACT

Aim & objective: Study of incidence of malaria, Dengue and Chikungunya fevers among febrile patients visiting tertiary care hospital (King George hospital) in Visakhapatnam

Method: The study is conducted in-patients visiting King George Hospital, which is a Government General Hospital located in Visakhapatnam, Andhra Pradesh, India. The hospital with 1237 beds serving the needs of north coastal Andhra Pradesh and adjacent Orissa for more than 150 years. Patients presenting to the health centre with some signs and symptoms compatible with the diagnosis of malaria, dengue and chikungunya (fever which can be recent or in evidence during the previous 2—4 days or/and other symptoms of febrile diseases such as chills, headache, joint, muscle and body pains).100 febrile patients shall be selected randomly at the age group of 13-60 years Patients shall also be selected on the basis of febrile and other symptoms such as chills, headache, joint, and muscle and body pains

Results and Conclusion: Age wise Distribution of Malaria, Dengue and Chikungunya, number of patients n=100 were taken, total n=72 patients were positive for Malaria, n=24 patients were positive for Dengue and n=4 patients were Chikungunya. With the Mean of 10.6 and Standard Deviation are 6.1. From the age group of "36 to 50"years n=28 number of patients positive for both males and females, form this total n=12 positive for malaria with the percentage of 16.6% and Females were n=16 with the percentage of 22.2%.From the age group "51 to 65"years n=8 number of patients positive for malaria in both males and females, from this total the male patients were n=4 positive for malaria with the percentage of 5.6%.The age wise description of Dengue a total "n=24"number of patients are positive for Dengue in both males and females. From the total n=16 number of male patients which are positive for Dengue with the percentage of 66.6% with the Mean of 5.3 and Standard Deviation is 4.7.females were n=8 number of patients with the percentage of 33.3% and in the Mean of 11.1 with Standard Deviation is 2.4. The age wise description of Chikungunya fever of different age groups a total "n=4"number

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

FORMULATION AND EVALUATION OF POLY HERBAL HAND WASH

P.Twila Pushpa[1*], Namratha Sunkara[2], Kabita Banik [3] Nahid[4]

Bharat Institute of Technology, Mangalpally, Hyderabad, 501510.

Corresponding author: P. Twila Pushpa, Email: twila.palaparthi@gmail.com,9908236572.

ABSTRACT

The aim of the present study is to formulate and evaluate herbal hand wash gel by Using extracts of Azadirachta indica (neem powder), Ocimum tenuiflorum (Tulasi powder), Mentha (mint powder), Syzygium aromaticum (clove oil), Sapindus mukorossi (rithapowder), carbolpol 940 (gelling agent), methyl Paraben (preservative), Glycerin (softening agent), distilled water, (vehicle), Turmeric (colorant),Rose oil (perfume), Saponin Extract. To select the plant materials. To extract powders from plants by air drying method to get particle free extract. To prepare herbal hand was gel by using suitable agents. To evaluate herbal hand wash gel. Like cosmetics and cosmeceuticals (a cosmetic thst has claimed medicinal properties) are topically applied but they have ingredients that influences the biological actions of skin. The WHO estimates that most of the population of Asian country presently use herbal medicine for the purpose of hand hygiene includes preparation of hand wash. the present study was carried out to formulate polyherbal hand wash gel containing herbal extract which is used not only for the purpose of cleaning hands but also for the prevention of bacterial growth. Its composition was prepared according to skin delicateness so that it cannot cause any type of irritation. Hence it can be concluded that polyherbal hand wash gel are much better than the plain soaps or existing marketed hand wash due to their ingredient's and effectiveness on our skin of hands as well a suitable for all type of skin.

Key Words:

Azadirachta indica, Ocimum tenuiflorum , Mentha, Syzygium aromaticum, Sapindus mukorossi, carbolpol 940, methyl Paraben.

FORMULATION AND EVALUATION OF POLYHERBAL HAND WASH

1. Introduction

- Hands are the major route of microbe and illness transfer; hand cleanliness is the most efficient way to prevent the spread of hazardous germs and diseases. In healthcare, hand cleanliness is the best and most effective, simplest, and affordable technique to prevent nosocomial infections. Contaminated hands can function as vectors for the spread of germs. Outbreaks are conveyed fromone human to another when a food handler contaminates his or her hands andthen transfers these bacteria to customers via hand contact with food or drinks. The user is exposed after ingesting these germs, which might cause gastrointestinal disease. Microorganisms infiltrate the food supply when people handle ready-to-eat foods.

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

STABILITY INDICATING RP-HPLC METHOD DEVELOPMENT AND VALIDATION OF DAPTOMYCIN

Dr.Namratha Sunkara*[1], Kabita Banik [2], ,P.Twila Pushpa[3],B.Swathi[4],Azka Fathima[5]

[1]Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Rangareddy Telangana India

ABSTRACT: A simple, Accurate, precise method was developed for the estimation of the Daptomycin in Tablet dosag form. The detection was carried out by using PDA detector at 223nm.Phenomenex IB-SIL C_8 column was used for the stuc as this yield peak of good shape.Buffers of different pH were tried. 3.4g/L $NH_4H_2PO_4$ adjust P^H to 3.1 ± 0.05 with H_3PO_4 w finally used because of the good symmetrical peaks.. Injection volume used was 25µl .This has yielded peaks of good shaj without any splitting. The flow rate was fixed at 0.9ml/min. This has eluted the drug around 37min.By using the method tl retention time of the Daptomycin was found to be 37.74min.System suitability conditions meet the recommend criterion.Linearity of the solution was demonstrated between 0.1506 mg/ml and 0.4519 mg/ml concentration range.Accura was demonstrated as reported. Recovery and % of RSD are within the recommended limits.Limit of detection value is 0.0000154mg/ml and limit of quantification is at 0.0000467mg/ml. Under forced degradation studies, the peak single poi threshold is always lower than purity index for Daptomycin peak and all degradant peaks were well resolved. Retention tim were decreased and run time was decreased, so the method developed was simple and economical that can be adopted regular Quality control test inIndustries.Hence the method can be adopted as a stability indicating method..

Keywords: Quality control, Daptomycin, Recovery, Wavelength.

INTRODUCTION:

Pharmaceutical Analysis is that centre branch of drug store training and research, which is advancing speedy. It can arranged as union of new medications particles and pharmaceutical investigation.The liquid chromatographic techniques, t pivoted arrange systems in perspective of balanced silica offers the most imperative probability of triumphs. In any case, extensive number of (structure) factors (parameters) impact the selectivity and the assurance. Trade legitimate methods : made for the prescription thing to diminish the cost and time[1]. Then evaluate the best division condition from trial runs. In ' light of improving the separation condition, favour the procedure for release to routine research focus.Daptomycin arep yellow crystalline powder, both the medicine are freely soluble in methanol and practically insoluble in wat Themechanismofactionofdaptomycinisdistinctfromthatofanyotherantibiotic. Daptomycin bindstobacterialmembranesandcau arapiddepolarisationofmembranepotential inbothgrowingandstationaryphasece

ISSN NO : 0363-8057

An observational study on the practice followed in India for dispensing antibiotics in community pharmacy

Nahid [1], Namratha Sunkara[2], kabita Banik[3], Twila Pushpa[4]*

Bharat institute of technology, Mangalpally, Hyderbad, 501510

Corresponding author: Nahid

***ABSTRACT**: India has one of the highest rates of antimicrobial resistance (AMR) Worldwide. Despite being prescription drugs, antibiotics are commonly available Over-the-counter (OTC) at retail or community pharmacies. We aimed to gain insight into the OTC sale of antibiotics at community pharmacy and to elucidate its underlying drivers. We conducted face-to-face, in-depth interviews using convenience sampling with the pharmacists and informal dispenser from the community pharmacy in Telangana. The subjects received a questionnaire aimed to collect data on the practice followed in India for dispensing the antibiotics. Analysis revealed that antibiotics were often dispensed OTC for conditions e.g., fever, cold, and acute diarrhea, which are typically viral and self limiting. In our study total 150 subjects were enrolled and we found that many pharmacy shops are handled and managed by other workers rather than the pharmacists the community pharmacy has developed much and growing their business. Many patients came to buy antibiotics without prescription for many reasons like cold, ear infection, throat infections, diarrhea and fever. In our study the dispensing of antibiotic according to the demographic profile Mostly sold antibiotic is Azithromycin with the percentage of 13.33%and the least sold antibiotic is .Cefadroxil with the percentage of 0.66%.We found that mostly dispensed antibiotics was for the age group between 18-5 and when comparing the gender Males (53%) and females (47%) are administrating the antibiotics.*

INTRODUCTION

Antibiotics are medicines used to prevent and treat bacterial infections. An antibiotic is a type of antimicrobial substance active against bacteria. It is most important type of antibacterial agent for fighting bacterial infections, and antibiotics medications are widely used in the treatment and prevention of such infections. [1] They may either kill or inhibit the growth of bacteria. They act as Bactericidal and bacteriostatic. Antibiotics have been used since ancient times. The first Person to directly document and treat infections was John Parkinson (1567–1650). Antibiotics revolutionized medicine in the 20th century. Alexander Fleming (1881–1955) discovered modern day penicillin in 1928, the widespread use of which proved significantly beneficial during wartime [2]. However, the effectiveness and easy access to antibiotics have also leaded to their overuse and some bacteria have evolved resistance to them.

ISSN NO: 1869

A Case Report in Wallenberg syndrome

Nahid[1], Dr.Namratha sunkara[2], kabita Banik[3], Twila Puspha[4]

Bharat Institute of Technology, Mangapally, Hyderabad, 501510

Corresponding author: Nahid

Introduction-

Wallenberg syndrome is also known as lateral medullary syndrome or the posterior inferior cerebellar artery syndrome. Wallenberg described the first case in 1895. This neurological disorder is associated with a variety of symptoms that occur as a result of damage to the lateral segment of the medulla posterior to the inferior olivary nucleus. It is the most typical posterior circulation ischemic stroke syndrome in clinical practice.

