



VISWAMBHARA EDUCATIONAL SOCIETY
VAAGDEVI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi & affiliated to Kakatiya University, Warangal, T.S)
Ramnagar Dist. Hanamakonda- 506001, (T.S)

List of year wise activities and exchange

S. No.	Name of the institution / industry with whom the MoU / linkage is made, with contact details	Year of signing MoU / linkage	Purpose of the MoU/Linkage (Internship, on-the-job training, project work, student / faculty exchange and collaborative research)	Duration of MoU / linkage	List of year wise activities
1	Mahatma Gandhi Hospital, Sherpura, Warangal 506002, Telangana	10/12/2021	Training of Pharm. D Students	1 Year	Internship & Project work for Pharm.D. students
2	Key Smiles Multi Speciality Dental Clinic, Deshaipet, Warangal	01/02/2022	Training of Pharm. D Students	5 Years	Internship for Pharm.D. students
3	Avodh, Edutech Pvt. Ltd. Ground floor, Carnival Infopark, Kakkanad.682042, Kerala	08/07/2022	Training of Students	5 Years	Training of students for placements, students were trained both in online and offline sessions for their achievements.
4	Datta Meghe Institute of Medical Sciences, Swangi, Wardha, Maharastra.	08/04/2022	Training of Pharm. D Students	3 Years	Anatomy and Physiology, Pathology and Microbiology guest lectures both in online and offline were done.
5	St.Peters Institute of Pharmaceutical Sciences, Vidhyanagar, Hanamkonda, 506001	19/08/2021	Collaborative Research	4Years	Training on Research Methodology and Research article writing for students.



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6	Jayamukhi College of Pharmacy, Narsampet, Warangal-506332	19/08/2021	Collaborative Research	5 Years	Training on Pharmacological Screening and Research Methodology for students.
7	Larson Pharma Pvt. Ltd, Bhagyanagar Colony, Kukatpally, Hyderabad-500072	29/06/2021	Collaborative Research	5 Years	Training of novel Industrial equipment for students.
8	SVR Multi Speciality Hospital, Opposite KUDA office, Kancharakunta, Hanamkonda- 506001	02-03-2021	Training of Pharm. D Students	3 Years	Project work for Pharm.D. students
9	Siddhartha Institute of Pharmacy,Narapally, Korremula Road, Ghatkesar Mandal, Medchal, Malkajgiri	19/08/2021	Collaborative Research	4 Years	Workshops for learning analytical equipments for students.
10	Unity College of Pharmacy, Raigiri,Bhongir, Yadadri Bhongiri	19/08/2021	Collaborative Research	4 Years	Training on learning various Tablet Coating methods for students.
11	Pratistha Institiute of Pharmaceutical Sciences, Durajpally, Suryapet, Telangana 508214	19/08/2021	Collaborative Research	4 Years	Training on learning different Capsule filling techniques for students.
12	Talla Padmavathi College of Pharmacy,Urus, Kareemabad, Warangal-506002	19/08/2021	Collaborative Research	4 Years	Published Research papers by Collaborative Research work
13	Mahatma Gandhi Hospital, Sherpura, Warangal 506002, Telangana	03/03/2021	Training of Pharm. D Students	1 Year	Internship & Project work for Pharm.D. students
14	DelExcel Pharma Pvt. Ltd, Manoharabad mandal, Medak,Telangana	06/01/2020	Collaborative Research	5 Years	Hands on training analytical equipments for students.



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15	Minvit Pharma Pvt. Ltd.	06/01/2020	Collaborative Research	5 Years	Learning novel Pharmaceutical Engineering equipments for students.
16	Mahatma Gandhi Hospital, Sherpura, Warangal 506002, Telangana	05/08/2019	Training of Pharm. D Students	1 Year	Internship & Project work for Pharm.D. students
17	Krishna Hospitals Opposite Kakatiya University, Vidhyaranyapuri, Hanamkonda, 50600	01/06/2018	Training of Pharm.D Students	6 Years	Project work for Pharm.D. students
18	Janatha Hospital, Beside Fire Station, Balasamudram, Hanamkonda	01/06/2018	Training of Pharm.D Students	6 Years	Project work for Pharm.D. students
19	Hope Hospitals, Kakaji Colony, hanamkonda, Warangal	01/06/2018	Training of Pharm.D Students	6 Years	Project work for Pharm.D. students
20	Mahatma Gandhi Hospital, Sherpura, Warangal 506002, Telangana	10/12/2018	Training of Pharm. D Students	1 Year	Internship & Project work for Pharm.D. students
21	Ajara Hospitals, Mulugu road, Hanamkonda, Warangal 506007	01/06/2018	Training of Pharm.D Students	5 Years	Project work for Pharm.D. students
22	Mamatha Heart Clinic, Balasamudram main road, Hanamkonda.	01/06/2018	Training of Pharm.D Students	6 years	Project work for Pharm.D. students
23	Chakravarthy Hospitals, Opposite Ekhashilla Park, Balasamudram, Hanamkonda, Warangal-506001	01/06/2018	Training of Pharm.D Students	6 years	Project work for Pharm.D. students
24	Durgam's Hospital's, Vijay Talkies Road, Near Sr Girls complex, Hanamkonda.	01/06/2018	Training of Pharm.D Students	6 years	Project work for Pharm.D. students



