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Hygeia was the Greek goddess of health and she was worshiped in connection with Aesculapius, her father, the god of medicine and health. She is said to be again, the granddaughter of the god Apollo. She is also the sister of Panakeia or Panacea (means all-cures) Akeso (Goddess of Healing), and Iaso (which means Remedies). Hygeia is usually depicted as a young woman, who holds a sacred snake (symbolizes resurrection), which is often combined with the rod of Asclepius to form the caduceus, or symbol of medicine. Often this snake is portrayed as drinking from a cup (symbolizing medicine), which has become known as the pharmacist’s bowl. Originally, she was the guardian of physical health and later became the goddess of mental health, as well. Eventually, she became a protectress against various kinds of danger, an attribute which she shared with Aesculapius. It is from Hygeia, the word hygiene originates. Hygiene is the science of preserving health. The subject of hygiene includes all of the agencies affecting the physical and mental well being of people. In its public aspects, it is concerned with soil; climate; character; materials and arrangement of dwellings; heating and ventilation; removal of wastes; medical knowledge on the incidence and prevention of disease; and the disposal of the dead.
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Abstract

A summary of not more than 150 words should be clear and factual in content. Abstract must present the reason of study, the main findings and principal conclusion. Follow the structured abstract pattern and include Plan, Prologue (Preface), Methodology, Outcome and Key words of the research work.

Introduction

The introduction should supply adequate background information to allow the reader to understand and evaluate the results of the present study, and the purpose of study should be clearly stated.

Materials and methods (Experimental)

The section on materials and methods should include brief details on the methodology adopted sufficient to repeat the experiment. Methods for which adequate references can be cited are not to be described. Units of measure should be metric or preferably SI methods.

Results and Discussion

This section include only the results of the experiments, important findings, should be stated in a relevant sequence. Illustrate the results with figures or tables in a concise manner where necessary. Results must be precise and comprehensive and should not suffer from ambiguities.

Conclusion

This part should provide an interpretation of the results in relation to previously published work and the experimental system followed to the present study. Do not repeat data already stated in results in details. All illustrations must be numbered using Roman numerals in their order of citation in the text. Illustration may be accepted if they enhance a paper's content scientifically. Every table must be on a single separate sheet presented neatly depicted on good quality tracing paper.

Acknowledgment

Acknowledgment of financial assistance and of personnel assistance is given in separate paragraphs.

References

The references section must include all relevant sources and all listed references must be sited in the text. Strictly follow the styles shown in the examples below: (for Journals and published books)

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Short communications

The divisions of the manuscript into separate section is unnecessary and only a discussion and an experimental section must be reported.

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Research News and views
Information about various new and novel, technical and scientific advances in Pharmaceutical field or related scientific areas.

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American Journal of Medicine- (Am J Med)
American Journal of Medical Sciences - (Am J Med Sci)
American Pharmacy- (Am Pharm)
American Journal of Pharmacy- (Am J Pharm)
American Journal of Physiology - (Am J Physiol)
Analytical Chemistry- (Anal Chem)
British Journal of Experimental Pathology - (Br J Exp Pathol)
British Journal of Pharmacology and Chemotherapy- (Br J Pharmacol)
British Heart Journal- (Brit Heart J)
Canadian Journal of Pharmaceutical Sciences- (Can J Pharm Sci)
Canadian Medical Association Journal- (Can Med Assoc J)
Cardiovascular Research- (Cardiovasc Res)
Chemical and Engineering News- (Chem Eng News)
Clinical Pharmacokinetics- (Clin Pharmacokinet)
Current Science - (Current Sci)
Drug Development and Industrial Pharmacy- (Drug Develop Ind Pharm)
Helvetica Chimica Acta- (Helv Chim Acta)
Indian Journal of Medical Sciences- (Indian J Med Sci)
Indian Journal of Pharmaceutical Sciences- (Indian J Pharm Sci)
Journal of the American Chemical Society - (J Am Chem Soc)
Journal of Biological Chemistry- (J Biol Chem)
Journal of Controlled Release- (J Control Release)
Journal of Medicinal Chemistry- (J Med Chem)
Journal of Pharmacology and Experimental Therapeutics- (J Pharmacol Exp Ther)
Journal of Pharmacy and Pharmacology- (J Pharm Pharmacol)
Lancet - (Lancet)
Nature- (Nature)
The Pharmaceutical Journal (Pharm J)
Pharmacological Research Communications- (Pharmacol Res Commun)
Science- (Science)
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Editorial