The primary pathology of Wallenberg syndrome is occlusion of the posterior inferior cerebellar artery (PICA) or one of its branches. The syndrome can also be due to occlusion of the vertebral artery, or the inferior, middle, or superior medullary vessels. Anatomically the infarcted area in Wallenberg syndrome is supplied by the posterior inferior cerebellar artery (PICA). The majority of cases are caused by occlusion of the vertebral artery, which gives rise to the PICA and the anterior spinal artery before it joins with the opposite vertebral artery to form the basilar artery the most common mechanism of occlusion of the vertebral artery or PICA is atherothrombosis. [1]

The symptoms of Wallenberg syndrome vary depending on the cause and location of the brain damage trouble swallowing (dysphagia),Feeling hoarse,Dizziness,Nausea and vomiting,Rapid involuntary eye movements (nystagmus),Difficulty with balance and gait (walking),Problems with body temperature sensation,Lack of pain and temperature sensation on one side of the face and the other side of the body, Vertigo, Hiccups. Horner syndrome [2]

All patients with suspected Wallenberg Syndrome should receive immediate care and neuroimaging in order to exclude differential diagnoses and to screen for any contraindications to suggested stroke therapies.In most cases, patients are initially prescribed medication in order to combat chronic/long-lasting pain. In cases of ischemic stroke, blood-thinners such as heparin or warfarin can also be prescribed to lessen the blockage in the arteries that supply the lateral medulla

Treatment management in Wallenberg syndrome include Intravenous (IV) thrombolysis with IV tissue plasminogen activator (TPA) within 3 to 4 1/2 hours of the onset of the ischemic stroke with slightly different exclusion criteria., General medical therapy, IV fluid, blood pressure management[1]. A feeding tube may be necessary if swallowing is very difficult. Speech/swallowing therapy may be beneficial. [3]

CASE REPORT-

A 35 year old male patient got admitted in a tertiary care hospital with the complaints of Giddiness since 02 days, Dysphagia, Not able to stand, Slurring of speech, difficulty in

ACTA SCIENTIFIC PHARMACEUTICAL SCIENCES (ISSN: 2581-5423)

Volume 6 Issue 7 July 2022

Research Article

Formulation and Evaluation of Clarithromycin Enteric Coated Microcapsules Using 2^2 - Full Factorial Designs

Kabita Banik[1]*, S Namratha[2] and Twila Pushpa[3]

[1]*Assistant Professor, Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India*

[2]*Assistant Professor, Department of Pharmaceutical Analysis, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India*

[3]*Assistant Professor, Department of Pharmacy Practice, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India*

*Corresponding Author: Kabita Banik, Assistant Professor, Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India.

Received: May 30, 2022

Published: June 29, 2022

Abstract

The purpose of the research was to develop and evaluate Clarithromycin loaded, Cellulose acetate phthalate (CAP) enteric coated, controlled release microcapsules where talc is used as an anti aggrading agent. Clarithromycin degrades rapidly at normal gastric pH (1.0-2.0) and remains stable at intestinal pH at 7.4-10 and shows rapid first-pass hepatic metabolism. In order to improve the bioavailability and reduce the gastric degradation, enteric coating microencapsulation was prepared. Clarithromycin microcapsules were formulated by solvent evaporation technique while using 2^2 factorial designs. A 2^2 full factorial designs was used to derive a statistical equation, ANOVA analysis, contour plots, and 3D response surface plots. Different polymer and anti aggregating agent ratios of CAP and talc were used to formulate five formulations (F1 to F5) of microcapsules. The relationship between dependent variables (Percentage drug release, drug entrapment efficiency, angle of repose) and independent variables (CAP and Talc) has been established by regression analysis and ANOVA.

The optimized formulations F2 exhibited high drug entrapment efficiency of 94.90 ± 0.02%, Angle of repose of % drug release of 71.51 ± 0.04% at 10 hrs. Microcapsules showed drug release by diffusion in the hydrated matrix and polymer relaxation as a controlled release mechanism.

Keywords: Clarithromycin; Enteric Coated Microencapsulation; Solvent Evaporation Technique; Cellulose Acetate Phthalate (CAP); Factorial Design

Introduction

Clarithromycin is a macrolide antibiotic used to treat pharyngitis, tonsillitis, acute maxillary sinusitis, acute bacterial exacerbation of chronic bronchitis, pneumonia (especially atypical pneumonias associated with Chlamydia pneumoniae or TWAR), skin and skin structure infections. In addition, it is sometimes used to treat Legionellosis [1], Helicobacter pylori, and lyme disease.

Clarithromycin prevents bacteria from growing by interfering with their protein synthesis. Clarithromycin binds to the subunit 50S of the bacterial ribosome and thus inhibits the translation of peptides. Clarithromycin has similar antimicrobial spectrum as erythromycin but is more effective against certain gram-negative bacteria, particularly [2] Legionella pneumophila.

Citation: Kabita Banik., *et al.* "Formulation and Evaluation of Clarithromycin Enteric Coated Microcapsules Using 2^2 - Full Factorial Designs". *Acta Scientific Pharmaceutical Sciences* 6.7 (2022): 42-53.

Dr. Namratha Sunkara

Chapter 6
Print ISBN: 978-81-19039-34-0, eBook ISBN: 978-81-19039-37-1

Quantitative Estimation Preservative Paraben and Niolone 950 Content in Herbal Skin Unguent

Kabita Banik [a#*], Namratha Sunkara [a#], P. Twila Pushpa [a#] and Nahid [a#]

DOI: 10.9734/bpi/rpst/v3/17595D

ABSTRACT

A new analytical method was developed and validated for the quantitative estimation of the preservatives, such as Paraben, by High-Performance Liquid Chromatography (HPLC) and Neolone 950 by High- Performance Thin Layer Chromatography (HPTLC), in dermatological unguent [1]. Skin creams typically contain a number of ingredients, including preservatives. The primary reason for including preservatives as antimicrobial additives in skin cream formulations is to protect consumer health and safety. Preservatives are frequently used in multi-component mixtures to broaden the spectrum of antimicrobial properties. 1. Cosmetic product ingredients are labelled in accordance with (European Union) EU legislation. We developed a quantitative method for estimating the preservative concentration in herbal skin cream. The methods described above are based on High-Performance Liquid Chromatography (HPLC) analysis and UV spectroscopy, and they are carried out under various conditions. With minimal sample preparation, the suggested method was applied successfully to the assay of methyl paraben, propyl paraben, and neolone 950 in cosmetic products [2].

Keywords: Herbal cosmetics; paraben; preservative; HPLC; HPTLC.

1. INTRODUCTION

Cream is a semi-solid emulsion composed of oil and water in the presence of an emulsifying agent [1]. They are divided into two types: oil-in-water (O/W) creams which are composed of small droplets of oil dispersed in a continuous phase, and water-in-oil (W/O) creams which are composed of small droplets of water dispersed in a continuous oily phase. Oil-in-water creams are more comfortable and cosmetically acceptable as they are less greasy and more easily washed off

[a] *Bharat Institute of Technology, Hyderabad, India.*
[#] *Assistant Professor;*
**Corresponding author: E-mail: bsnikkabita84@gmail.com;*

International Journal of Pharmaceutical Science Invention
ISSN (Online): 2319-6718, ISSN (Print): 2319- 670X
www.ijpsi.org Volume 12 Issue 3 | May –June. 2023 | PP. 92-96

27

Simultaneous Estimation of Telmisartan and Azelnidipine by RP- HPLC

Namratha Sunkara*[1], Suveen[2], Pavan[3], Dinesh[4], Praveen[5], Vaishnavi[6]
Bharat School of Pharmacy, Mangalpally Ibrahimpatnam, Rangareddy, Telangana, India
**Author for correspondence*
Dr.Namratha Sunkara,
PROFESSOR
Hyderabad

ABSTRACT: *In the present work new has been developed and validated for the present drug release of Telmisartan and Azelnidipinein bulk and tablet dosage form. New method was established for simultaneous estimation of Azelnidipine and Telmisartan by RP-HPLC methods. The chromatographic conditions were successfully developed for the separation of Azelnidipine and Telmisartan by using Inertsil ODSC18 column (4.6×250mm)5µ, flow rate was 1ml/min, mobile phase ratio was (70:30 v/v) ACN: KH2PO4 ph 3, detection wavelength was 225nm. The instrument used for HPLC, WATERS HPLC Auto Sampler, Separation module 2695, photo diode array detector 996, Empower-software version-2. The retention times were found to be 2.798 mins and 3.587 mins. The % purity of Azelnidipine and Telmisartan was found to be 99.87% and 100.27% respectively. The system suitability parameters for Azelnidipine and Telmisartan such as theoretical plates and tailing factor were found to be 4260, 1.2 and 5085 and 1.2, the resolution was found to be 7.67. The analytical method was validated according to ICH guidelines (ICH, Q2 (R1)). The linearity study of Azelnidipine and Telmisartan was found in concentration range of 50µg-250µg and 15µg-55µg and correlation coefficient (r²) was found to be 0.999 and 0.999, % recovery was found to be 98.56% and 99.96%, %RSD for repeatability was 1.2, % RSD for intermediate precision was 1.9. The precision study was precision, robustness and repeatability. LOD value was 3.72 and 0.0242 and LOQ value was 7.40 and 0.0202 respectively.*
Hence the suggested RP-HPLC can be used for routine analysis of Azelnidipine and Telmisartan in API and Pharmaceutical dosage form.

Date of Submission: 08-06-2023 Date of acceptance: 21-06-2023

I. INTRODUCTION:

HIGH PRESSURE LIQUID CHROMATOGRAPHY

High Performance Liquid Chromatography (HPLC) is a process of separating components in a liquid mixture. A liquid sample is injected into a stream of solvent (mobile phase) flowing through a column packed with a separation medium (stationary phase). Sample components separate from one another by a process of differential migration as they flow through the column.

II. MATERIALS AND METHOD:

Preparation of phosphate buffer:

3.4gm of potassium dihydrogen ortho phosphate is taken in 1000ml of hplc water pH was adjusted with 0.1M NAOH up to 3.0 final solution was filtered through 0.45 µ m Membrane filter and sonicate it for 10 min

TELMISARTAN AND AZELNIDIPINE :

Preparation of sample solution :

Accurately weigh and transfer the equivalent weight of 40 mg of Telmisartan and 8 mg of Azelnidipine Tablet powder into a 10 ml clean dry volumetric flask add about 7 mL of Diluent and sonicate to dissolve it completely and make volume up to the mark with the same solvent. (Stock solution)

Further pipette 0.75 ml of the above stock solutions into a 10ml volumetric flask and dilute up to the mark with diluent.

