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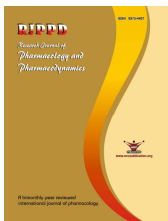
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Research Journal of *Pharmacology and Pharmacodynamics* (RJPPD)

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Abstract

RESEARCH ARTICLE

Wound Healing Potential of *Musa paradisiaca* L. (Musaceae) Stem Juice Extract Formulated into an Ointment

A. Weremfo¹, A.N.M. Pappoe² and M.B. Adinortey¹.....294

¹Department of Biochemistry, School of Biological Sciences, University of Cape Coast, Cape Coast, Ghana.

²Department of Environmental Sciences, School of Biological Sciences, University of Cape Coast, Cape Coast, Ghana

ABSTRACT:

Musa paradisiaca L (plantain) stem juice has been shown to possess haemostatic effect. The present work was undertaken with the premise that if the stem juice is able to stop bleeding, then it could have wound healing potential. An ointment containing extract of plantain stem juice (10%) was formulated and tested for wound healing activity in rats using excision wound model. The results indicate that topical application of the formulated ointment significantly ($P < 0.05$) enhanced the rate of wound healing and reduced the epithelization period. The percentage closure of wound area for the ointments of plantain stem juice and silver sulphadoxine were 98.9 ± 0.7 and 100 ± 0.00 , respectively. Epithelization period was drastically reduced from 21.0 ± 1.4 days for the petroleum jelly-treated group to 14.6 ± 0.5 days for silver sulphadoxine-treated group and 16.8 ± 0.8 days for the extract-treated group. In conclusion the study clearly shows the potential of plantain stem juice ointment in wound healing confirming its ethno-medicinal use.

KEY-WORDS: Wound healing, excision wound model, *Musa paradisiaca*, epithelization, topical application

Pure Leiomyoma of prostate: A Case Report

Sutrakar S.K., Singh U.R., Sharma B.K., Singh V. and Sulya M.....297

S.S. Medical College and Asso. S.G.M. Hospital, Rewa (Madhya Pradesh)

ABSTRACT:

Benign prostatic hyperplasia (BPH) is common in elderly males. However, benign mesenchymal tumors, especially pure leiomyoma, are rare in prostate. The diagnosis of is important because of the potential of malignancy in such cases, histopathology is only tool to diagnose and to rule out the malignant changes. Here we report the case of pure leiomyoma prostate diagnosed on sonography as benign prostatic hyperplasia.

KEY-WORDS: Mesenchymal tumors, Leiomyoma, BPH, Malignancy, Prostate.

Biochemical Evaluation of Hypoglycemic, Hypolipidemic and Antioxidant Properties of *Lippia nodiflora* Leaves Studied in Alloxan-Induced Experimental Diabetes in Rats

S. Subramanian*, N. Priya and V. Thamizhiniyan.....299

Department of Biochemistry, University of Madras, Guindy Campus, Chennai – 600 025, Tamil Nadu, India.

ABSTRACT:

Lippia nodiflora, a perennial herb, has been reported to possess a number of pharmacological activities and used for various ailments. In the absence of systemic studies in the literature, the present study was designed to evaluate the hypoglycemic, hypolipidemic and antioxidant properties of *Lippia nodiflora* leaves extract in alloxan-induced experimental diabetic rats. The beneficial effects of oral administration of *Lippia nodiflora* leaves extract (400 mg/kg b.w.) on the levels of biochemical parameters were determined in experimental groups of rats. The altered levels of biochemical parameters such as blood glucose, insulin and glycosylated hemoglobin in the diabetic rats were significantly reverted back to near basal values by the administration of *Lippia nodiflora* leaves extract to diabetic rats for 30 days. The levels of lipid peroxides in the plasma and pancreatic tissues of diabetic rats were elevated significantly and were normalized by the administration of *Lippia nodiflora* leaves extract. The activities of pancreatic enzymic antioxidants and the levels of plasma non-enzymic antioxidants were markedly declined in the diabetic rats. Upon treatment with *Lippia nodiflora* leaves extract to diabetic rats, these decreased levels were elevated to near normal values. The altered levels of lipid profile were reverted back to near normalcy upon the extract treatment. The results of the study indicate that *Lippia nodiflora* leaves extract possesses antilipidemic, antioxidant effects in addition to antidiabetic activity. The results are comparable with gliclazide, an oral standard hypoglycemic drug. The phytochemicals present in the *Lippia nodiflora* leaves may account for the observed pharmacological properties.