- Pharmacovigilance
  Dr. Shirley Samson Varghese
  [Abstract] [Full Text] [Pdf] [doi:10.15254/H.J.D.Med.6.2014.9]

Research Articles

- In Vitro Anticancer Activity of Papain Hydrolysates of Oyster Mushroom (Pleurotus ostreatus) Protein
  Sundaram Meignanalakshmi, Aarthi KS, Parthiban M and Palanisammi A
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.130]

- Formulation and Evaluation of Cream Containing Antifungal Agents, Antibacterial Agents and Corticosteroids
  A. Premkumar, T. Muthukumaran, V. Ganesan, Shanmugam R, Priyanka D.L
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.131]

- Phytochemical Analysis and Histology of Strychnos potatorum L. Seeds
  Shanti Bhushan Mishra and M. Vijayakumar
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.132]

- Prospective Evaluation of Drug Prescribing and Improvement of Drug Safety in Renal Failure Patients
  Manjula Devi A.S, Bittu Thomas, Annu Joseph, Kavuri Sravani.
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.133]

- Development and Validation of an Antidiabetic Polyherbal Formulation Containing Curcumin Using RP-UFLC Method.
  Rashmi N G, Gurupadayya B M, Sirisha Tadiboyina, Jinesh B Nagavi, Chetan G Shinde
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.134]

- Pharmacognostical Investigation of Indigofera barberi Gamble (Fabaceae) – A Threatened Medicinal Herb
  Srinivasan N and Sathyanarayana D
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.135]

- Bioavailability Enhancement of Ziprasidone: Optimization of Carriers and Methods Employed
  Murthy S N Varanasi, John S, Srikar G, Radha Madhavi B
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.136]

Review Articles

- Autophagy: A Janus-Faced Role in Inflammation and Cancer
  Mohannad A. Elkhider and Bob Chaudhuri
  [Abstract] [Full Text] [Pdf] [References] [doi:10.15254/H.J.D.Med.6.2014.137]
Pharmacovigilance (PV) is the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug-related problem. WHO established its Programme for International Drug Monitoring in response to the thalidomide disaster detected in 1961. The aims of PV are to enhance patient care and patient safety in relation to the use of medicines; and to support public health programs by providing reliable, balanced information for the effective assessment of the risk-benefit profile of medicines. Though it was set in motion several decades ago, some countries still look upon PV as a ritual or a copycat strategy to comply with the International bodies. PV is not yet felt as an intrinsic need…”

Sundaram Meignanalakshmi, Aarthi KS, Parthiban M and Palanisammi A
Department of Animal Biotechnology, Madras Veterinary College, Chennai-7

ABSTRACT

Plan: The present study has been undertaken to evaluate the in vitro anticancer activity of papain hydrolysates of Oyster mushroom (Pleurotus ostreatus) protein.

Preface: Oyster mushroom protein was isolated by phosphate buffer method and concentration of protein was found to be 24mg/g of Oyster mushroom.

Methodology: The total protein was enzyme hydrolysed by papain (enzyme and substrate was added at a ratio of 1:5). In vitro anticancer activity was studied by Percentage cell inhibition in MCF-7 cell line using MTT assay. In vitro percentage cell viability was tested in vero cell line.

Outcome: Papain hydrolysates was found to be having highest percentage cell inhibition of 75.82% at 100 µg/ml, 89.83% at 500 µg/ml concentration respectively in MCF-7 cell line. Papain hydrolysates were found to be having highest percentage cell viability of 97.23% at 100 µg/ml and 83.72% at 500 µg/ml concentration respectively.

Key words: Oyster mushroom, anticancer activity, Papain hydrolysates, MTT assay, Percentage cell inhibition, Percentage cell viability.

Received: 5 July 2014, Revised: 20 July 2014, Accepted: 30 July 2014, Available online: 14 October 2014
Formulation and Evaluation of Cream Containing Antifungal Agents, Antibacterial Agents and Corticosteroids

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4. Department of Pharmacognosy, CES College of Pharmacy, (Affiliated to JNTU, Anantapur) Kurnool, Andhra Pradesh, India.

ABSTRACT

Plan: The main aim of our research was to develop a novel cream formulation consisting of combination of Miconazole nitrate, Mupirocin and Hydrocortisone for the treatment of secondary skin infections.

