

The Comparison of Hemodynamic Variations with Clonidine and Dexmedetomidine as Adjuvant with Bupivacaine in Spinal Anesthesia.

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ABSTRACT

Background:We compared the heart rate and mean atrial pressure as hemodynamic variations after administration of intrathecal dexmedetomidine or clonidine with bupivacaine. **Methodology:** 90 patients were randomly divided into three groups, Bupivacaine-Clonidine group (BC) received 30mcg clonidine with 3.5ml of 0.5% bupivacaine, Bupivacaine –Dexmedetomidine group (BD) received 5mcg of Dexmedetomidine with 3.5ml of 0.5% bupivacaine & group (B) received 0.5% bupivacaine -3.5ml as intrathecal. The hemodynamic parameters MAP & HR were recorded by the help of standard monitor & standardized data entry format. The data collected were both descriptive and non-descriptive used for result analysis. The statistical constants arithmetic mean and standard deviation were computed to get valid interference about the data for comparison. In order to see whether the significant difference, the ANOVA test and chi square test were applied using SPSS. A p value of less than 0.05 was considered statistically significant. **Results:**we noticed that heart rate was slightly more decrease in BD than BC group after induction of drug till 25 minutes but it was not statistical significance. In mean atrial pressure, after 5 minutes of intrathecal administration, there was drastic decrease in MAP in BD group than other groups till 20 minutes. There was significant decrease in dexmedetomidine. **Conclusion:** When compared the hemodynamic variations among various groups, it concluded that there was more hemodynamic disturbance with dexmedetomidine than other groups.

Keyword: Hemodynamic, Bupivacaine, Clonidine, Dexmedetomidine, HR, MAP

Pharmacological validation of Dhanavantram Kwatham for analgesic, anti-inflammatory and anti-arthritic activity using experimental animal models

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ABSTRACT

Emerging evidences are indicating that Ayurvedic medicines are effective against many chronic disease conditions with less side effects and also exhibiting cost-effectiveness. Currently, Dhanavantram kwatham (DKM), a poly herbal formulation is well known for treatment for pain management, chronic inflammation associated disorders, paralysis and arthritis like conditions in south part of India. Though it is showing beneficial effects in Ayurvedic practice, but the pharmacological validations for DKM has not been elucidated. Thus, the present study is planned to validate the analgesic, anti-inflammatory and anti-arthritic effect of DKM in experimental animal models. The analgesic activity was carried out using acetic acid induced writhing model in mice. The inflammation in rats was induced by administration of carrageenan in rat hind paw and adjuvant arthritis in rats was induced by administration of sub-plantar injection of Freund's complete adjuvant (FCA). The results indicate that in comparison to DKM (250 mg/kg), DKM (500 mg/kg) treated group has shown significant reduction in number of writhing, paw volume and paw-edema and also this effect was comparable with diclofenac treated group. Hence DKM is exhibiting analgesic, anti-inflammatory and anti-arthritic effect. This poly herbal formulation could be an effective formulation in clinical conditions like rheumatoid arthritis where the pain and inflammation play a major role.

Keywords: Ayurveda, inflammation, analgesic, poly herbal, rheumatoid arthritis

Antibiotic Susceptibilities of *Nocardia asteroides* Isolated from Ocular Specimens

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ABSTRACT

Nocardia, an actinomycete, is becoming increasingly important as a cause of ocular infection in south India. A total of 39 isolates of *Nocardia asteroides* were obtained from four different ocular complications such as corneal ulcer (n=25), endophthalmitis (n=8), preoperative cases (n=5) and other infections (n=1). In the disk diffusion test 98%, 96.67% and 94.74% of *Nocardia* isolates were sensitive to amikacin, moxifloxacin, and gentamycin & vancomycin, respectively. Based on the MIC values, it is recommended that levofloxacin, amikacin, moxifloxacin, tetracycline and vancomycin as suitable antibiotics for the treatment of ocular infections caused by *Nocardia* spp.

Key words: Ocular infection, *Nocardia*, disk diffusion test, minimum inhibitory concentration (MIC).

CHEMOTHERAPY INDUCED ADVERSE DRUG REACTIONS IN CANCER PATIENTS

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ABSTRACT

The aim of the present study was to monitor adverse drug reactions in cancer patients receiving chemotherapy. The present study was carried out on 135 patients for six months. The causality assessment was done by using Naranjo's scale. The severity of ADR's was assessed using Hartwig's severity scale. The mean age of patients in sample was 49.31 ± 12.69 years. In our present study females (63%) were affected most commonly than males (37%). Monotherapy with Paclitaxel found to have highest number of ADRs (39). 5-FU+ cisplatin combination therapy had highest number of ADRs (104) followed by doxorubicin+ Cyclophosphamide (88) and doxorubicin+cyclophosphamide+5-FU (63). According to naranjo's algorithm, around 76% reactions were probable in causality, 20% were possible and 4% were definite in causality. According to Schumock and Thornton preventability criteria, more than half of the reactions are definitely preventable in nature (62%). Modification of dose of the drug and appropriate treatment measures should be implemented to minimizing the effects after chemotherapy and improving the patient's outcomes. In majority of post chemotherapy cases emesis is uncontrolled, even the anti-emetics are prescribed as prophylaxis. In general, myelosuppression is dose limiting ADR but it is observed even dose adjustment has been done.

Keywords: chemotherapy, causality, Paclitaxel, severity, adverse drug reaction.

DESIGN AND EVALUATION OF BUCCOADHESIVE TABLETS OF ACECLOFENAC

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ABSTRACT:

The present study is to develop and evaluate Buccoadhesive tablets of aceclofenac formulated to enhance bioavailability. Aceclofenac a non-steroidal anti-inflammatory agent with high protein binding, which makes it an ideal candidate for administration by buccal route. Tablets were prepared using various buccoadhesive polymers and evaluated for its characteristics. All the formulation showed compliance with standard limits. The formulations F3, F4, F5, and F6 showed considerable results indicating that Polymers HPMC K4M and Guar gum may be the choice for formulating mucoadhesive tablets. The release profile of F4 and F6 indicates that 15% concentration of HPMC K4M and Guar gum showed satisfactory results compared with 10% of HPMC , guargum and Xanthan Gum at various concentrations.

Keywords: Aceclofenac, mucoadhesive, tablets, non-steroidal anti-inflammatory agent.

EFFICIENT SYNTHESIS OF 2-PHENYLBENZOTHIAZOLES.Raghuraman^{*1}, T.Soujanya¹, S.Nikitha²¹Department of Pharmaceutical Chemistry, Unity College of Pharmacy, Bhongir. Nalgonda, Telangana 508116²Department of Pharmacology, Unity College of Pharmacy, Bhongir. Nalgonda, Telangana 508116

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ABSTRACT

One pot effective conversion of phenolic ester to 2-phenyl benzothiazole by using different mild base catalyst was described. The 2-phenyl benzothiazole was obtained in high chemical yields and this transformation would facilitate synthesis by short reaction time, and rapid isolation of the products. An attempt to control process related impurities as per ICH guidelines was carried out.

Keywords: 2-Phenyl benzothiazole, Base catalyst, Quality control.