KEY-WORDS: *Lippia nodiflora*, hypoglycemic, hypolipidemic, antioxidant nature, alloxan.

Primary Hydatid Cyst of Breast: A Case Report

Sutrakar S. K.¹*, Bhargava O.P.², Singh U. R.¹, Lal S.¹ and Azad K.L.³305

¹S.S. Medical College, Rewa.

²N.S.C.B. Medical College, Jabalpur MP.

³Govt. Medical College, Jagdalpur CG.

ABSTRACT:

Cystic hydatid disease is caused by the *Echinococcus granulosus* parasite. Hydatid disease involving the breast is uncommon. The breast can be either a primary site of the disease or part of disseminated hydatidosis. It is most commonly found in temperate climate than of tropical areas. Cysts develop in liver and lung is the commonest site, here we report a case of hydatid cyst breast, which clinically diagnosed as fibrocystic disease of breast pre-operatively and intra-operatively.

KEY-WORDS: Hydatid cyst, Breast lump.

Elevated Singlet Oxygen Dependent Tissue Injury As Well As Diminished Activity of Antioxidative Defense Mechanism by Sodium Valproate Clinical Course in Epileptic Children.

N.Sangeetha¹ and U.S. Mahadeva Rao²*.....307

¹PG Department of Biochemistry, SRM College of Arts and Science, Chennai-603 203. India.

²Associate Professor, Faculty of Medicine and Health Science, Universiti Sultan Zainal Abidin, 20400 Kuala Terengganu, Terengganu, Malaysia.

ABSTRACT:

The study was aimed to determine the biochemical changes in the free radical profile and antioxidant enzyme status in epileptic children before and after treatment with VPA monotherapy. **Methods:** We have studied the levels of serum LPO (MDA), erythrocyte antioxidants (GSH, GPx, SOD and CAT) in 25 epileptic children before and after treatment with sodium valproate and compared them against 25 healthy children. **Results:** The results showed that MDA levels were increased ($p < 0.001$) in epileptic children under VPA treatment compared to the controls. Antioxidant enzymes GPx, SOD, CAT activities were decreased ($p < 0.001$) in epileptic children receiving VPA monotherapy whereas no significant changes when compared between before and after treatment with VPA. The level of GSH was also decreased ($p < 0.001$) in follow-up cases of epileptic children receiving VPA therapy. **Conclusion:** It was hypothesized that the oxidants-antioxidants balance were modified further by sodium valproate in epileptic children.

KEY-WORDS: Sodium valproate, antioxidants, lipid peroxidation, oxidative stress, epilepsy, free radical

Epidemiological Profile of Patients Attending a Tertiary Care Hospital, Muktsar, Punjab (India)

Garg Narendra K.¹ and Sharma A. B.²311

¹Kaya Chikitsa, Punjab Ayurvedic Medical College, Shri Ganga Nagar, Rajasthan (INDIA).

²Deptt. of Kaya Chikitsa, Madan Mohan Malviya Govt. Aayurvedic College, Udaipur, Rajasthan (INDIA).

ABSTRACT:

Objective: To study the epidemiological profile of patients attending a tertiary care hospital. **Study Design:** Prospective study. **Setting:** Population in the catchments area of a tertiary hospital. **Participants:** One hundred and twenty seven patients of both sexes and of all age group, who attended the O.P.D **Variables:** Age, sex, occupation, residence, type of family, religion diet, educational status and addiction if any. **Statistical Analysis:** were expressed in terms of Ratio, Chi –square test and simple proportion. **Findings and interpretations:** Male female ratio was 1: 0.95. More than 50.0 % of female patients belong to 15 to 44 years of age group in comparison to less than 50.0 % male patients of the same age group .Non vegetarian 41.66 % male and 33.33 % female patients attended O.P.D. with symptoms of C.V.S. in comparison to only 18.75% and 6.06% male and female respectively of vegetarian and 16.21% male and 3.84% females were from mixed diet group. Patients belonging to Sikh religion were more in Respiration, C.V.S., C.N.S., Reproductive Tract and Skin while Thyroid, Coryza, Rheumatism/Joint pain and of miscellaneous group were more in Hindu. More married patients in comparison to their counterparts unmarried found suffering from one or the other disease. It was noticed that 39.37% patients were illiterate, 22.04%, 17.32% and 21.25% were studied up to 5th, 10th. and above 10th classes respectively. Though there were less number of females of rural back ground but still, females outnumbered their male counterparts in G.I.T., reproductive tract, Rheumatism/Joint pain, coryza and miscellaneous group of symptoms and in rest rural male outnumbered rural females. It was interesting to note that none of the male patients were student in comparison 16.53% females students. 30.76% of females with tea's addiction complain of G.I.T. symptoms in comparison to their 20.50% female counterparts who are not taking tea. Though on application of Chi-square test, the difference found statistically insignificant ($X^2 = 0.933$).

KEY-WORDS: Third parent. Media Mix, Key Players.

Anti-Obesity Activity of Ethanolic Extract of *Moringa oleifera* Seeds In Experimental Animals.

Manjula B., *Rayappa Hunasagi and Shivalinge Gowda K.P.318

Department of Pharmacocology, Sree Siddaganga College of Pharmacy, Tumkur-572 102.

ABSTRACT:

Background and objectives: Obesity is closely associated with life-style-related disorders such as arteriosclerosis, hyperlipidemia, hypertension and type-2 diabetes mellitus. *Moringa oleifera* Lam. seeds were proved scientifically

for the treatment of lifestyle related disorders. Present study was performed to clarify whether an *M. oleifera* Lam. seeds ethanol extract (MOE) prevent high-fat diet-induced obesity in mice fed for nine weeks.

Methods: We have performed two *in vivo* experiments such as high-fat diet-induced obesity mice model and lipid emulsion tolerance test in normal rats. In high-fat diet-induced obesity mice model, female Swiss mice were fed a high fat diet (HFD; 40% fat) with or without 1 or 2% of MOE or 0.012% orlistat for nine weeks. In lipid emulsion tolerance test male Wistar rats were orally administered, lipid emulsion with or without 500 mg/kg or 1000 mg/kg of MOE and the plasma triglycerides were measured from 0.5 to 5 h.

Results: Consumption of HFD containing MOE to mice for nine weeks exhibited significant reduction in lipid parameters, body weight, parametrial adipose tissue weight, liver TG and different organs weight compared to HFD fed control. Whereas, improvement in insulin resistance induced by HFD alone group. Furthermore, consumption of a HFD containing 1 or 2 % of MOE significantly increased the fecal content and fecal triglyceride compared with the HFD group. Pre-treatment with MOE inhibited the elevated plasma triglyceride level after the oral administration of the lipid emulsion to rats. In other words, administration of MOE improves lipid tolerance in rats.

Conclusion: Observed anti-obesity activity of MOE in experimental animals may be partly mediated through delaying the intestinal absorption of dietary fat by inhibiting pancreatic lipase activity as evident from similar profile of activity as that of orlistat.

KEY-WORDS: MOE; High fat diet; insulin tolerance; lipid parameter; lipid emulsion; fecal TG.

REVIEW ARTICLE

Current and Future Trends of Drugs Used in Osteoporosis

Radhakrishna B., Ashok M., Harish P.L., Veera Jyothsna M. and Shivalinge Gowda K.P.*.....329

Department of Pharmacology, P.E.S. College of Pharmacy, Hanumanthanagara, Bangalore-560050

ABSTRACT:

Osteoporosis represents a weakening of bone tissue due to an imbalance in the dynamic processes of bone formation and bone resorption that are continually ongoing within bone tissue. Most currently available osteoporosis therapies are antiresorptive agents. Promising new drugs are currently under investigation by the FDA for the treatment of osteoporosis. Majority of the drugs used in osteoporosis are antiresorptive agents. These drugs act by inhibiting osteoclastic bone resorption and thus slowing the loss of bone mass. However these drugs do not stimulate new drug formation and does not increase true bone mass. The only FDA approved bone anabolic agent is PTH. It is the most beneficial agent for the patients with very low bone mass. Clinical trials are undergoing for denosumab. One of the new drug strontium ranelate acts by stimulating the bone formation and inhibiting bone resorption. More recent research indicates that dietary sources of phytoestrogens may increase osteoprotegerin production and help prevent bone loss and bone resorption; however, rigorous data are needed before clinical recommendations can be made. This review discusses the use of currently available agents as well as highlighting emerging agents expected to bring significant changes to the approach to osteoporosis therapy in the near future.

KEY-WORDS: Bone resorption, antiresorptive agent, bone anabolic agent, osteoprotegerin.

Sickle Cell Anemia Introduction and Management

Rajesh Kumar*.....334

Co. Dr. K.D.Sharma, Vijay Medical Stores Old Market, Dalli Rajhara, Dist – Durg. – 491228 Chhattisgarh.

ABSTRACT:

Sickle cell Anemia is a serious Condition in which the Red Blood cell can become sickles shaped {Shaped like a “C”}. They don’t move easily through blood vessels. They are stiff and sticky and tend to form clumps and get stuck

in blood vessels. The clumps of sickle cells block blood flow in the blood vessels that leads to the limbs and organs. Blocked blood vessels can cause pain, serious infections and organ damage.¹ There is no specific therapy.² In sickle cell anemia we treat only symptoms. In present paper Author is introducing Homoeopathic Medicinal System to treat Sickle cell Anemia.

Ayurvedic, Phytochemical and Pharmacological profile of *Aegle marmelos* (Linn.) Corrae - A Review

Ajay Kumar Meena¹, Himanshu Sehgal^{1*}, M. M. Rao¹, P. Panda¹ and M. M. Padhi².....340

¹National Institute of Ayurvedic Pharmaceutical Research, Patiala – 147001, Punjab, (India).

²Central Council for Research in Ayurveda and Siddha, Janakpuri, Delhi-110058, (India).

ABSTRACT:

The scientific basis for the statement that plant and their active constituents play an important role in the prevention diseases is continuously advancing. Most sacred herb in Indian mythology, Bael (Bilva), word Bilva means that kills all the diseases has several medicinal properties. As mentioned in Dhanvantri nigantu, in 10th century that the unripe fruit is sangrahi, the research also shows the same result that unripe fruit is most effective remedy for chronic diarrhea and dysentery without fever. The present review deals with its history, origin, distribution, cultivators, nutritive value, phytochemical properties and therapeutic uses of *Aegle marmelos*. It is antidysentary, anti diarrheal, antimicrobial, antipyretic, anti inflammatory, analgesic, cardio protective, antidiabetic, anticancerous, antispermatogenic, radio protective and also cures peptic ulcer and respiratory infections.

KEY-WORDS: *Aegle marmelos*, anticancerous, phytochemical, diarrhea.

Diabetes in India: A Review

A.R. Umarkar*, A.K. Raut, S.S. Sonone, S.S. Pawar, R.S. Deshmukh, and N.V. Bharude.....345

Shree Sureshdada Jain Institute of Pharmaceutical Education and Research Jamner, Dist: Jalgaon.[M.S]

ABSTRACT:

Diabetes is a major cause of morbidity and mortality worldwide. Prevalence of diabetes is on rise in India and it may reflect changes in lifestyle. Major complications of diabetes are neuropathy, nephropathy, coronary artery disease and retinopathy. Improper diets, immigration effects, modification in life style, inter-population differences and obesity are the principal reasons for the augmentation of the diabetic prevalence. Diabetic prevalence in Chennai, Andhra and Kerala are 15.5%, 13.2% and 12.4% respectively. It has been estimated that India may have 80 million diabetic people in the year of 2030. Therefore, providing safe and effective measures are the need of the hour to control the explosion of the disease in India particularly its southern. The present review article gives a brief overview of diabetes, different factors leading to the increase in diabetic occurrence and complications particularly localizes in India.

KEY-WORDS: Diabetes, type-1, type-2, insulin.