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25	Magnificent Cosmo Cosmoceuticals, Venkata Sai Colony, Gopalpuram Road, Hanamkonda, Warangal 506009	01/08/2018	Collaborative Research	5 Years	Published Research papers & Book chapters by Collaborative Research work
26	SP Accure Labs Pvt. Ltd, Road NO: 3, Kamala Nagar, Dilkush Nagar, Hyderabad-500060	01/04/2018	Collaborative Research	5 Years	Industrial Visit for exploring Pharmaceutical equipments and Quality control for students.
27	Masters Pharma, \$03, 4 th Floor, SSR Vijetha Royal Empire building, Dilsukhnagar, Hyderabad, Telangana State	01/03/2018	Training of Students	6 Years	Classes to students for preparing Competitive exams
28	Manisha Neuro Psychiatric Clinic and Counselling Centre, Near Hanuman temple, Chowrasta, Hanamkonda	31/01/2018	Training of Pharm. D Students	5 Years	Internship & Project work for Pharm.D. students
29	Mahatma Gandhi Hospital, Sherpura, Warangal 506002, Telangana	22/01/2018	Training of Pharm. D Students	1 Year	Internship & Project work for Pharm.D. students
30	Vaagdevi Institute of Pharmaceutical Sciences, Bollikunta, Warangal Urban 506005	9/08/2017	Collaborative Research	4 Years	Published Research papers & Book chapters by Collaborative Research work



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Outcomes of MOU



Students working as a part of project work at MGM as part of MOU



Students working as a part of project work at Key smile Multispecialty Dental clinic



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Avodh Edutech Pvt Ltd Resource person training our students.



Training of our students by Datta meghe Institue resource person



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Our students attended St.Peter's institute of Pharmaceutical sciences classes as a part of MOU



Jayamukhi College of Pharmacy staff training our students

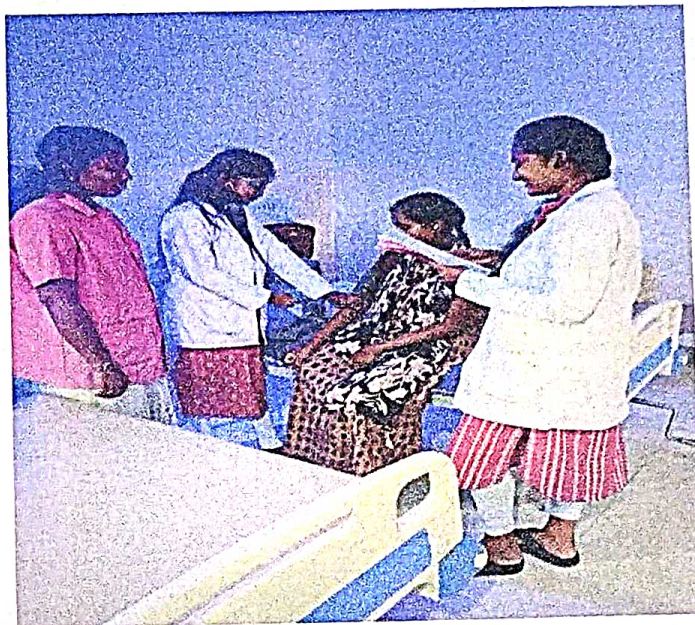


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Students as a part of their project work in SVR Multi Speciality Hospital



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Students working as a part of project work at MGM as part of MOU