Preparation of standard solution :

Accurately weigh and transfer 40 mg of Telmisartan and 8 mg of Azelnidipine working standard into a 10 ml clean dry volumetric flask add about 7 mL of Diluent and sonicate to dissolve it completely and make volume up to the mark with the same solvent. (Stock solution)

A Novel Approach to Develop Tramadol Hydrochloride Transdermal Films with Complete *In-Vitro* Evaluation

KABITA BANIK[1], DR. NAMRATHA[2], TWILA[3], K HARIKA[4]
[1, 2, 3, 4] *Bharat Institute of Technology, Hyderabad, Telengana.*

Abstract— The oral route is now the most prevalent method of medication administration. While it has the benefit of being simple to administer, it also has substantial disadvantages, including low bioavailability due to hepatic metabolism and the propensity to cause fast blood level spikes, necessitating high and/or frequent doses, which may be expensive and inconvenient. In this study, hydroxypropyl methyl cellulose 6 cps (HPMC 6 cps) and ethyl cellulose are used as release-controlling polymers to create a matrix type transdermal drug delivery system for the analgesic medication tramadol HCl for its systemic delivery. This new drug delivery systems has increased the therapeutic efficacy and safety of pharmaceuticals by allowing for more accurate, site-specific delivery system, it allows temporal placement inside the body, resulting in smaller dosages consumption.

Indexed Terms— Transdermal films, Hydroxypropyl methyl cellulose, Ethylcellulose polymer, Tramadol HCl

I. INTRODUCTION

Transdermal medication delivery refers to the movement of a medicinal substance via the dermis of the skin for later systemic distribution. Therefore, properly speaking, this includes both traditional subcutaneous administrations with a hypodermic needle and syringe as well as the better recognised "patch." By this wide definition, the medication must enter the body through an artificial pathway, which is a feature of all transdermal drug delivery techniques. The key benefit of this method is that the medicine enters the body undisturbed and bypasses the body's different defence mechanisms[1]. The transdermal route of medication administration, while less convenient than oral administration (such as eating a tablet), avoids both drug breakdown in the gastrointestinal system and lower effectiveness due to first-pass metabolism (i.e. in the liver). Additionally, oral-specific adverse effects like liver damage—common with medications like estradiol (oestrogen) or paracetamol—are avoided. [2]

- Conventional patching techniques

Despite the fact that infusion pumps are dependable in providing the desired therapeutic administration profile, using one (such as an insulin pump) is rather difficult, expensive, and necessitates a hypodermic needle-based infusion set [2]. Drug administration using transdermal patches, where the medication diffuses through the skin, is far more practical while still providing the advantages of continuous drug release [3]. Depending on the patch size, the medications now used topically range in molecular weight from 162 Da (for nicotine) to 357 Da (for oxybutynin), with a realistic dosing rate of 4 -20 mg/day. The mass of an insulin molecule is 5808 Da, but the molecular weight of contemporary DNA -based vaccines, which are composed of vectors with thousands of base pairs, may range from hundreds to thousands of kilo Daltons (kDa) [4-5].

II. MATERIALS AND METHODS

All the materials used in formulation, evaluation and other experiments are listed below. Distilled water is used in all experiments.

S.No	Use	Material	Source
1	Drug	Tramadol HCl	Hyderabad Chemicals Pharma Ltd
2	Polymer	Hydroxy Propyl Methyl Cellulose 6 cps	Dr. Reddy's Laboratories Ltd
		Ethyl Cellulose	Dr. Reddy's Laboratories Ltd
3	Plasticizer	Polyethylene glycol 400	S.D Fine Chemicals
		Glycerin	S.D Fine Chemicals
4	Solvent	Isopropyl alcohol	S.D Fine Chemicals
5	Solvent	Acetone	S.D Fine Chemicals
6	Lubricant	Liquid Paraffin	S.D Fine Chemicals

Table 1: List of materials used

REVIEW ARTICLE ON ULTRA PERFORMANCE LIQUID CHROMATOGRAPHY

Dr.Namratha Sunkara [1] G.Anvitha [2] G. Yamini [3] G.Deepika [4] G.Induprlya [5] G.Srikanth [6]
Bharat Institute of Technology, Mangalpally, Hyderabad, 501510.

Corresponding author: Dr. Namratha sunkara,

ABSTRACT:

UPLC is a modern technique which gives a new direction for liquid chromatography. UPLC refers to ultra performance liquid chromatography, which enhance mainly in three areas: "speed, resolution and sensitivity. Ultra performance liquid chromatography (UPLC) applicable for particle less than 2µm in diameter to acquire better resolution, speed, and sensitivity compared with high-performance liquid chromatography (HPLC). In twenty first centenary pharmaceutical industries are focusing for new ways to in economy and shorten time for development of drugs. UPLC analysis at the mean time gives the better quality of their products and analytical laboratories are not exception in this trend. The separation and quantification in UPLC is done under very high pressure (up to 100M Pa). As compare to HPLC, under high pressure it is observed that not any negative influence on analytical column and also other components like time and solvent consumption is less in UPLC

Introduction:

Ultra performance liquid chromatography systems take advantage of technological pace in particle chemistry performance, system optimization, detector design and data processing. When taken together, these achievements have created an improvement in chromatographic performance. UPLC retains the practicality and principles of HPLC and along with that increases the overall interrelated attributes of speed, sensitivity and resolution. Speed allows a greater number of analyses to be performed in a shorter amount of time thereby increasing sample throughput and lab productivity. Faster analysis and hence called as ultra performance liquid chromatography, achieves both higher sample analysis throughput and better assay sensitivity. Analysis of operation cost and sample throughput UPLC cost advantageous over HPLC.1 The factor responsible for the development of UPLC technique was evolution of packing materials used to effect the separation. The principles behind this evolution are governed by the van Dee meter equation that describes the relationship between linear velocity and plate height.

According to the van Dee meter equation, decrease in particle size increases the efficiency of separations while on other hand efficiency diminishes and peak capacity can be extended to new limits, termed ultra performance liquid chromatography (UPLC). This technology takes full advantage of chromatographic principles to run separations using columns packed with smaller particles and/or higher flow rates for increased speed, with superior resolution and sensitivity.1 The use of non-porous particles, however, has been limited in the pharmaceutical industry due to their low sample loading capacity. The Milford, Massachusetts based company Waters Corporation introduced ACQUITY UPLC, the commercially available system that addresses the challenge of using elevated pressure and 2 mm particles, which makes it a particularly attractive and promising tool for fast Liquid Chromatographic method development. Engineering challenges of operating at high pressures and the high performance expected from such columns necessitates new developed pumps, redesigned injector, reduced system volumes, an increased detector sampling rate, and other improvements. To be suitable for the analysis of pharmaceutical development samples under GMPs, the UPLC instrument and columns must not only deliver on its promises for fast, high resolution separations but do so reproducibly and with the required sensitivity.In addition to the speed at which the data can be obtained, the quality of the data is also improved. It is clear that the quality of the UPLC-MS spectra is better than that of the Capillary LC-MS spectra with much improved signal-to-noise ratio. 3 This new category of analytical separation science retains the practicality and principles of HPLC while

International Journal of All Research Education and Scientific Methods (IJARESM),
ISSN: 2455-6211, Volume 11, Issue 10, October-2023, Available online at: www.ijaresm.com

Formulation and in Vitro Characterization of Nelfinavir Extended-Release Tablets

Gundavi Ramyasri[1], Namratha Sunkara[1]

[1]Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Hyderabad

ABSTRACT

The current study's objective was to develop a Nelfinavir drug delivery system based on extended release (ER). Four separate batches of Nelfinavir ER tablets were made using the direct compression method based on varying ethyl cellulose (EC) concentrations. The tablets' pre-compression and post-compression characteristics were established. N4 was judged to be the best batch out of all of them based on the highest drug release. The results for all formulations made it clear that the polymer of the core can regulate the rate of medication release. Therefore, current tablet design technologies can offer more benefits than traditional tablets.

Keywords: extended release, Nelfinavir, ethyl cellulose, direct compression

INTRODUCTION

Because of its simplicity in administration, consistent drug release into systemic circulation, and improved patient compliance, oral extended release (ER) systems command the largest market share among the numerous innovative drug delivery systems (NDDS) on the market. Compared to quick release formulation, these dosage forms offer a number of advantages, such as improved effectiveness in treating chronic illnesses, less side effects, and improved patient convenience because of a more straightforward dose regimen [1].

To provide therapeutically effective drug concentrations to the systemic circulation for an extended period of time, ER oral administration devices were created. Reduced side effects, improved convenience and patient compliance, and reduced dosing frequency are all therapeutic benefits of a correctly designed DR dosage form [2]. Controlled release polymer is used into dose forms to primarily achieve ER effect. This study's goal was to create ER Nelfinavir tablets using the direct compression method with ethylcellulose as the appropriate polymer.

MATERIALS AND METHODS

Materials

Nelfinavir was obtained from Cipla Laboratories Ltd, Goa, India. Microcrystalline cellulose (MCC, Avicel pH 101) was purchased from Signet Pharma, Mumbai. EC were obtained as a gift sample from SD Fine Chem Ltd, Mumbai. All other ingredients used were of laboratory reagents and used as such without further testing. All other solvents and reagents usedwere of analytical grade.

DRUG EXCIPIENT STUDIES

Fourier Transform Infrared (FTIR) Spectroscopy Study

FTIR is used to know characteristics peaks indicating compatibility between drug and excipients. The FTIR allows identification of functional groups [3] in various chemicals as well as incompatibilities between the drug and excipients.

Preparation of extended release (ER) tablets

The direct compression approach was used to create the tablets [4]. Ingredients in Table 1 were accurately weighed, with the exception of the lubricant (magnesium stearate) and glidant (aerosil), which passed through filter number 60. Gliding and lubricating fluid were run through sieve No. 80.

By using geometric dilution, all the ingredients—aside from the lubricant and glidant—were physically mixed together in a mortar. With the use of a rotary compression machine, the powders were compacted into spherical tablets.

Acta Scientific Pharmaceutical Sciences (ISSN: 2581-5423)

Formulation and Evaluation of Clarithromycin Loaded Gastric Floating Microspheres Using 3² Full Factorial Design

Kabita Banik*, S Narendra and Twila Panlya

[illegible]

Received: May [illegible] 2022
Published: June [illegible] 2022
© All rights are reserved by Kabita Banik, et al.

Abstract

[illegible]

Keywords: [illegible]

Introduction

[illegible]

[illegible]

2. [illegible]

[illegible]

12/9/2022, 11:56 AM

INTERNATIONAL JOURNAL OF CREA
RESEARCH THOUGHTS (IJCRT)
An International Open Access, Peer-reviewed, Refereed Jour

REVIEW ARTICLE ON FTIR SPECTROSCOPY

Dr.Namratha Sunkara[1] G.Anvitha[2] G. Yamini[3] G.Deepika[4] G.Indupriya[5] G.Srikanth[6]
Bharat Institute of Technology, Mangalpally, Hyderabad, 501510.

