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CONTENT

REVIEW ARTICLE

ABSTRACT

Chikungunya virus is an insect-borne virus, of the genus *Alphavirus*, that is transmitted to humans by virus-carrying *Aedes mosquitoes*. The virus causes an illness with symptoms similar to dengue fever with an acute febrile phase of the illness which lasts only two to five days. Infection can affect the nervous system or the musculo-skeletal system. General symptoms include fever, headache, maculopapular rash, arthralgia, myalgia, photophobia and lymphadenopathy. Virus isolation provides the most definitive diagnosis. The most effective means of prevention are protection against contact with the disease-carrying mosquitoes and mosquito control. NSAIDs, chloroquine and DNA vaccine are the effective medicines.

KEY WORDS: Chikungunya, Aedes mosquitoes, fever, chloroquine.

RESEARCH ARTICLE

ABSTRACT

Ethanolic and aqueous extracts of *Nymphaea nouchali (Burm.) F.* flowers at the dose of 200mg/kg showed significant lowers the plasma triglyceride, LDL and cholesterol levels as well as increase the Plasma HDL level like the standard anti-hyperlipidaemic drugs Ezitimibe (0.9mg/kg) and atorvastatin (8 mg/kg) when compared to untreated control albino rats.

ABSTRACT

Ficus glomerata roxb latex is traditionally used in treatment of inflammation. Latex of Ficus glomerata Roxb was subjected to preliminary screening for anti-inflammatory activity in swiss albino mice. All doses of latex exhibited significant anti-inflammatory activity comparable to the standard drug Indomethacin against xyline induced ear edema in mice method. Latex of plants showed local anti-inflammatory activity, compared with control.

ABSTRACT

The rise in population in the developing world is over whelming and this intensifies the need for effective birth control measures. The synthetic agents available today for fertility control produce severe side effects. Such as hormonal imbalance, hypertension, increased risk of cancer and weight gain. Thus there is a need to replace these agents by safe and effective agents such as plants based contraceptive agents.

Therefore, the present study was under taken to explore the abotifacient and antiovulatory activity of ethanol extract of henna roots. Thus, the successive ethanolic extract showed promising strong abotifacient and antiovulatory activity was observed at dose level of 400mg/kg body weight. Histological studies were carried out to confirm this effect.

KEY WORDS: Abortifacient, ovulation, contraception.

ABSTRACT
The aim of the present study was to evaluate the analgesic and anti-inflammatory activity of the methanolic extract of pericarps of *Sapindus emarginatus*. The preliminary phytochemical screening of the pericarps revealed the presence of saponins, terpenoids, tannins, flavonoids, glycosides and sugars. The central analgesic activity of the extract was evaluated using eddy's hot plate method and formalin test whereas peripheral analgesic activity using acetic acid induced writhing test. The extract was studied for anti-inflammatory activity in carrageenan-induced hind paw edema in rats and the paw volume was measured plethysmometrically. The study was carried out using dose (200 and 400 mg/kg, p.o.) of the extract. Pentazocin (10mg/kg, i.p.) is the standard drug for the centrally acting analgesic activity whereas indomethacin (10mg/kg, i.p.) is the standard for peripheral acting analgesics and anti-inflammatory activity. The statistical analysis was carried out using one-way ANOVA followed by Dunnet's test. P value less than 0.5 were considered significant. The methanolic extract of *Sapindus emarginatus* significantly ($p<0.05$) reduced carrageenan-induced paw edema in rats and analgesic activity evidenced by increase in the reaction time by eddy's hot plate method. It also significantly inhibited the neurogenic and inflammatory pain in formalin test as well as the writhing reaction induced by acetic acid. The methanolic extract of *Sapindus emarginatus* showed significant anti-inflammatory and analgesic effect comparative to the standard drugs. The pharmacological screening of the extract showed significant antinociceptive activity with anti-inflammatory profile.

KEY WORDS: *Sapindus emarginatus*, carrageenan, inflammation, paw edema.

ABSTRACT
In the present study, the anti-arthritic effect of oral administration of ethanolic extract of *Delonix elata* on Freund's adjuvant induced arthritis has been studied in Wistar albino rats. The loss of body weight during the arthritic condition was corrected on treatment with ethanolic extract of *Delonix elata* at 250 and 500 $mg.kg^{-1}$body weights. The swelling of the paws during the secondary lesions was also markedly reduced on treatment with ethanolic extract of *Delonix elata* and this results was confirmed using radiographic analysis and the changes in the density of Hind Limb Bone Mass (HLBM) was measured using photodensitometer and aluminium step wedge. The HLBM was significantly reduced on treatment with ethanolic extract (250 and 500 $mg.kg^{-1}$body weight) of *Delonix elata* and standard drug Indomethacin (10 $mg.kg^{-1}$). From the result we observed that the ethanolic extract of *Delonix elata* possess potent anti-arthritic activity.