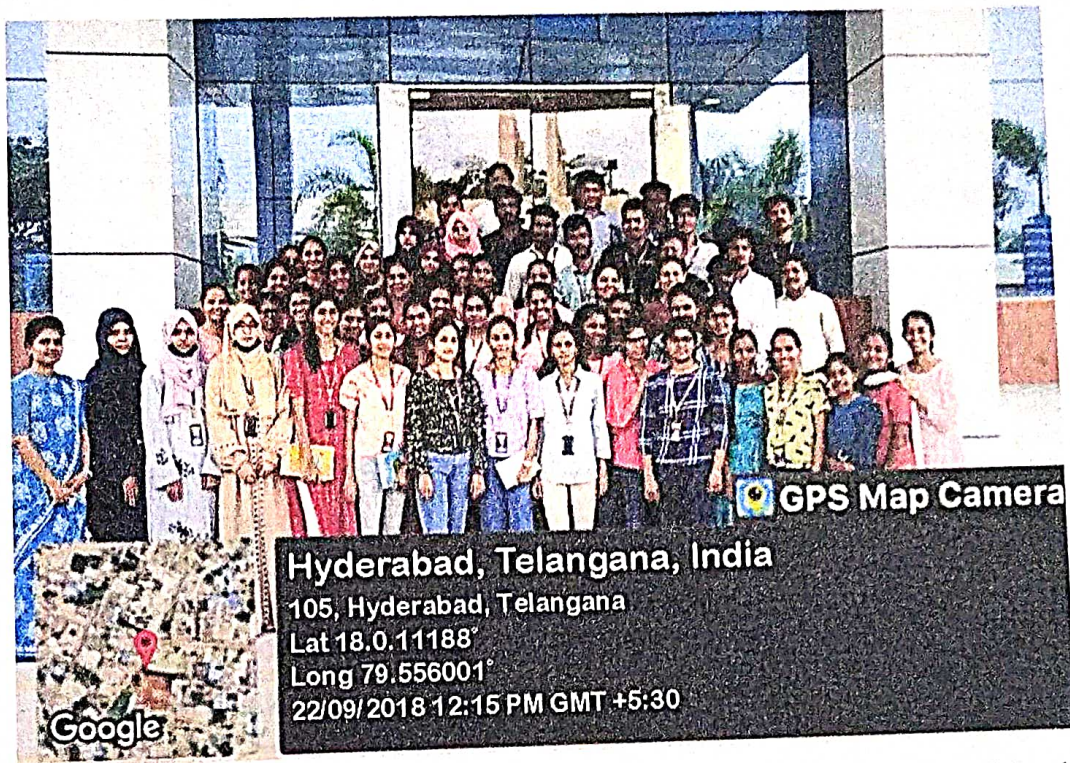


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Hyderabad, Telangana, India
105, Hyderabad, Telangana
Lat 18.0.11188°
Long 79.556001°
22/09/2018 12:15 PM GMT +5:30

Students Industrial visit to SP Accure Labs Private limited as a part of MOU with Vaagdevi College of Pharmacy



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Students as a part of their project work in Ajara hospital




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Students as a part of their project work in Durgam Hospital



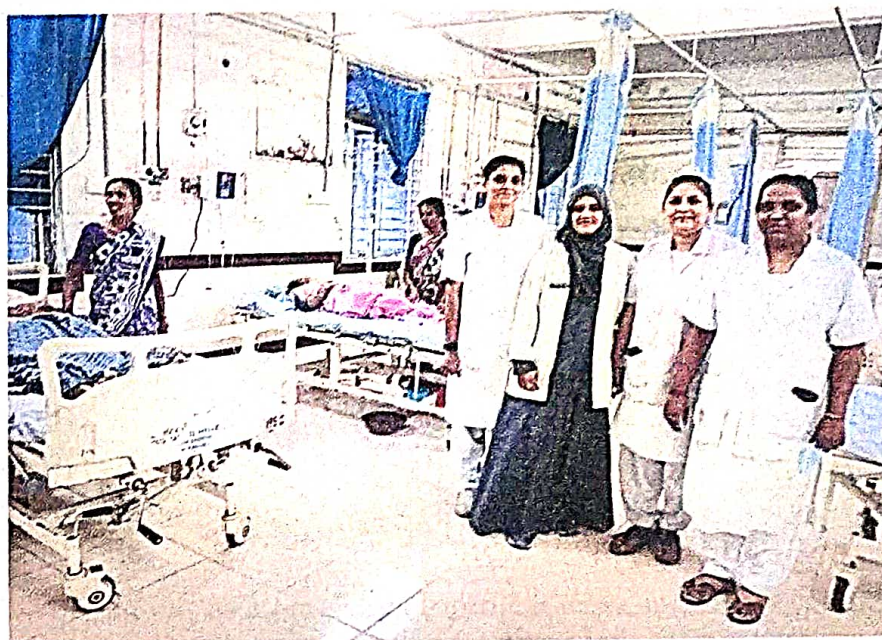
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Students as a part of their project work in Durgam Hospital



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Students as a part of their project work in Hope's Hospital



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Students as a part of their project work in Hope's Hospital



Students as a part of their project work in Hope's Hospital



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Students as a part of their project work in Krishna Hospitals



Students as a part of their project work in Janatha Hospitals



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Students as a part of their project work in Chakravarthy Hospitals