ABSTRACT:

Qualitative Fourier transform infrared (FTIR) spectroscopy has long been established and implemented in a wide variety of fields including pharmaceutical, bio-medical, and clinical fields. While the quantitative applications are yet to reach their full potential, this technique
is flourishing. It is tempting to shed light on modern engaging and the applicability of analytical quantitative FTIR spectroscopy in the aforementioned fields. More importantly, the credibility, validity, and generality of the application will be thoroughly demonstrated by reviewing the latest published work in the scientific literature. Utilizing FTIR spectroscopy in a quantitative approach in pharmaceutical, biomedical, and interdisciplinary fields has many
undeniable advantages over traditional procedures. An insightful account will be undertaken in this regard. The technique will be introduced as an appealing alternative to common methods such as high performance liquid chromatography. It is anticipated that the review will offer researchers an update of the current status and prospection the subject among the pharmacy and biomedical sciences both in academic and industrial fields.

INTRODUCTION:

The measurement of infrared light absorption (or transmission) by a material as a function of wavelength is known as infrared (IR) spectroscopy (or frequency). The IR spectrum is produced as a plot of absorption (or transmission) versus wavelength (or frequency). The fundamental heat spectrum of materials, which is principally caused by molecular vibrations and their corresponding rotating absorption bands, is examined using infrared spectroscopy. [1]The IR spectroscopy was the first structural spectroscopic technique and is an analytical method which is used to characterize the bonding structure of atoms based on the interaction of the IR radiation at which the substance absorbs and lead to the production of vibration in molecules. It gives the techniques for identification and characterization of chemical structures to obtain information from biological to composite materials, from liquids to gases. [3]The basic principle of IR is measurement of amount of IR radiation by absorption, emission or reflection. It is also called as vibrational spectroscopy. It is widely used for structural elucidation of molecules. The spectral regions can be divided into further 3 regions; the FAR Infrared (400-10 cm-1), MID Infrared (4000-400 cm-1), NIR
(13000-4000 cm-1). It is based on the absorption pattern of other compounds including isomers. When reference spectra available, most compound can be obvious identified on the basis of spectra of IR. [2]
Most widely used IR is MIR, but remaining both can also provide important information. FTIR is real time measurement analytical method and
non-destructive technique, which is unable to identify the unknown compounds (quantitative determination) and their corresponding concentration (qualitative determination) from liquid, gas or solid samples. During vibrations, there is change in the dipole moment. In this case we can called as IR active substances and a radiation corresponds to a change in dipole moment. For
IR inactive substances, the dipole moment is zero, there is no matter how long the bond is in the molecule (IR -

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

www.rjptonline.org

RJPT

RESEARCH ARTICLE

Phytochemical screening and *Invitro* Anticancer activity of *Lonicera ligustrina* leaf extract on Breast and Colorectal carcinoma cell lines

Chaganti Sai Sri Rama Chandra Murthy[1], Arun Kumar Saunpala[2]*, Unnam Sambamoorthy[3], Kasireddy Paul babu[4], Namrutha Sunkara[5]

[1,3]Sree Dattha Institute of Pharmacy, Sheriguda, Ibrahimpatnam, Hyderabad, Telangana, India.
[2]Research Scholar, Department of Pharmacy, JNTUK, Kakinada, Andhra Pradesh, India.
[4]St. Mary College of Pharmacy, Surampalem, Kakinada, Andhra Pradesh, India.
[5]Department of Pharmacy, Bharat Institute of Technology, Ibrahimpatnam, Rangareddy, Telangana, India.
*Corresponding Author E-mail: saunpala787@gmail.com

ABSTRACT:

Cancer can be described as a disease characterized by groups of aberrant cells that undergo uncontrolled proliferations in the absence of cell cycle regulation. The metastasize cancer cells spread to various locations in the body where their uncontrolled growth invades the normal tissue. Cancer comprises more than hundred different diseases, including malignant tumors of different sites such as breast, cervix, stomach, intestines, colon, lung, mouth etc. There are numerous factors responsible for the cause, like genetic, tobacco, chemicals, environmental factors, hormones etc. Cancer detection is described by their pathological grade and clinical stage. Thus we have made an attempt to use *Lonicera ligustrina* herbal extract to check the efficacy against breast and colorectal carcinoma cell lines. The present study aimed to evaluate preliminary phytochemical screening and *invitro* anticancer potential activities against MCF-7(breast) and HCT-116 (colorectal) cancer cell lines. Samples shown significant activity at its higher concentration and the IC50 value of breast cell lines 24.45µM (MCF-7) and colorectal cell lines 9.219µM (HCT-116) inhibition. Standard Doxorubicin tested against MCF-7 and HCT-116 cell lines showed IC50 value of 18.76µM and 16.89µM inhibition. Therefore, a dynamic view of IC_{50} values and the methods used to detect the density-dependent IC_{50} spectrum of a cancer cell line (primary or passaged) established. This view will benefit patients and the cancer research community as a whole.

KEYWORDS: Cancer, cell lines, Breast, Colorectal, Doxorubicin, Culture.

INTRODUCTION:

Cancer can be described as a diseases characterized by groups of aberrant cells that undergo uncontrolled proliferation in the absence of cell cycle regulation. The metastasize cancer cells spread to various locations in the body where their uncontrolled growth invades the normal tissue. Cancer comprises more than hundred different diseases, including malignant tumors of different sites such as breast, cervix, stomach, intestines, colon, lung, mouth etc. There are numerous factors responsible for the cause, like genetic, tobacco, chemicals, environmental factors, hormones etc.

Received on 18.08.2020 Modified on 20.02.2021
Accepted on 18.07.2021
Research J. Pharm. and Tech. 2022; 15(8):3485-3489.
DOI: 10.52711/0974-360X.2022.00584

Cancer detection is described by their pathological grade and clinical stage [1,2]. The cancer treatment includes surgery, radiation, hormone therapy and chemotherapy [3]. Medicines from plant sources have gained importance in therapeutic efficacy with minimum adverse effects. Hence there is need for continuous investigation and inclusion of secondary plant metabolites for efficient therapeutic system. *Lonicera ligustrina* shrub belongs to family caprifoliaceae grows in Bhutan, Nepal, India and China. The leaves claimed to have Antioxidant, anti-inflammatory, laxative, Antidiabetic, Anticancer and urinary disorders based on practices[4,5]. However, this plant has not been studied for anticancer activity on breast and colorectal carcinoma. Thus we have made an attempt to use this herbal extract to check the efficacy against Breast and Colorectal carcinoma cells [6,7]. The present study aimed to evaluate preliminary phytochemical screening and *invitro* anticancer potential

IJCRT.ORG ISSN

INTERNATIONAL JOURNAL OF CRE
RESEARCH THOUGHTS (IJCRT)
An International Open Access, Peer-reviewed, Refereed J

33

STABILITY INDICATING RP-HPLC METHO DEVELOPMENT AND VALIDATION OF DAPTOMYCIN

Dr.Namratha Sunkara*[1], Kabita Banik [2], ,P.Twila Pushpa[3],B.Swathi[4],Azka Fathima[5]

[1]Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Rangareddy Telangana India

ABSTRACT: A simple, Accurate, precise method was developed for the estimation of the Daptomycin in Tablet dos form. The detection was carried out by using PDA detector at 223nm.Phenomenex *IB-SIL.* C_8 column was used for the st as this yield peak of good shape.Buffers of different pH were tried. 3.4g/L $NH_4H_2PO_4$ adjust ^{pH} to 3.1 ± 0.05 with H_3PO_4 finally used because of the good symmetrical peaks.. Injection volume used was 25µl .This has yielded peaks of good sha without any splitting. The flow rate was fixed at 0.9ml/min. This has eluted the drug around 37min.By using the method retention time of the Daptomycin was found to be 37.74min.System suitability conditions meet the recommend criterion.Linearity of the solution was demonstrated between 0.1506 mg/ml and 0.4519 mg/ml concentration range.Accura was demonstrated as reported. Recovery and % of RSD are within the recommended limits.Limit of detection value is 0.0000154mg/ml and limit of quantification is at 0.0000467mg/ml. Under forced degradation studies, the peak single poi threshold is always lower than purity index for Daptomycin peak and all degradant peaks were well resolved. Retention time were decreased and run time was decreased, so the method developed was simple and economical that can be adopted i regular Quality control test inIndustries.Hence the method can be adopted as a stability indicating method.

Keywords: Quality control, Daptomycin, Recovery, Wavelength.

INTRODUCTION:

Pharmaceutical Analysis is that centre branch of drug store training and research, which is advancing speedy. It can be arranged as union of new medications particles and pharmaceutical investigation.The liquid chromatographic techniques, the pivoted arrange systems in perspective of balanced silica offers the most imperative probability of triumphs. In any case, an extensive number of (structure) factors (parameters) impact the selectivity and the assurance. Trude legitimate methods are made for the prescription thing to diminish the cost and time'. Then evaluate the best division condition from trial runs. In the wake of improving the separation condition, favour the procedure for release to routine research focus. Daptomycin arepale yellow crystalline powder, both the medicine are freely soluble in methanol and practically insoluble in water[7]. Themechanismofactionofdaptomycinisdistinctfromthatofanyotherantibiotic. Daptomycin bindstobacterialmembranesandcauses arapiddepolarisationoftuenbranepotential

inbothgrowingandstationaryphusecells.

A Case Report in Wallenberg syndrome

Nahid[1], Dr.Namratha sunkara[2], kabita Banik[3], Twila Puspha[4]

Bharat Institute of Technology, Mangapally, Hyderabad, 501510

Corresponding author: Nahid

Introduction-

Wallenberg syndrome is also known as lateral medullary syndrome or the posterior inferior cerebellar artery syndrome. Wallenberg described the first case in 1895. This neurological disorder is associated with a variety of symptoms that occur as a result of damage to the lateral segment of the medulla posterior to the inferior olivary nucleus. It is the most typical posterior circulation ischemic stroke syndrome in clinical practice.