KEY WORDS: *Delonix elata*, Anti-arthritic, Freund's complete adjuvant, Photodensitometer, Aluminium step wedge.

ABSTRACT
Ethnobotanical search has revealed the use of water extracts of bark of *Acacia catechu* and *Rotula aquatica* in the treatment of cancer. The aqueous extracts of both above mentioned plants were evaluated for antimitotic activity using the meristamatic cells of *Allium cepa* roots. The results showed inhibition of prophase stages in cell division. The *A.catechu* and *R. aquatica* treated roots of *A.cepa* were treated with tritiated thymidine. DNA was extracted

from these root tips. The total DNA was then counted in a scintillation counter. The results were compared with a positive control Methotrexate, a known anticancer drug. Roots treated with Plain water were used as negative control. The total DNA count from the treated roots and that from Methotrexate treated roots was less than that of Plain water. The extracted DNA was subjected to gel electrophoresis. DNA from roots treated with extracts and from Methotrexate treated roots showed fragmentation where as that from the Plain water was intact.

KEY WORDS: *Acacia catechu*, *Rotula aquatica, Allium cepa,* Antimitotic activity, DNA isolation.

ABSTRACT

The Parkinson's disease is mainly distinguished from other diseases based on the key feature that is tremors. Oxotremorine induced oxidative stress is implicated as a common pathway in development of Parkinson's symptoms like, tremor, salivation and temperature variation. Hence Oxotremorine-induced tremor model was used to evaluate antiparkinsonian drugs. Different extracts of plant of *Cassia tora* such as, petroleum ether (200mg/kg) p.o., methanolic (200mg/kg) p.o. and ethyl acetate extract (200mg/Kg) p.o. were used to investigate antiparkinsonian effect on oxotremorine induced Parkinson's symptoms in mice. Procyclidine, an anticholinergic, antiparkinsonian drug was administered as a standard drug at a dose of 5mg/kg p.o., 1hr prior the administration of oxotremorine (0.5mg/kg) S.C. Methanolic extract at 200mg/kg p.o route of administration decreased ($p<0.05$) Parkinson's symptoms, while petroleum ether extract (200mg/kg)p.o and ethyl acetate extract (200mg/kg)p.o shows moderate action. This study suggests that *cassia tora* is a plant with possible therapeutic value for Parkinson's disease.

KEY WORDS: Parkinson's disease, oxotremorine, tremor, procyclidine.

ABSTRACT

Though the non-pharmacological treatment play a key role in anxious and depressive patients the drugs like antidepressants and anxiolytics have an elegant role in treating these patients. The success rates with newly diagnosed patients were better. Drugs are necessary to reduce the risk of developing chronic conditions. We have assessed the efficacy of anxiolytics and antidepressants prescribed (to newly diagnosed patients), cost of medications, quality of life in a Multi Specialty Hospital. An assessment was made in newly diagnosed patients with anxiety and depression to study the efficacy of antidepressants and anxiolytics prescribed to them, and their quality of life. Also, the total cost incurred by the patients for one month after diagnoses were evaluated. 100 patients were included in this study, conducted over a period of 6 months. The study sample consisted of 61 females and 39 males. Patients were treated with both single and two drug therapy. There was a significant difference in both the therapy. With the mean differences in both the therapy groups, single drug therapy itself is effective for treating the newly diagnosed patients. All the drugs prescribed significantly improved the health condition of anxiety and depressive patients. In single drug therapy Escitalopram is considered as the drug that has more efficacies with respect to the mean values. Same way in two drug therapy the combination of Escitalopram+Alprazolam is more effective with respect to the mean values. Regarding the cost analysis, Escitalopram is the costliest drug. Though the quality of life of the patients shows significant improvement, it can be improved much more through patient awareness programs and patient education.

ADMINISTRATIVE, EDITORIAL, ADVERTISING AND SUBSCRIPTION OFFICE

A and V Publication, E-282 'Saikripa' Sector-4, Pt. Deendayal Upadhyay Nagar, Raipur 492010. (CG) India

Phone No. +919406051618. E. mail: editor.rjppd@gmail.com; Website: www.anvpublication.org