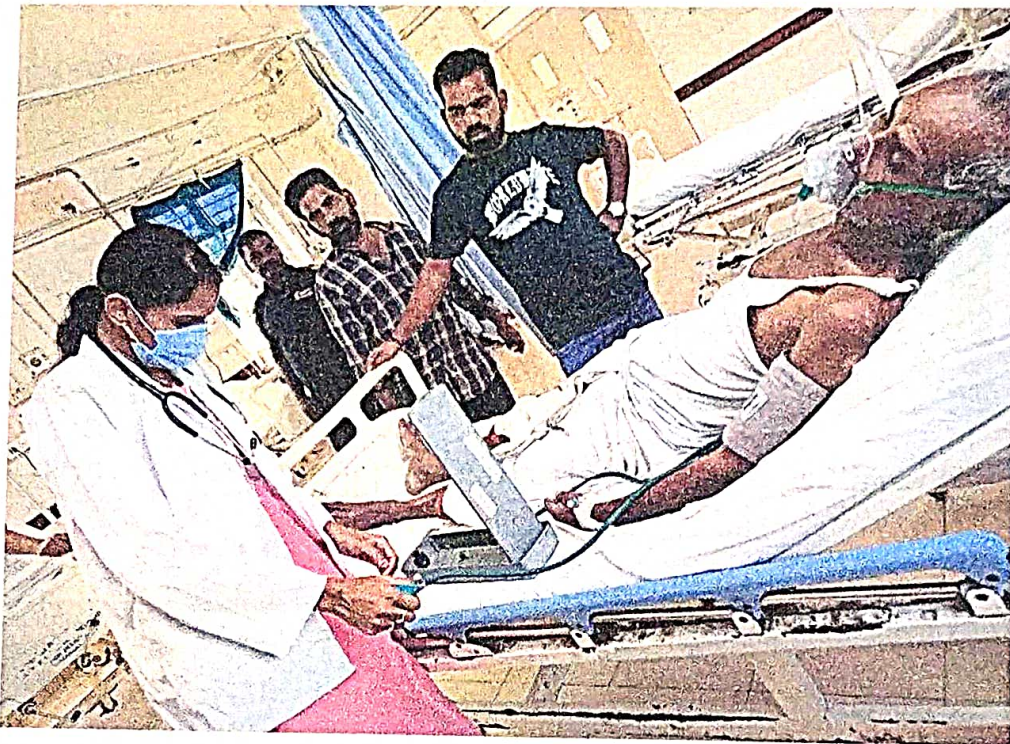


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Students as a part of their project work in SVR Multi Speciality Hospital



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Students as a part of their project work in SVR Multi Speciality Hospital



Students as a part of their project work in Mamatha Heart Clinic

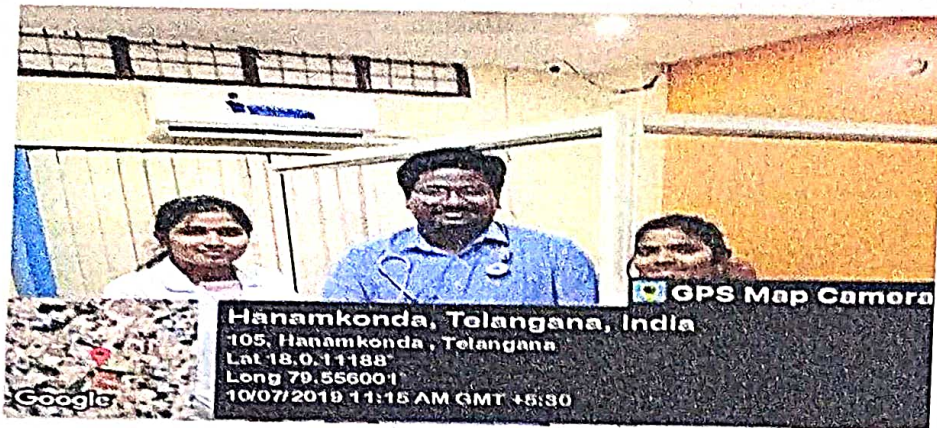


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Students in Manisha Neuro Psychiatric clinic and counseling centre as a part of their project work



Students working in MGM as a part of their project work



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REVIEW ARTICLE

Formulation and Evaluation of Carvedilol Sustained Release Capsules by Semisolid Matrix Filling Technique

P. Priyanka¹, S. Harika², MD. Wajid³, Y. Shravan Kumar^{4*}

¹Department of Pharmaceutics, Vaagdevi College of Pharmacy Affiliated by Kakatiya University, Warangal 506003, India.

²Vaagdevi Institute of Pharmaceutical Sciences Affiliated by Kakatiya University, Telangana, Warangal 506002, India.

³Vaagdevi College of Pharmacy Affiliated by Kakatiya University, Telangana, Warangal 506002, India.

⁴Department of Pharmaceutics, Vaagdevi College of Pharmacy, R&D Head Magnificent Cosmo-Cosmaceuticals, Telangana, Warangal 506002, India.