The primary pathology of Wallenberg syndrome is occlusion of the posterior inferior cerebellar artery (PICA) or one of its branches. The syndrome can also be due to occlusion of the vertebral artery, or the inferior, middle, or superior medullary vessels. Anatomically the infarcted area in Wallenberg syndrome is supplied by the posterior inferior cerebellar artery (PICA). The majority of cases are caused by occlusion of the vertebral artery, which gives rise to the PICA and the anterior spinal artery before it joins with the opposite vertebral artery to form the basilar artery the most common mechanism of occlusion of the vertebral artery or PICA is atherothrombosis. [1]

The symptoms of Wallenberg syndrome vary depending on the cause and location of the brain damage trouble swallowing (dysphagia),Feeling hoarse,Dizziness,Nausea and vomiting,Rapid involuntary eye movements (nystagmus),Difficulty with balance and gait (walking),Problems with body temperature sensation,Lack of pain and temperature sensation on one side of the face and the other side of the body, Vertigo, Hiccups, Horner syndrome [2]

All patients with suspected Wallenberg Syndrome should receive immediate care and neuroimaging in order to exclude differential diagnoses and to screen for any contraindications to suggested stroke therapies.In most cases, patients are initially prescribed medication in order to combat chronic/long-lasting pain. In cases of ischemic stroke, blood-thinners such as heparin or warfarin can also be prescribed to lessen the blockage in the arteries that supply the lateral medulla

Treatment management in Wallenberg syndrome include Intravenous (IV) thrombolysis with IV tissue plasminogen activator (TPA) within 3 to 4 1/2 hours of the onset of the ischemic stroke with slightly different exclusion criteria., General medical therapy, IV fluid, blood pressure management[3]. A feeding tube may be necessary if swallowing is very difficult. Speech/swallowing therapy may be beneficial [4]

CASE REPORT-

A 35 year old male patient got admitted in a tertiary care hospital with the complaints of Giddiness since 02 days, Dysphagia, Not able to stand, Slurring of speech, difficulty in

VOLUME 9 ISSUE 12

Share IJCRT2211...

ISSN : 2320-2882

INTERNATIONAL JOURNAL OF C
RESEARCH THOUGHTS (IJCRT)
An International Open Access, Peer-reviewed, Refereed Journal

1 / 21

FORMULATION AND EVALUATION OF POLY HERBAL HAND WASH

ABSTRACT

[illegible]

Key Words

[illegible]

FORMULATION AND EVALUATION OF POLYHERBAL HAND WASH

1. Introduction

- [illegible]

- [illegible]

- [illegible]

- [illegible]

i) Epidermis

ii) Dermis

iii) Subcutaneous Tissue

III Epidermis

[illegible]

2) Stratum corneum

[illegible]

2) [illegible]

12/9/2022, 11:58 AM

ACTA SCIENTIFIC PHARMACEUTICAL SCIENCES (ISSN: 2581-5423)

Volume 6 Issue 7 July 2022

Research Article

Formulation and Evaluation of Clarithromycin Enteric Coated Microcapsules Using 2^2 - Full Factorial Designs

Kabita Banik[1]*, S Namratha[2] and Twila Pushpa[3]

[1]Assistant Professor, Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India

[2]Assistant Professor, Department of Pharmaceutical Analysis, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India

[3]Assistant Professor, Department of Pharmacy Practice, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India

*Corresponding Author: Kabita Banik, Assistant Professor, Department of Pharmaceutics, Bharat Institute of Technology, Mangalpally, Hyderabad, Telangana, India.

Received: May 30, 2022

Published: June 29, 2022

Abstract

The purpose of the research was to develop and evaluate Clarithromycin loaded, Cellulose acetate phthalate (CAP) enteric coated, controlled release microcapsules where talc is used as an anti aggrading agent. Clarithromycin degrades rapidly at normal gastric pH (1.0-2.0) and remains stable at intestinal pH at 7.4-10 and shows rapid first-pass hepatic metabolism. In order to improve the bioavailability and reduce the gastric degradation, enteric coating microencapsulation was prepared. Clarithromycin microcapsules were formulated by solvent evaporation technique while using 2^2 factorial designs. A 2^2 full factorial designs was used to derive a statistical equation, ANOVA analysis, contour plots, and 3D response surface plots. Different polymer and anti aggregating agent ratios of CAP and talc were used to formulate five formulations (F1 to F5) of microcapsules. The relationship between dependent variables (Percentage drug release, drug entrapment efficiency, angle of repose) and independent variables (CAP and Talc) has been established by regression analysis and ANOVA.

The optimized formulations F2 exhibited high drug entrapment efficiency of 94.90 ± 0.02%, Angle of repose of % drug release of 71.51 ± 0.04% at 10 hrs. Microcapsules showed drug release by diffusion in the hydrated matrix and polymer relaxation as a controlled release mechanism.

Keywords: Clarithromycin; Enteric Coated Microencapsulation; Solvent Evaporation Technique; Cellulose Acetate Phthalate (CAP); Factorial Design

Introduction

Clarithromycin is a macrolide antibiotic used to treat pharyngitis, tonsillitis, acute maxillary sinusitis, acute bacterial exacerbation of chronic bronchitis, pneumonia (especially atypical pneumonias associated with Chlamydia pneumoniae or TWAR), skin and skin structure infections. In addition, it is sometimes used to treat Legionellosis [1], Helicobacter pylori, and lyme disease.

Clarithromycin prevents bacteria from growing by interfering with their protein synthesis. Clarithromycin binds to the subunit 50S of the bacterial ribosome and thus inhibits the translation of peptides. Clarithromycin has similar antimicrobial spectrum as erythromycin but is more effective against certain gram-negative bacteria, particularly [2] Legionella pneumophila.

Citation: Kabita Banik, *et al.* "Formulation and Evaluation of Clarithromycin Enteric Coated Microcapsules Using 2^2 - Full Factorial Designs". *Acta Scientific Pharmaceutical Sciences* 6.7 (2022): 42-53.

ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

STABILITY INDICATING RP-HPLC METHOD DEVELOPMENT AND VALIDATION OF DAPTOMYCIN

(39)

Dr.Namratha Sunkara*[1], Kabita Banik [2], ,P.Twila Pushpa[3],B.Swathi[4],Azka Fathima[5]

[1]Bharat Institute of Technology, Mangalpally, Ibrahimpatnam, Rangareddy Telangana India

ABSTRACT: A simple, Accurate, precise method was developed for the estimation of the Daptomycin in Tablet dosage form. The detection was carried out by using PDA detector at 223nm.Phenomenex IB-SIL C_8 column was used for the study as this yield peak of good shape.Buffers of different pH were tried. 3.4g/L $NH_4H_2PO_4$ adjust P^H to 3.1 ± 0.05 with H_3PO_4 was finally used because of the good symmetrical peaks.. Injection volume used was 25µl .This has yielded peaks of good shape without any splitting. The flow rate was fixed at 0.9ml/min. This has eluted the drug around 37min.By using the method the retention time of the Daptomycin was found to be 37.74min.System suitability conditions meet the recommended criterion.Linearity of the solution was demonstrated between 0.1506 mg/ml and 0.4519 mg/ml concentration range.Accuracy was demonstrated as reported. Recovery and % of RSD are within the recommended limits.Limit of detection value is at 0.0000154mg/ml and limit of quantification is at 0.0000467mg/ml. Under forced degradation studies, the peak single point threshold is always lower than purity index for Daptomycin peak and all degradant peaks were well resolved. Retention times were decreased and run time was decreased, so the method developed was simple and economical that can be adopted in regular Quality control test inIndustries.Hence the method can be adopted as a stability indicating method.

Keywords: Quality control, Daptomycin, Recovery, Wavelength.

INTRODUCTION:

Pharmaceutical Analysis is that centre branch of drug store training and research, which is advancing speedy. It can be arranged as union of new medications particles and pharmaceutical investigation.The liquid chromatographic techniques, the pivoted arrange systems in perspective of balanced silica offers the most imperative probability of triumphs. In any case, an extensive number of (structure) factors (parameters) impact the selectivity and the assurance. Trade legitimate methods are made for the prescription thing to diminish the cost and time[1]. Then evaluate the best division condition from trial runs. In the wake of improving the separation condition, favour the procedure for release to routine research focus.Daptomycin arepale yellow crystalline powder, both the medicine are freely soluble in methanol and practically insoluble in water[2]. Themechanismofactionofdaptomycinisdistinctfromthatofanyotherantibiotic. Daptomycin bindstobacterialmembranesandcauses rapiddepolarisationofmembranepotential Inbothgrowingandstationaryphasecells.

To assess clinical presentation, angiographic profile, and treatment outcome of acute myocardial infarction patients

P.Twila pushpa[1*], Chaitanya sai Ram Chimakurthi[1], Dr.S.Namratha[2], Kabita Banik[2]

1 P.Twila Pushpa, Assistant professor, department of pharmacy practice, Bharat institute of technology, managalpally, ibrahimpatnam, hyderabad, ranga reddy district 501510.

[1] Chaitanya sai Ram Chimakurthi, Clinical project coordinator, IQVIA, Bengaluru, 560103.

[2]Dr.S.Namratha,M.Pharm, Phd, Associate Professor, Bharat institute of technology,Mangalpally,Hyderabad,501510

[2]Kabita Banik,Assistant professor , Pharmaceutics, *Bharat institute of technology, managalpally, ibrahimpatnam, hyderabad, ranga reddy district 501510.*

Corresponding author : P.Twila Pushpa, malikarjunanagar, boduppal,500092.

Abstract: aim & objective: To assess clinical presentation, angiographic profile, and treatment outcome of acute myocardial infarction patients admitted into cardiology department, King George Hospital.

Method: It is a hospital based prospective study, and the data was collected from the in-patients of Cardiology ward, with myocardial infarction who satisfied the inclusion criteria. Patient's demographic data, clinical data was collected from patient's case sheet; personal interview with subjects and 2D echocardiograph, angiographic data was collected from the cardiology department and was conducted for period of six months of sample size of about 64.

Results: The study among the 64 patients most of the persons were males 46 (71.8%) and 18 (28.1%) were females, finally we observed that, the prevalence of myocardial infarction & acute myocardial infarction is more in males 46 (71%). Most of the persons were reported with IWMI 26 (40%). Among the 64 patients, smokers were 17 (26.5%), persons on alcoholic were 11 (17.1%), and persons with both habits (alcohol and smoking) were 19 (29.6%), We found that, most of the persons were reported with both habits 17 (26.5%). we observed that, the persons reported to the hospital were mostly suffering with co morbidities. Among the 64 patients, hypertension is more prevalent in most of the patients 32 (50%) and found that, regional wall motion abnormality of LAD territory 22 (34.3%) is more dominant in most of the patients. The ejection fraction of <55% patients 43 (67.1%) were more dominant. patients diagnosed with different age groups along with altered ejection fractions 7 (10.9%) patients were between the age group (31-40) diagnosed with ejection fraction

Journal of Global Trends in Pharmaceutical Sciences
ISSN- 2230-7346

STUDY OF INCIDENCE OF MALARIA, DENGUE AND CHIKUNGUNYA FEVERS AMONG FEBRILE PATIENTS VISITING TERTIARY CARE HOSPITAL (KING GEORGE HOSPITAL) IN VISAKHAPATNAM

P. Twila pushpa[1*], K. Narendra Kumar[1], Dr. S. Namratha[2], Kabita Banik[2]

[*1]Department of Pharmacy Practice, Bharat Institute of Technology, Managalpally, Ibrahimpatnam, Hyderabad, Ranga Reddy District 501510.
[1]Sr.Clinical research Associte, Advity Research Private Limited, kuktpally, Hyderabad, 500072.
[2] Bharat institute of technology, Mangalpally, Hyderabad, 501510
[2]Department of Pharmaceutics, Bharat Institute of Technology, Managalpally, Ibrahimpatnam, Hyderabad, Ranga Reddy District 501510.
*Corresponding author E-mail: twila.palaparthi@gmail.com.