Prologue: Topical route is most suitable route for skin infections. The development of topical drug delivery systems designed to have systemic effects appears to be beneficial for a number of drugs on account of the several advantages over conventional routes of drug administration.

Methodology: A novel cream formulation consisting of combination of Miconazole nitrate, Mupirocin and Hydrocortisone was prepared. The formulation was subjected to in-vitro diffusion studies. Microbiological studies and in-vivo skin irritation studies were performed to find out the safety of materials used in the formulation.

Outcome: The developed cream consisting of combination of Miconazole nitrate, Mupirocin, and Hydrocortisone was found to be safe and effective for the treatment of skin infections.

Keywords: Miconazole nitrate, Mupirocin, Hydrocortisone, Antifungal, antibacterial, Skin irritation studies.

Received: 10 June 2014, Revised: 2 July 2014, Accepted: 18 July 2014, Available online: 10 October 2014

Phytochemical Analysis and Histology of Strychnos Potatorum L. Seeds

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2. The Himalaya Drug Company, Bangalore, India

ABSTRACT

Plan: To evaluate the Pharmacognostic properties including physicochemical characters and HPTLC profile of seeds of Strychnos potatorum L.

Methodology: Micro and macroscopic characters of fresh and dried seed samples were analyzed. Physicochemical studies, fluorescent behavior of seeds and estimation of Quercetin by HPTLC were performing by using standard procedure.

Outcome: Microscopic studies revealed that testa comprises two different region: the outer region consists shrunken parenchyma and inner is trichome zone with dense trichomes occur very close to each other. Calcium oxalate prismatic crystals are frequently seen. Physicochemical parameters such as foreign matters, moisture content, extractive values, ash content, and fluorescent behavior of seed powder were also determined. This report on the pharmacognostic studies of S. potatorum may help investigators, in the characterization of the crude drug and to screen pharmacological activities of this species.

Key words: Strychnos potatorum, HPTLC, Phytochemical and Pharmacognostic screening, Quercetin

Received: 6 April 2014, Revised: 14 June 2014, Accepted: 25 2014, Available online: 14 October 2014

Prospective Evaluation of Drug Prescribing and Improvement of Drug Safety in Renal Failure Patients

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ABSTRACT

Plan: To assess the incidence of inappropriate dosing of renally excreted drugs in hospitalized patients with renal impairment.
Preface: Inappropriate dosing in patients with renal dysfunction can cause drug accumulation and toxicity.
Method: Creatinine clearance or estimated glomerular filtration rate of patients with serum creatinine greater than 1.7 mg% was calculated using Cockroft-Gault equation and Modified Diet in Renal Disease equation respectively. Dose of all potentially nephrotoxic drugs was evaluated using the published drug dosing guidelines and the new dose or dosing interval was recommended based on the patient’s individual degree of renal impairment.
Outcome: Five hundred and six drugs in 50 patients were evaluated of which the dosages of 88 (17.39%) drugs were not adjusted at the time of prescribing. Most of the drugs requiring dose adjustment were antibiotics (39.77%) and antihypertensives (14.77%). About 27% of the drugs were to be avoided strictly.
Conclusion: Drug dosing evaluation and concurrent feedback mechanism by the pharmacist improve drug safety in patients with renal impairment.

Keywords: Renal impairment, Creatinine clearance, Dosage adjustment, Drug safety.

Received: 16august 2014, Revised: 25August 2014, Accepted: 30 August 2014, Available online: 14 October 2014

Development and Validation of an Antidiabetic Polyherbal Formulation Containing Curcumin Using RP-UFLC Method.

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ABSTRACT

Plan: The principle destination of our work was to develop a simple, rapid and sensitive reverse phase ultra-fast liquid chromatographic (RP-UFLC) method for estimation of curcumin in anti-diabetic poly herbal formulation (Mehagni).
Methodology: Chromatography was carried on a reverse phase C18 column (250 x 4.6 mm) with the mixture of methanol and 2% acetic acid as a mobile phase at the proportion of 70:30 v/v with the flow rate of 1.2 ml/min. The absorbance measured at 420 nm by PDA detector.
Outcome: Optimized chromatographic conditions were achieved and results showed good peak resolution. The retention time was found at 5.02 min. The method was validated as indicated by International Conference on Harmonization guidelines. The parameters, such as specificity, sensitivity, linearity, precision, accuracy, ruggedness, robustness and system suitability were performed. The framework was linear with a correlation co-efficient of 0.9945. %RSD of system and method precision were found to be 1.14 and 1.13. The LOD & LOQ for curcumin was found to be 0.2 µg/ml and 0.65 µg/ml.