*Corresponding Author E-mail: sunchuharika@gmail.com, shravanyamsani@gmail.com

ABSTRACT:

The objective of the study was to prepare semisolid capsules of poorly water-soluble drug Carvedilol using a combination of technologies involving solid dispersion preparation and converting it into semisolid matrix filled in hard gelatin capsule. Different excipients like Gelucire 44/14, poloxamer 188, gelatin, PVPK30, PEG6000 were used. Fifteen capsule formulations were prepared and assessed for their release characteristics. Lipid matrix formulations prepared with increasing amount of polymer showed a substantial decrease in release rate of drug in case of poloxamer188. Whereas gelucire 44/14, gelatin, PVPK30, and PEG6000 showed immediate release the mechanism of drug release from the test formulations were studied. The possible modification of carvedilol release kinetics by using poloxamer in the SSM was studied. Results indicate that poloxamer188 is an appropriate carrier for the development of sustained release drug delivery systems and Gelucire 44/14 a highly hydrophilic and lipophilic balance (HLB) excipient, acts as release enhancer in the different ratios studied. Among all the formulations Carvedilol formulation with poloxamer188 in the ratio of (1:3) showed sustained release. Release kinetics studies were performed. The formulation with poloxamer in 1:3 ratio follows first order and Higuchi order release kinetics governed by Fickian diffusion mechanism with R² value 0.992.

KEYWORDS: Carvedilol, Gelucire44/14, Poloxamer188, Gelatin, PVPK30, PEG6000.

INTRODUCTION:

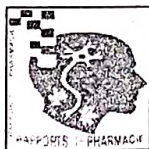
Solid dispersion can be defined as "The dispersion of one or more active ingredients in an inert carrier or matrix at solid state"⁽¹⁾. Oral drug delivery is the most widely utilized route of administration among all the routes that have been explored for systemic delivery of drugs via pharmaceutical products of different dosage form. Oral route is considered as most natural, uncomplicated, convenient and safe due to its ease of administration, patient acceptance, and cost-effective⁽²⁾ manufacturing process⁽³⁾.

The goal in designing sustained delivery systems⁽⁴⁾ is to reduce the frequency of the dosing or to increase effectiveness of the drug by localization at the site of action, reducing the dose required or providing uniform drug delivery^(5,6). A single dose of a drug that is released over a sustained period of time to maintain a near constant or uniform blood level of a drug often translates into better patient compliance, as well as enhanced clinical efficacy of the drug for its intended use⁽⁷⁾. There are certain considerations for the preparation of sustained release formulations. If the active compound has a long half-life, it is sustained on its own⁽⁸⁾.

Carvedilol is a non-selective beta adrenoceptor blocker, used in the treatment of hypertension⁽⁹⁾. The drug was selected as a model drug for the investigation because this drug has low molecular weight (carvedilol



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INCIDENCE OF CATARACTS IN WARANGAL DISTRICT, TELANGANA STATE: A PROSPECTIVE OBSERVATIONAL STUDY

L. Venkatesh¹, Ch. Sushma¹, P. Achyuth², E. Venkateshwarlu¹, A. Kottai Muthu¹, B.S. Sharavana bhava^{1*}

¹Department of Clinical Pharmacy & Pharm.D., MGM Hospital, Vaagdevi College of Pharmacy, Hanamkonda, Warangal, Telangana, India

²Department of Clinical Pharmacy & Pharm.D., Vaagdevi Institute of Pharmaceutical Sciences, Bollikunta, Warangal, Telangana, India

³Associate Professor, Department of Pharmacy, FEAT, Annamalai University, Annamalai Nagar- 608002, Chidambaram, Tamil Nadu, India.

ABSTRACT

Background: Cataract is the major cause of blindness worldwide, especially in tropical belt, where the densely populated developing countries are located. Survey in different climatic zones in northern India have found cataract prevalence of 4-10% and steadily increasing after the age 30 and with prevalence 13-36% among age of 30 and above. Our aim is to study the incidence of cataracts in Warangal District, Telangana State. **Material and Methods:** It is a prospective observational study in which all the patients suffering with cataracts were included as subjects. **Results:** Among the total 83,827 cases in outpatient department females are found to be 41,167 (0.49%) and males found to be 42,660 (0.50%) of 6816 inpatients admitted, the female population was found to be 3285 (0.48%) and male population was found to be 3531 (0.51%). The total number of cataract operations done including TOL were 5429 and females found to be 2653 (0.48%) and males 2726 (0.50%). The total corrected refractive errors were 31,427 and females were found to be 17,538 (0.55%) and males were 13,889 (0.44%). **Conclusion:** In conclusion, we have documented the incidence of cataracts in which males more affected than females.

Keywords: Cataracts, Blindness, Incidence, Ophthalmology.