ARTICLE INFO

Key words:

Malaria, Dengue, Chikungunya.

Access this article online
Website:
Quick Response Code:

ABSTRACT

Aim & objective: Study of incidence of malaria, Dengue and Chikungunya fevers among febrile patients visiting tertiary care hospital (King George hospital) in Visakhapatnam. *Method:* The study is conducted in-patients visiting King George Hospital, which is a Government General Hospital located in Visakhapatnam, Andhra Pradesh, India. The hospital with 1237 beds serving the needs of north coastal Andhra Pradesh and adjacent Orissa for more than 150 years. Patients presenting to the health centre with some signs and symptoms compatible with the diagnosis of malaria, dengue and chikungunya (fever which can be recent or in evidence during the previous 2-4 days or/and other symptoms of febrile diseases such as chills, headache, joint, muscle and body pains).100 febrile patients shall be selected randomly at the age group of 13-60 years Patients shall also be selected on the basis of febrile and other symptoms such as chills, headache, joint, and muscle and body pains. **Results and Conclusion:** Age wise Distribution of Malaria, Dengue and Chikungunya, number of patients n=100 were taken, total n=72 patients were positive for Malaria, n=24 patients were positive for Dengue and n=4 patients were Chikungunya. With the Mean of 10.6 and Standard Deviation are 6.1. From the age group of "36 to 50"years n=28 number of patients positive for both males and females, form this total n=12 positive for malaria with the percentage of 16.6% and Females were n=16 with the percentage of 22.2%.From the age group "51 to 65"years n=8 number of patients positive for malaria in both males and females, from this total the male patients were n=4 positive for malaria with the percentage of 5.6%.The age wise description of Dengue a total "n=24"number of patients are positive for Dengue in both males and females. From the total n=16 number of male patients which are positive for Dengue with the percentage of 66.6% with the Mean of 5.3 and Standard Deviation is 4.7.females were n=8 number of patients with the percentage of 33.3% and in the Mean of 11.1 with Standard Deviation is 2.4. The age wise description of Chikungunya fever of different age groups a total "n=4"number of patients are positive for Chikungunya fever in both males and females. From the total n=02 number of male patients which are positive for malaria with the percentage of 50% with the Mean of 0.6 and Standard Deviation is 0.5 females were n=02 number of patients with the percentage of 50% and in the Mean of 0.6 and Standard Deviation is 0.5. Chikungunya fever in both males and females, from the total male patients were n=0 positive for Chikungunya fever and females were n=1 number of patients positive for Chikungunya with the percentage of 25%. The maximum peaks are observed equally in the age of 36 to 50 years age group. The Month wise Description of Malaria, Dengue and Chikungunya positive patients from the month of April 2017 to month of October 2017. To identify the seasonal variation of the disease, analysis of the data on monthly basis was done.

PLANT SCIENCE TODAY
ISSN 2348-1900 (online)
Vol 9(3): 642–649
https://doi.org/10.14719/pst.1586

HORIZON
e-Publishing Group HePG

RESEARCH ARTICLE

Protective effect of *Vitex altissima* L.f. bark extract on cisplatin-induced renal injury in Wistar rats

Girija Sastry Vedula[1], Tejaswi Isukapatla[1] & Alekhya Ketha[1,2*]

[1]Pharmaceutical Sciences Department, AU College of Pharmaceutical Sciences, Andhra University, Visakhapatnam - 530003, India

[2]Department of Pharmaceutical Sciences, Bharat Institute of Technology-Pharmacy, Mangalpally, Ibrahimpatnam - 501510, Telangana, India

*Email: alekhya.lla92@gmail.com

OPEN ACCESS

ARTICLE HISTORY

Received: 08 November 2021
Accepted: 15 April 2022

Available online
Version 1.0: 22 May 2022
Version 2.0: 01 July 2022

Check for updates

Additional information

Peer review: Publisher thanks Sectional Editor and the other anonymous reviewers for their contribution to the peer review of this work.

Reprints & permissions information is available at https://horizonepublishing.com/journals/index.php/PST/open_access_policy

Publisher's Note: Horizon e-Publishing Group remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Indexing: Plant Science Today, published by Horizon e-Publishing Group, is covered by Scopus, Web of Science, BIOSIS Previews, Clarivate Analytics, etc. See https://horizonepublishing.com/journals/index.php/PST/indexing_abstracting

CITE THIS ARTICLE

Vedula G S, Isukapatla T, Ketha A. Protective effect of *Vitex altissima* L.f. bark extract on cisplatin-induced renal injury in Wistar rats. Plant Science Today. 2022; 9(3): 642–649. https://doi.org/10.14719/pst.1586

Abstract

Cisplatin (CP) is a commonly used chemotherapeutic drug. The major limiting factor in the use of CP is the side effects in normal tissues, including the kidney. Since ancient times, medicinal plants are rich sources of various bioactive constituents used to treat multiple ailments, including drug toxicities. The present work is a preliminary study to explore the renoprotective actions of methanolic extract of *Vitex altissima* L.f. bark (**Va**) against CP-induced renal damage in Wistar rats. **Va** was found to have potent radical scavenging activity than metal ion reducing power properties, compared with ascorbic acid. Further, **Va** was evaluated for nephroprotective activity in rats induced by CP (8 mg/kg; intraperitoneal) on the 7th day. The animals were grouped ($n = 6$) and treated with **Va** (100 and 200 mg/kg) orally for 14 days. The outcomes of the study found that CP significantly ($P < 0.001$) altered the oxidative stress markers (MDA, SOD and CAT), serum urea and creatinine levels. The administration of **Va** significantly halted the toxic condition and maintained it towards normal levels. The higher dose of **Va** significantly ($P < 0.001$) raised the SOD and CAT levels and halted the MDA levels than the low dose. Also, a higher dose of **Va** maintained the normal integrity of the histopathological studies of kidneys than a low dose. The present study demonstrates that *V. altissima* can attenuate the oxidative stress induced by CP by enhancing the endogenous antioxidant levels and depleting the lipid peroxidation levels.

Keywords

antioxidant activity, cisplatin, nephrotoxicity, oxidative stress, *Vitex altissima*

Introduction

The kidney is the principal organ that plays a vital role in the excretion of xenobiotics and their metabolites (1, 2). Nephrotoxicity is one of the major leading causes of death worldwide, of which 20% of deaths are accounted for drug-induced toxicity with various classes of life-saving drugs (2-4). The nephrotoxicity symptoms include the change in urine volume, increased kidney weight, and alteration of kidney biochemical parameters (serum urea nitrogen and creatinine levels) (5, 6).

Cisplatin (CP) is platinum derived first-line anticancer drug that shows the efficient suppression of malignancies. CP interacts with DNA via the formation of covalent adducts between certain DNA bases and the platinum compound (7, 8). The toxic effects of CP include nausea, vomiting, ototoxicity, neurotoxicity and bone marrow suppression, but its chief dose-limiting side effect is nephrotoxicity (8). But prolonged usage of CP exhibits

Bioassay Guided Isolation of Anti-Inflammatory Compounds from *Bauhinia variegata* L.: A Key Ingredient in Herbo-Mineral Formulation, Gandmala Kandan Ras

K. N. KILLARI, NGUYEN HUY THUAN[1], D. S. N. B. K. PRASANTH[2], S. P. PANDA[3], P. K. PASALA[4], ALEKHYA KETHA[4] AND V. B. TATIPAMULA[1]*

Department of Pharmacology, Sri Vishnu College of Pharmacy, Bhimavaram, Andhra Pradesh 534201, India, [1]Center for Molecular Biology, College of Medicine and Pharmacy, Duy Tan University, Danang 550000, Vietnam, [2]Pharmacognosy Research Division, K. L. College of Pharmacy, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh 522302, [3]Pharmacology Research Division, Institute of Pharmaceutical Research, GLA University, Mathura, Uttar Pradesh 281406, [4]Department of Pharmacology, Santhiram College of Pharmacy, Nandyal, Andhra Pradesh 518112, [5]Department of Pharmaceutical Chemistry, Bharat Institute of Technology-Pharmacy, Mangalpally, Ibrahimpatnam, Telangana 501510, India

Medicinal herb *Bauhinia variegata* L. is the main ingredient in "Gandmala Kandan Ras" (GKR) herbo-mineral medicine used in Ayurveda for the treatment of swelling, inflammation and tumors. This study aimed to isolate the anti-inflammatory compounds from the methanolic extract of aerial parts of *Bauhinia variegata*. Through bioassay-guided isolation, three known flavonoids, namely kaempferol, ombuin and quercetin were identified from methanolic extract of aerial parts of *Bauhinia variega*. The primary screening by protein denaturation method revealed a significant percentage of inhibition of protein denaturation of compounds kaempferol and quercetin. The anti-inflammatory assays against COX-1/2 enzymes showed significant anti-inflammatory activity of these two compounds, compared to the standard drug, indomethacin. Of which, quercetin as a potent non-selective inhibitor of COX1 and COX2 with IC_{50} values of 172.05±4.29 and 220.62±9.13 nM, respectively; while kaempferol showed selective COX2 inhibition with the IC_{50} of 154.86±5.60 nM. The results provided evidence that supports the Ayurvedic usage of Gandmala Kandan Ras formulation in the treatment of inflammation, which was attributed to the natural active kaempferol and quercetin. The results indicated that plant *Bauhinia variegata* could be considered as an excellent natural source of remedial medicine for inflammation.

Key words: *Bauhinia*, protein denaturation method, cyclooxygenase enzymes, inhibitory assay

Bauhinia genus belongs to the family Fabaceae, well recorded in the flora of Brazil, India, Nepal and South Africa[1,2]. Traditionally, the bark, flowers and roots of the genus *Bauhinia* are most valued in Brazil, India and South Africa for treating various ailignments such as diabetes, inflammation, tumors, gastrointestinal disorders and infectious diseases[3]. In Ayurveda, an herbo-mineral formulation named "Gandmala Kandan Ras" (GKR) is widely used for patients suffering from inflammation-related conditions such as swelling, cysts and tumors. The Sanskrit technical term "Gandmala" is "scrofula," which is an inflammatory disorder indicating swelling of the neck and inflammation of lymph glands. GKR formulation mainly contains ingredients from *Bauhinia variegata* (*B. variegata*) L. and Shuddha Guggulu[4].