Keywords: Curcumin, Mehagni, RP-UFLC, Anti-Diabetic Herbal Formulation.

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Pharmacognostical Investigation of *Indigofera Barberi Gamble* (Fabaceae) – A Threatened Medicinal Herb

Srinivasan.N and Sathyanarayana.D

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**ABSTRACT**

**Plan:** A preliminary Pharmacognostical study on the leaves and stems of *Indigofera barberi Gamble*

**Methodology:** The *Indigofera barberi Gamble* leaves and stems were collected, in the forest regions of Thalakona (Nelakona regions) of Chittoor district, Andhra Pradesh, India in the month of November. The collected drug were dried and studied to determine various Pharmacognostical parameters such as macroscopy, microscopical characters of leaf and stems including its powder microscopical characters. The shade dried powder and various solvent extracts (viz., petroleum ether, chloroform, dichloromethane ethanol and water) have been analysed for their phytochemicals, behaviour of powder with different chemical reagents and fluorescence characters.

**Outcome:** The data generated for the Pharmacognostical evaluation on *Indigofera barberi Gamble* leaves and stems. The results may be useful as a reference material in the preparation of standard monograph.

**Keywords:** *Indigofera barberi*, stem, leaf, histological, powder microscopy.

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Bioavailability Enhancement of Ziprasidone: Optimization of Carriers and Methods Employed

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**ABSTRACT**

**Plan:** The main objective of the present research work was to enhance the dissolution rate of Ziprasidone by preparing the solid dispersions using different carriers like PVP, PEG 4000, SSG and β-Cyclodextrin.

**Preface:** Ziprasidone is a class-II drug according to Biopharmaceutical Classification System. It is practically insoluble in water and it has dissolution limited bioavailability. So, the present research work it is aimed to improve the dissolution rate through solid dispersion technique which further enhances the bioavailability.

**Methodology:** The solid dispersions were prepared at three ratios (1:1, 1:2 & 1:3) of each carrier by three different techniques viz. Physical mixtures, Kneading method and Solvent evaporation method. The characterizations of prepared solid dispersions were done by Differential Scanning Calorimetry (DSC) and they were also characterized for their drug content and in-vitro dissolution studies

**Outcome:** From DSC studies it was confirmed that the drug was dispersed in the carrier at molecular level in the obtained co-evaporates. From the results of dissolution studies, it was confirmed that the solid dispersions could enhance the bioavailability of Ziprasidone.

**Key Words:** Ziprasidone (ZPR), Solid dispersions, Co-evaporates, Bioavailability

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Autophagy: A Janus-Faced Role in Inflammation and Cancer
Mohannad A. Elkhider and Bob Chaudhuri
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ABSTRACT

Plan: This review focuses on the role of autophagy, in up regulation, in the innate and adaptive immune response, in controlling carcinogenesis, and in supporting neuronal cell growth, development & remodeling. Also the review covers the therapeutic interventions involved in cancer management through autophagy modulations.

Preface: Autophagy is a cellular degradative pathway where unwanted and weary cytosolic components are recycled. Any defects interfering with the integrity of the autophagic machinery would compromise the cells defenses leaving the cell susceptible to infection by circulating pathogens. Current literature points out that the dysregulation of autophagy may be associated with the genesis of cancer. Accumulation of aberrant organelles and proteins increases the chances of triggering an inflammatory microenvironment favoring chromosomal instability and mutagenesis. The aggregation of certain proteins yields cellular toxicity which eventually leads to cell death and neurodegeneration. Therefore, the autophagic duty of continuously monitoring and clearing out aggregated proteins is indispensable in neuronal cells.

Outcome: The accumulation of autophagosomes is an established assurance in a number of neurodegenerative diseases. However, this observation has triggered controversy whereas one opinion considers the activated autophagic pathway to act as an executioner by initiating neuronal cell death while the other explains the presence of autophagosomes as a final attempt by the cell to sustain viability against the increasing amount of stress.

Keywords: Autophagy, Cancer, Inflammation

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