INTRODUCTION

Cataract is defined as accumulation of proteins in the lens of eye where the cloudiness can be observed and the symptoms can be seen are mainly watery eyes and blurred vision. Cataract is a major cause of blindness worldwide, especially in the tropical belt, where the most of the densely populated developing countries are located. In India 60% of all blindness may be due to cataract. Various surveys in India show that nearly 7% of the population suffers from cataracts and nearly 1.5% of the population is blind due to cataract (1,2). Accordingly, blindness control programmes in India have focused primarily on cataract. Although such programmes have improved the coverage of cataract surgery they have not always resulted in good postoperative vision outcomes. Surveys in different climatic zones in northern India have found cataract prevalence of 4-10%, with senile cataract appearing and steadily increasing after age 30 and with prevalence 13 - 36% among persons aged 30 and older (3,4). The aim is to study

the incidence of Cataracts in Regional Eye Hospital at Warangal district in Telangana state.

MATERIAL AND METHODS

It is a prospective observational study conducted in patients from "Regional Eye Hospital" located at Warangal. Patients were explained about the study & informed consent forms were sought by explaining them in their local language. Institutional Human Ethical Committee Endorsement was obtained after submission of protocol and IHEC No. is MGM/VCOP/PHARMD/V/12/2017.

Inclusion criteria:

All the cataract patients of age above 40 years (Males and Females).

Exclusion criteria:

Trauma to eye and other complications. Pediatric patients. Pregnancy and Lactating mothers were excluded from this research work (5-9).

Study type: A Prospective Observational Study conducted in the Regional Eye Hospital, Warangal, Telangana State.

Statistical analysis: We had calculated the Incidence by using formula

$$\text{Incidence} = \frac{\text{Number of new cases at a particular area}}{\text{total number of cases at that particular area}}$$

Address for correspondence:

B.S. Sharvana bhava,
Department of Clinical Pharmacy &
Pharm.D., Vaagdevi College of Pharmacy,
Warangal, Telangana-506007



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Evaluation of Antioxidant, Antimicrobial and Anticancer activity of Thiazole Tagged Isatin Hydrazones

¹Venkateshwarlu Eggadi, ¹Umasankar Kulandaivelu, ³Sharvana Bhava Bandaru Sheshagiri, ²Venkateshwar Rao Jupalli

¹Vaagdevi College of Pharmacy, Warangal-506001, Telangana, India

²Department of Pharmaceutical Chemistry, Talla Padmavathi College of Pharmacy, Warangal-506009, Telangana, India

Abstract: Isatin and its derivatives is versatile lead molecule for potential bioactive agents and shows wide spectrum of activities. In this study, we evaluated antioxidant, antimicrobial and cytotoxic activity of isatin-3-[N-(2-benzalaminothiazol-4-yl)] hydrazone derivatives using well defined models. Antioxidant activity of the isatin derivatives (Va-Vj) was evaluated by using the 1, 1-diphenyl-2-picryl hydrazine radicals scavenging assay. The antimicrobial activity is evaluated by cup plate method and anticancer activity is evaluated by MTT assay against HBL-100 & HeLa cell lines. Compound Vh (R = 5-Cl, R¹ = OH & R² = OCH₃) showed good antioxidant activity with the IC₅₀ of 8.09 µM. In addition Ve and Vi have showed most active antibacterial activity against *Bacillus subtilis*, *Staphylococcus aureus* and *Escherichia coli* with a Zone of Inhibition (mm) 20, 16, 18 and 14, 12, 15 on respective organism at 100 µg/disc. The compound Vi have produced a good antifungal activity against *Aspergillus niger* and *Clostridium vericulata* with the zone of inhibition values of 9 and 8 mm respectively. These isatin derivatives also among the test compounds, compound Vd (R = 5-Cl, R¹ = OH & R² = OCH₃) and compound Vh (R = 5-Cl, R¹ = OH & R² = OCH₃) have shown nearly equal cytotoxic activity with IC₅₀ values of 246.53 µM and 247.29 µM against HBL-100 cell lines and HeLa cell lines respectively. From the results, isatin derivatives showed powerful antioxidant activity, antimicrobial and anticancer activity may be due to the halogens substituted at 5th position of isatin. The standard drugs used were ampicillin, clotrimazole, cisplatin and ascorbic acid for antibacterial, antifungal, anticancer and antioxidant respectively.

Keywords: Isatin derivatives; zone of inhibition; cytotoxic activity; DPPH method.

1. Introduction

Oxidative stress has been implicated as a major role in the onset and progression of a vast variety of clinical abnormalities including neurodegenerative disorders. Free radicals play an important role in many physiological and pathological conditions.¹ In general, the generation and scavenging of oxygen free radicals is

balanced and any imbalance or excessive amounts of active radicals may contribute to disease development. It has been found that, free radical reactions can produce deleterious modifications in membranes, proteins, enzymes, DNA and increasing the risk of diseases.² Therefore, it is important to find effective scavengers of free radicals for prevention and treatment of such disorders.