B. variegate L. is a semi-evergreen tree, usually called "Camel's foot creeper" in English, and "Kanchanara or Kachnar" in Sanskrit. In some parts of India, buds and flowers of *B. variegata* are used as vegetables and are cooked and eaten as a famous food named "Karalen Ki Sabji"[5]. Particularly, in the Indian tribes, the *B. variegata* has been using in the treatment of multiple conditions, including microbial

Received: 1 February 2023
Revised: 22 September 2022
Accepted: 24 July 2023
Indian J Pharm Sci 2023;85(1):227-232

*Address for correspondence
E-mail: vinaybharadwaj.tatipamula@duytan.edu.vn

© 2023 IJCRT | Volume 11, Issue 2 February 2023 | ISSN: 2320-2882

ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A REVIEW ON MILLINGTONIA HORTENSIS

AUTHORS : Dr.ALEKHYA KETHA*[1] , A.SAI CHARAN[2], A.JAYASREE[3], B.M JOTHSNAVI [4], A. VARSHITHA[5] , A.SAI [6].

AUTHOR 1 ASST.PROFESSOR, DEPARTMENT OF CHEMISTRY ,AUTHOR-2,3,4,5,6 STUDENT ,B PHARM 4 TH YEAR
BHARAT INSTITUTE OF TECHNOLOGY,MANGALPALLI ,RANGAREDDY ,TELANGANA ,INDIA,501510.

ABSTRACT: Millingtonia hortensis Linn. is cultivated in most parts of India, both in gardens and avenues. Tall and straight, with comparatively few branches, its popularity lies in its ornamental value. It is a fine tree, fast growing, but with brittle wood, liable to be damaged by storms. In favourable positions it can grow to 24 m tall. The ashy bark is cracked and furrowed and the numerous fissures make removal of the cork an easy matter. It is used as an inferior substitute for true cork. From April until the rains and again in November and December, a profusion of silvery-white, delightfully fragrant flowers crown the foliage. Upright open clusters with arching blooms terminate every branchlet. Each flower is a tiny bell-shaped calyx, a long slender tube of palest green dividing into four waxy, white petals and several conspicuous yellow anthered stamens. Many flowers are delicately tinted with rose. As the flowers are short-lived, the flower sprays mostly consist largely of long whitish buds, while the ground below is spangled with innumerable little stars. Between January and March the leaves are shed and renewed during April and May, although the tree is never quite naked. Trees do not seed very easily in India[1].

IMPORTANT TERMS : Millingtonia hortensis , brittle wood, foliage, calyx, stamens.

INTRODUCTION :

Millingtonia hortensis Linn. is an important medicinal plant which belongs to the family Bignoniaceae and it is one of important medicinal plant in Southern Asia, ranging from India, Burma, Thailand and Southern China Commonly known as Cork tree. It is also called as Akash neem, Neem chameli . A very tall tree, Flowers have very rich & pleasant scent. Propagation by Seeds, suckers. Longevity is Perennial. It is a tall deciduous tree. It grows up to 25 meter. The leaves are pinnately compound. Long leaves bear two or three widely spaced pinnae, each with 5-7 smooth leaflets, oval, pointed and slightly round-toothed, 1-3 inches long[2].

In India about 7300 plant species are used in traditional health care systems. 90% of the medicinal plants which find place in day-to-day uses, many of these, are used as herbal remedies[3]. Medicinal plants are of great importance to the health of individual and communities. The medicinal value of these plants lies in some chemical active substances that produce a define physiological action on human body. The most important of these chemically active constituents of plants are alkaloids, tannin, flavonoid and phenolic[4].

A very tall and straight tree with brittle wood and liable to damaged by storms. It can grow up to 25 meter tall and it can reach 80 meter in height. Flowers have very rich and pleasant scent. In Thailand, the flower is called 'peep' and compounds. Many of these indigenous medicinal plants are also used for medicinal purposes . In recent years, use of antimicrobial drugs in the treatment of infectious disease has developed multiple drug resistance and with increase in production of new antibiotics, by pharmaceutical industry, resistance to these drugs has also increased.used for the treatment of asthma, sinusitis and as a cholagogue and tonic. The flowers are also used in rituals and have good antimicrobial properties. The stem has brittle wood and liable to damaged by storms, stem bark is used traditionally as mainly lung tonic, antiasthmatic and antimicrobial properties. Leaves and roots of cork tree used as antiasthmatic and antimicrobial activity. Fruit is very long and narrow, pointed at both ends and contains thin, flat seeds. Trees do not seed very easily in India. Roots can be used for the treatment of tuberculosis and as an antiasthmatic. The leaves of Cork tree are very ornamental and extracts of leaves has good antimicrobial activity. The leaves of Millingtonia hortensis are used as antipyretic, antiasthmatic, sinusitis, cholagogue and tonic in folklore medicine[5].

Toxicology International, 30(1): 19-27, 2023. DOI: 10.18311/ti/2023/v30i1/26258

INFORMATICS JOURNALS

Online ISSN : 0976-5131; Print ISSN : 0971-6580

Toxicology International

Contents available at: www.informaticsjournals.com/index.php/toxi

Effect of Isolated Fraction from *Biophytum reinwardtii* on Dexamethasone Induced Insulin Resistance in Rats

Nagaraju Bandaru[1]*, A. Narayana Rao[1], Yasho Deepika[2], Alekhya Ketha[3], Daveedu Thathipudi[4] and N. Sri Laxmi[1]

[1]*College of Pharmacy, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur - 522502, Andhra Pradesh, India; bnagaraju@kluniversity.in*

[2]*Department of Pharmacy, Anurag University, Venkatapur, Ghatkesar, Hyderabad - 500088, Telangana, India*

[3]*Bharat Institute of Technology-Pharmacy, Mangalpally, Hyderabad - 501510, Telangana, India*

[4]*Department of Biotechnology, Vikarma Simhapuri University, Nellore – 524320, Andhra Pradesh, India*

Abstract

The Fraction from Methanolic extract whole plant of *Biophytum reinwardtii* (HEMBR) is traditionally used in the treatment of diabetes. Rats were treated with a standardized dose of Dexamethasone for 21 days and the effect of HEMBR at the doses of 50 and 100 mg/kg, p.o. on plasma blood glucose level, serum triglyceride level, glucose uptake in skeletal muscle, levels of hepatic antioxidant enzymes (GSH, SOD and catalase), and body weight were observed. HEMBR showed a significant decrease in plasma glucose and serum triglyceride levels ($p < 0.01$) at the dose of 50 and 100 mg/kg, p.o. and also stimulated glucose uptake in skeletal muscle. The levels of antioxidant enzymes GSH, SOD, and catalase were significantly increased ($p < 0.01$). Hence it can be concluded that *Biophytum reinwardtii* may prove to be effective in the treatment of Type-II Diabetes mellitus owing to its ability to decrease insulin resistance.

Keywords: Antioxidants, Diabetes, Fraction, Insulin, Resistance

1. Introduction

Diabetes could be a chronic sickness that happens either once the exocrine gland doesn't manufacture enough hypoglycemic agents, or once the body cannot effectively use the hypoglycemic agent it produces. Insulin could be an internal secretion that regulates glucose[1]. Hyperglycaemia, or raised glucose, could be a typical result of uncontrolled polygenic disease and over time ends up in serious harm to several of the body's systems, especially the nerves and blood vessels[2]. In 2014, 8.5% of adults aged 18 years and older had diabetes. In 2016, diabetes was the direct cause of 1.6 million deaths, and in 2012 high blood glucose was the cause of another 2.2 million deaths[3].

Modern medicines like Biguanides, Sulphonylureas and Thiazolidinediones are available for the treatment of diabetes. But they also have undesired effects associated with their uses[4]. Alternative drugs, notably flavouring medicines are offered for the treatment of polygenic disease. Instead of the introduction of hypoglycemic agents from the synthetic source, diabetes and its secondary complications continue to be a significant problem. Many

*Author for correspondence

Article Received on: 15.10.2020 Revised on: 04.11.2020 Accepted on: 05.05.2021

59

Protective activity of ferulic acid on rotenone-induced Neurodegeneration in Zebra-fish model

Nagaraju Bandaru[1]*, A. Narayana Rao[2], Alekhya ketha [3], N. Srilaxmi[4], Yasho Deepika [5], Nalini Panatula[6], Marshet Getachew Argaw[7]

[1,2,4] College of Pharmacy, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, AP, India-533302.

[3] Bharat Institute of Technology-Pharmacy, Mangalpally, Hyderabad

[5] Department of Pharmacy, Anurag University, venkatapur, Ghatakesar, Telangana.

[6] Pharmaceutical Biotechnology division, A.U. College of Pharmaceutical Sciences, Andhra University, Visakhapatnam-530003.

***Corresponding author:**
Nagaraju Bandaru,
College of Pharmacy,
Koneru Lakshmaiah Education Foundation,
Email: bnagaraju@kluniversity.in

Abstract

Back ground- Parkinson disease is acknowledged as progressive disorder that cause degeneration of a neuron which occur as a result of abnormal cluster of a protein termed as alpha-synuclein that leads to a diminishing effect to the level of brain dopamine level in basal ganglia. Methods and Materials determine the behavioral parameter, dopamine and catalase level and mitochondrial function of Rotenone induced zebra fishes we carried out an experiment on 40 fishes induced with Rotenone (Parkinson inducer) and 10 normal fishes. Result -this article provides an inclusive, general and practical experimental procedure on zebra fish using Ferulic acid as our test compound and it act as anti-Parkinson phytochemical. Conclusion-we noticed that while the fish treated with Rotenone shows unusual feature like erratic movement and being in cataleptic state after some time and decrease of their Dopamine, Catalase and Mitochondrial function level, on the other hand the fish that was priorly treated with Ferulic acid followed by a direct exposure to Rotenone shows an increasing level of bio chemical parameter

Keywords: Alpha-synuclein, abnormal cluster, Brain dopamine level, Behavioral parameter, Biochemical parameter, Catalepsy.

Introduction

Parkinson's disease is named by the British doctor James Parkinson in 1817 who wrote the first book about the disease. According to his definition, Parkinson is called the shaking palsy or paralysis agitans (1). Neuronal loss in the substantia nigra, which result in striatal dopamine deficiency, and intracellular inclusions containing bunch of α-synuclein are the neuropathological target of Parkinson disease (2). Parkinson disease is a unique clinical and neuropath logical entity which is manifested clinically by bradykinesia, resting tremor, rigidity and postural reflex impairment (3).