Infections caused by multi drug resistant bacteria are of major health concern worldwide. Particularly important are infections caused by the Gram-positive bacteria *Staphylococcus aureus* and species of the genus *Enterococcus*, due to increasing incidence of infections caused by these microorganisms in hospitals and communities, and their ability of developing antibiotic resistance to multiple antibiotics. Due to some serious side effects in newly introduced antibacterial agents such as semi-synthetic streptogramins quinupristin/dalfopristin, daptomycin, the development of a diversified series of antimicrobials still remains a necessity.³ Indole and its analogues are good pharmacophore for designing several chemotherapeutic reagents which exhibit wide spectrum of antimicrobial activities.⁴

The development of new anticancer therapeutic agents is one of the fundamental goals in medicinal chemistry. Cytotoxicity and genotoxicity of anticancer drugs to the normal cells are major problems in cancer therapy and engender the risk of inducing secondary malignancy.⁵ A dose of anticancer drug sufficient to kill tumor cells is often toxic to the normal tissue and leads to many side effects, which in turn, limits its treatment efficacy. In recent years, there has been a concerned search for the discovery and development of novel selective anticancer agents, devoid of many of the unpleasant side effects of conventional anticancer agents. The synthesis of a newer class of anticancer agents is in need of time.

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*Corresponding author: V. Tel: 091984815002

E-mail: eggadivenky@gmail.com

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Eggadi et al
doi: 10.14805/jphchem.2016.art52

Vensel Publications



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Advances in Drug Delivery

Volume -V

Editors

Y. Madhusudan Rao

Director,

**Vaagdevi Group of Pharmacy Colleges
Warangal, India.**

Formerly,

Prof & Head of the Department

*Centre for Biopharmaceutics and Pharmacokinetics,
University College of Pharmaceutical Sciences,
Kakatiya University, Warangal-506009 (T.S.), India.*



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1

Dental Inserts

Dr. Y. Shravan Kumar^{1,2}, Dr. Pavani Sriram¹, S. Harika¹, M. Mounica¹ and Prof. Y. Madhusudan Rao³

¹Vaagdevi College of Pharmacy, Raamnagar, Hanamkonda

²Magnificent cosmo cosmeceuticals

³Magnificent cosmo cosmoceuticals

Dental Inserts

Insert means the dosage form to place or introduce into the body. The insert mainly used for dental cavity are called as dental insert.

The mouth is a naturally dirty field, besides its high content of microflora, its high moisture content (96%) and appropriate temperature (37 °C) increases the incidence of bacteria. (Dolan, Matulka, & Burdock, 2010). Development of bacteria is a concern for dentist as it is associated with failure of dental procedures especially dental implants. Anaerobic gram positive cocci, and anaerobic gram negative rods are amongst the most common strains involved in dental surgery infections. The use of prophylactic antibiotics to combat these strains becomes a general practice in dental implants and procedures. High dose of systemic antibiotics are used to achieve adequate concentrations in the blood to prevent the growth and dissemination of bacteria at the site of implant surgery. The adverse effects associated with the use of systemic antibiotics makes it unappealing, hence the local application of an antibiotic medicated implant will be advantageous. Main advantages of dental inserts are localized action, reduced frequency of administration, reduced side effects and sustained action. Some of the disadvantages of dental inserts are it requires technical person for the administration and drug loss through saliva.

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Sublingual Drug Delivery

Prof. Y. Shravan Kumar, Dr. A. Bhargavi latha, Prof. Y. Vamshi Vishnu, Prof. Y. Madhusudan Rao

¹Vaagdevi College of Pharmacy, Raamnagar, Hanamkonda

²Nethaji Institute of Pharmaceutical Sciences

³Anjall college of Pharmacy and Sciences, Etmadur, Agra, U.P.

⁴Magnificent cosmo cosmoceuticals

Introduction

Oral administration is the most widely used route because of ease of ingestion, pain avoidance, and most importantly patient compliance. Solid oral delivery systems do not require sterile conditions and are therefore less expensive to manufacture. One important drawback of solid dosage forms is the difficulty in swallowing (dysphasia) or chewing in some patient's particularly pediatric and geriatric patients. The problem of swallowing is common phenomenon in geriatric patient due to fear of choking, hand tremors, dysphasia and in children's due to under developed muscular and nervous systems.