The etiology of Parkinson disease is not known but genetic and environmental factors have its own implication (4). Abnormal mutation in alpha-*synuclein* (*SNCA*), *parkin* (*PARK2*), *PTEN-induced putative kinase 1* (*PINK1*), *DJ-1* (*PARK7*), and *Leucine-rich repeat kinase 2* (*LRRK2*) are the main genetical factor for the disease (5). An increase in the level of genetically cell aging process as a result of the combined effect of triggering factor like environmental toxins result in idiopathic

Gas Chromatography-Mass Spectrometric Analysis, Isolation, Characterization and Biological Activity of Ethanolic Extract of Moss *Fabronia secunda* Mont.

K. N. KILLARI, D. S. N. B. K. PRASANTH[1], P. K. PASALA[2], HO VIET HIEU[3], ALEKHYA KETHA[4], V. B. TATIPAMULA[5]*

Department of Pharmacology, Shri Vishnu College of Pharmacy, Bhimavaram, Andhra Pradesh 534201, [1]Department of Pharmacognosy, KVSR Siddhartha College of Pharmaceutical Sciences, Vijayawada, Andhra Pradesh 520010, [2]Department of Pharmacology, Santhiram College of Pharmacy, Nandyal, Andhra Pradesh 518112, India, [3]Department of Medical Microbiology and Parasitology, Duy Tan University, Da Nang 550000, Vietnam, [4]Department of Pharmaceutical Chemistry, Bharat Institute of Technology-Pharmacy, Mangalpally, Telangana 501510, India, [5]Center for Molecular Biology, College of Medicine and Pharmacy, Duy Tan University, Danang 550000, Vietnam

The chemical and biological profile of the ethanolic extract of *Fabronia secunda* examined for the first time. The gas chromatography-mass spectrometric analysis of ethanolic extract of *Fabronia secunda* identified 200 components, which mainly composed of lup-20(29)-ene-3,28-diol (4.01 %), guanosine (3.99 %), and 1,2-benzene-dicarboxylic acid (3.79 %). Also, the chromatographic analysis yielded three compounds, namely stigmasterol (1), β-sitosterol (2) and lupeol (3). The ethanolic extract of *Fabronia secunda* exhibited superior inhibition of superoxide and 2,2-diphenyl-1-picrylhydrazyl radicals with an half maximal inhibitory concentration value of 33.5 and 34.5 µg/ml respectively. Additionally, ethanolic extract of *Fabronia secunda* depicted prominent inhibitory profiles against alpha-glucosidase and pancreatic alpha-amylase with half maximal inhibitory concentration values of 48.5 and 58.0 µg/ml respectively. To conclude, this preliminary chemical analysis provides a piece of evidence to know the metabolism of mosses and the biological investigation proved the therapeutic importance of mosses like *Fabronia secunda*.

Key words: *Fabronia secunda*, moss, ferric ions, 2,2-diphenyl-1-picrylhydrazyl, superoxide, α-glucosidase inhibitory assay, pancreatic α-amylase inhibitory assay, aldose reductase inhibitory assay

Mosses were simplest-level plants that belong to the second-largest taxonomic group among bryophytes. Amongst 25 000 bryophytes species, mosses include 14 000 species around the world[1]. Mosses survive in wet and humid places and mostly they live in rocks, soil, woods and walls of a building. Long-time ago, mosses less considered for the identification of bioactive substances due to their identification problems. Nevertheless, in recent times, the research attention in mosses chemical profile is increasing, as several biologically active components identified from them due to their unique adaptations. However, from a large number of mosses, only very few species have been studied additionally, the study of the chemical composition of moss assists in knowing their metabolism[2].

Mosses are widely present in forest ecosystems and the Northern Hemisphere. Traditionally, tribes of North American utilized mosses for the management of convulsions, neurasthenia, pneumonia, scald, burns, tuberculosis and others. In the folklore of China and India, extracts of mosses are well-known for antimicrobial activity and the treatment of anxiety, snake-bites, heart problems, tuberculosis, cancer and diabetes[3-6]. The major chemical constituents of mosses are carbohydrates, fatty acids, lipids, flavonoids, benzoic acid derivatives, polyphenols, terpenoids,

*Address for correspondence
E-mail: vinaybharadwajtatipamula@duytan.edu.vn

Accepted 24 March 2023
Revised 14 August 2022
Received 10 June 2021
Indian J Pharm Sci 2023;85(2):525-531

Gmail

KETHA ALEKHYA <kethaalekhya@gmail.com>

European chemical bulletin

1 message

KETHA ALEKHYA <kethaalekhya@gmail.com>
To: kethaalekhya@gmail.com

Fri, Jul 28, 2023 at 11:33 AM

Please find the mail

On Mon, 1 May 2023 at 23:59, eurchem info <editor@eurchembull.com> wrote:

> We are pleased to inform you that your article titled " Ivermectin as a potential drug for treatment of COVID-19: a review with clinical attributes" has been accepted for publication, For further processing in the **European Chemical Bulletin** (**https://eurchembull.com/**) we are here with the details of the processing fee. Please pay the processing fee and send the transaction details along with the final word file immediately, so that we can start the further processing.
>
> **Status : Accepted .**
>
> You can pay using this link:
> https://paypal.me/PUBLICATION11?

Volume 11, Issue 9, 868-891 Research Article ISSN 2278-4357

EVALUATION OF ANTIDIABETIC EFFECT OF LEAVES OF ACACIA NILOTICA ON PHYTOPHARMACOLOGICAL PROSPECTIVE

Neelmani Chauhan[1]*, Ved Prakash Tiwari[1] and Rachel Niveditha[2]

[1]School of Pharmacy, BBD University, Lucknow.

[2]Bharat College of Pharmacy, Hyderabad.

Article Received on
14 July 2022,

Revised on 04 August 2022,
Accepted on 24 August 2022

*Corresponding Author
Neelmani Chauhan
School of Pharmacy, BBD University, Lucknow.

ABSTRACT

Acacia nilotica is a potent herbal drug traditionally used in the treatment of diabetes. Aim of present study is to evaluate the anti-diabetic effect of Acacia nilotica leaf on phytopharmacological prospective.

KEYWORDS: Acacia nilotica, antidiabetic, Anti oxidents, Phytopharmaceuticas.

1. Plant profile

Acacia nilotica leaf.

1.1 Common names

Hindi Karuvela maram.

1.2 Classfication

Kingdom:	Plantae
(Unranked):	Angiosperms
(Unranked):	Eudicots
(Unranked):	Rosids
Order:	Fabales
Family:	Fabaceae
Genus:	Vachellia
Species:	V. nilotica

REVIEW ARTICLE ON FABRY'S DISEASE

[1]*Fathima Syeda, [2]*Maria Baseer, [3]*JE Rachel Nivedita

India.

Article Received on
16 March 2022,
Revised on 06 April 2022,
Accepted on 26 April 2022

*Corresponding Author
Fathima Syeda
India.

ABSTRACT

Fabry's disease is a rare, inherited, lysosomal storage disorder which is progressive in nature. It is caused by mutations in the GLA gene present on the X chromosome which results in the complete absence or deficiency of the lysosomal enzyme alpha glycosidase A which is responsible for the break down of fatty substances like glycosphingolipids. The accumulation of glycosphingolipids (mainly globotriaosylceramide or GL3) and its derivative globotriaosylsphingosine or lyso-Gb3 in body fluids and lysosomal cells hinders their working and triggers a cascade of cellular events which eventually leads to various complications. Fabry's disease is initially characterized by neurological (pain), cutaneous (angiokeratoma), heat and cold intolerance, cochlea-vestibular manifestations which later progresses to renal (proteinuria, kidney failure), cardiovascular (cardiomyopathy, ventricular hypertrophy, fibrosis, valve disease, cardiac conduction abnormalities, arrhythmia), and cerebrovascular (transient ischemic attacks, strokes) manifestations if left untreated. In females the signs and symptoms may vary from mild to severe. The premative diagnosis is based on the symptoms and supported by a positive family history .The clinical diagnosis must be confirmed through determination of α-GAL A activity in leukocytes or plasma by using 4 methyllumbelliferyl –d- galactoside as substrate and/or genotyping. Different screening strategies have been carried out to detect undiagnosed Fabry patients. Enzyme replacement therapy (ERT) and oral chaperone therapy is used in the treatment of Fabry disease.

SUMMARY

Fabry's disease is also known as Anderson-Fabry disease, Angiokeratoma corporis diffusum, Alpha-galactosidase A deficiency, Sweeley-Klionsky disease to name a few.

olume 11, Issue 4, 722-726. Review Article

STONEMAN SYNDROME FREQUENCY / FIBRODYSPLASIA OSSIFICANS PROGRESSIVA (FOP) / MUNCHMEYER'S DISEASE RARE GENETIC DISORDER (1 IN 2 MILLION)

Keerthika*, J. E. Rachel Nivedita

India.

le Received on
eb. 2022,
ised on 24 Feb. 2022,
epted on 11 March 2022,

orresponding Author
erthika
dia.

ABSTRACT

FOP it is an extremely rare skeletal dysplasia also called stone man syndrome. It is characterized by the progressive ectopic ossification of tendons and ligaments, facial and skeletalmuscle throughout life. It is a rare hereditary connective tissue disease. Smooth muscle is not involved in this disorder. The known reported epidemiology in this disorder is one in two million FOP it is occurred due to the bone formation outside of the skeleton is namely called as heterotopic ossification. And which leads to formation of ribbons, sheets and plates of extra bone forming in places whole body where bone should not be. Once formed this bone cannot be removed and hence it may lead to stiffness of joint. Hence it can restrict normal movement and function therefore it causes lock in joints. Here it is a rare skeletal dysplasia which has the characteristics of imaging and clinical findings whereit includes stout first metatarsals, bilateral hallux valgus, mono phalanges great toes. The symptoms are likely to begin in childhood as localized soft tissue swellings. There will be dysfunction and immobility of the spine and proximal extremities. In severe case there is also limitation of masticatory function by scoliosis it is a temporal mandibular joint (TMJ) Is a critical component involved in the maxillofacial region. Where TMJ is not involved and rare.

KEYWORDS

- Fibro dysplasia ossificans progressive.
- Rare dominant autosomal skeletal dysplasia.
- One in two million / rare.
- Dysfunction and immobility of the spine and proximal extremities.
- It is a trivial trauma.