The unique environment of the oral cavity offers its potential as a site for drug delivery, because rich blood supply and direct access to systemic circulation, the oral mucosal route is suitable for drugs which are susceptible to acid hydrolysis in the stomach or which are extensively metabolized in the liver. The continuous secretion of saliva results in rapid removal of released drug and this may desire that the oral cavity be restricted to the delivery of drugs, which have a short systemic circulation. The mucin film, which exists on the surface of the oral mucosa may provide an opportunity to retain a drug delivery system in contact with the mucosa for prolonged periods, if it is designed to be

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Principal
Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001

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Pelletization Techniques

Dr. Y. Shravan Kumar¹, B. Gavaskar² and Dr. Yamsani Madhusudhan Rao³

¹Vaagdevi College Of Pharmacy, Raamnagar, Hanamkonda

²SB Organics Ltd, Unit -II, Sanga Reddy, Telangana

³Vaagdevi Institute Of Pharmaceutical Sciences, Bollikunta, Hanamkonda

Introduction

In the past few eras, pharmaceutical invention and research on drug delivery has reformed astonishingly and even greater changes are anticipated in the forthcoming future to supplement desirable therapeutic intents with minimizing side effects. The key purpose of the drug therapy is to accomplish a curative and healing effect. For the motive, to improve and make advances in the delivery of pharmaceutical compound(s) and therapy, the area is being extensively researched and a marked growth have seen till date and development is still on going.

Drugs are being consumed to enrich health and expand life. To acquire the assumed therapeutic response and to be absorbed as well as transported to the site of action at the right time, an appropriate amount of the active drug is needed. The rate of input drug quantity can be regulated based on various drug delivery systems and routes of administration to maintain the effective level of essential concentration for as long as necessary.

Drug delivery is an approach of transporting a medicinal compound of required dose into the body to safely accomplish the desired therapeutic effect in animals/ humans. Drug delivery systems are the technologies that facilitate the ingestion of engineered therapeutic agent(s) into the

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Principal

Vaagdevi College of Pharmacy
Hanamkonda, Warangal-506 001

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Solid Dispersion

**Dr. Y. Sheavan Kumar^{1*}, Dr. A. Bhargavi latha¹, Yamsani
Madhusudhan Rao^{2,3}**

¹Vaagdevi College Of Pharmacy, Raamnagar, Hanamkonda

²Bheemaji Institute Of Pharmaceutical Sciences

³Vaagdevi Institute Of Pharmaceutical Sciences

*Magnificent cosmo cosmoseulicite

Introduction

The oral of drug administration is the most common and preferred method of delivery due to convenience and easy of digestion. From a patient's perspective, swallowing a dosage form is a comfortable and a familiar means of taking medication.

Although the oral route of administration is preferred, for many drugs it can be a problematic and inefficient mode of delivery for a number of reasons. Limited drug absorption resulting in poor bioavailability is paramount amongst the potential problems that can be encountered when delivering an active agent via oral route. Drug absorption from the gastrointestinal (GI) tract can be limited by a variety of factors with the most significant contributors being poor solubility and/or intestinal fluids before it can then permeate the membranes of the GI tract to reach systemic circulation. Therefore, a drug with poor membrane permeability will typically exhibit permeation rate limited absorption. Hence, two areas of pharmaceutical research that focus on improving the oral bioavailability of active agents include (1) enhancing solubility and dissolution rate of poorly water soluble and (2) enhancing permeability of poor permeable drugs. This article focus on the former, in particular, the use of solid dispersion technologies to improve the dissolution



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Principal
Vaagdevi College of Pharmacy
Raamnagar, Warangal-506 002

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Chewing Gum as Drug Delivery

Dr. Y. Shравan Kumar^{1,3}, Dr. Rajitha Koppula², Prof. Y. Madhusudhan Rao^{2,3}

¹Vaagdevi College of Pharmacy, Raamnagar, Hanamkonda

²Vaagdevi Institute of Pharmaceutical Sciences

³Magnificent cosmo cosmoceuticals

Introduction

Medicated chewing gum is a solid, single-dosage preparation that has been to be chewed and not swallowed; chewing gum contains one or more active ingredients that are released by chewing. A medicated chewing gum is intended to be chewed for certain period of time, required to deliver the dose, after which the remaining mass is discarded.

During the chewing process the drug contained in the product is released from the mass into saliva and could be absorbed through the oral mucosa or swallowed reaching stomach for gastro-intestinal absorption.

Chewing gum can be used as a convenient modified release drug delivery system.

Medicated chewing gums are currently available for pain relief, smoking cessation, travel illness, freshening of breath, obesity. (Savaliya prathik *et al.*, 2011)

There are two absorption pathways which are possible to introduce the active ingredient into the systemic circulation giving rise to a systemic effect. Drug absorbed directly via the buccal membrane avoids metabolism in the GIT and the first-pass effect of the liver, it might



Principal
Vaagdevi College of Pharmacy
Raamnagar, Warangal-506 001