

به نام خدا

دانشگاه علوم پزشکی شیراز
مقالات برتر طی ۳۰ سال انقلاب شکوهمند اسلامی
بهمن ماه ۱۳۸۷

وآمد علم سنجی معاونت پژوهشی دانشگاه علوم پزشکی شیراز

تهیه کنندگان :

شیرین دهقان

فروغ ده بزرگیان

مقالات منتخب طی ۳۰ سال انقلاب شکوهمند اسلامی توسط هیات داوران وزارتخانه
که دارای شرایط زیر می باشند:

- ۱- تاریخ چاپ مقاله بعد از انقلاب شکوهمند اسلامی باشد.
- ۲- مقاله در ژورنالی چاپ شده باشد که ایندکس آن ISI باشد.
- ۳- **Impact Factor** ژورنال مساوی و یا بیشتر از ۱/۵ باشد .
- ۴- تعداد **Citations** مساوی و یا بیشتر از ۱۰ باشد .
- ۵- نویسنده مسئول بایستی از دانشگاه علوم پزشکی شیراز باشد.

Human saliva penetration of coronally unsealed obturated root canals

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Source: JOURNAL OF ENDODONTICS **Volume:** 19 **Issue:** 9 **Pages:** 458-461 **Published:** SEP 1993

Abstract: Studies have shown significant coronal dye and bacterial leakage following exposure of sealed root canals to artificial and natural saliva. The purpose of this study was to determine the time needed for bacteria in natural saliva to contaminate the entire length of root canals obturated by lateral and vertical condensation techniques. Forty root canals were cleaned and shaped using a step-back technique. Thirty root canals were obturated with gutta-percha and root canal sealer using either lateral or vertical condensation techniques. Five root canals were obturated without a root canal sealer and served as positive controls. After obturation, the coronal 3 mm of five root canals were sealed with sticky wax and served as negative controls. The coronal portions of the filling materials were placed in contact with human saliva and the number of days required for bacteria in saliva to penetrate the entire root canals were determined. No bacterial leakage occurred in the negative control group. Complete bacterial leakage occurred within 2 days in the positive control group. All root canals were recontaminated in less than 30 days. No statistical significant difference was found between the two methods of obturation.

KeyWords Plus: endodontically treated teeth; thermoplasticized gutta-percha; microleakage; invitro; sealer

Citation: 88

Impact Factor: 3.369

Database Source: ISI

The diversity of the effects of sulfur mustard gas inhalation on respiratory system 10 years after a single, heavy exposure - Analysis of 197 cases

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Source: CHEST **Volume:** 112 **Issue:** 3 **Pages:** 734-738 **Published:** SEP 1997

Abstract: Objective: To find out the late pulmonary sequelae of sulfur mustard gas inhalation in 197 veterans, 10 years after their exposure.

Design: Cross-sectional clinical study

Setting: University hospital.

Patients: One hundred ninety-seven veterans with a single, heavy exposure to sulfur mustard gas in 1986 and 86 nonexposed veterans as their control group, Interventions: Pulmonary function tests, carbon monoxide diffusion capacity, bronchoscopy, and high-resolution CT of the chest were performed in all patients, Transbronchial lung biopsy was done in 24 suspected cases of pulmonary fibrosis.

Results: Asthma was diagnosed in 21 (10.65%), chronic bronchitis in 116 (58.88%), bronchiectasis in 17 (8.62%), airway narrowing due to scarring or granulation tissue in 19 (9.64%), and pulmonary fibrosis in 24 (12.18%) cases, None of these were found among the control group except for a single case of chronic bronchitis.

Conclusion: Although the respiratory symptoms of an acute sulfur mustard gas inhalation are usually transient and nonspecific, it can lead to the development of a series of chronic destructive pulmonary sequelae in such cases.

Author KeyWords: asthma; bronchiectasis; chronic bronchitis; mustard gas; pulmonary fibrosis

Citation: 56

Impact Factor: 4.143

Database Source: ISI

Effect of oral omeprazole in reducing re-bleeding in bleeding peptic ulcers: a prospective, double-blind, randomized, clinical trial

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Source: ALIMENTARY PHARMACOLOGY & THERAPEUTICS **Volume:** 17 **Issue:** 2 **Pages:** 211-16
Published: JAN 2003

Abstract: Background: Endoscopic therapies and continuous intravenous omeprazole can decrease the morbidity and duration of hospital stay of patients with high-risk peptic ulcer.

Aim: To evaluate the role of oral omeprazole in high-risk bleeders.

Methods: After injection therapy of 160 patients with high-risk peptic ulcer, 80 received oral omeprazole and 80 received placebo, and all were followed up.

Results: One hundred and forty-nine patients (71 omeprazole and 78 placebo) completed the study. Eleven patients were excluded from the study. Thirty-seven (25%) patients had gastric ulcer and 112 (75%) had duodenal ulcer. Fifty-seven (38%) ulcers showed visible vessels, 80 (54%) showed oozing of blood and 12 (8%) showed a spurting artery. Only one patient died (placebo group). The mean hospital stays were 62.8 +/- 28.6 h and 75 +/- 39 h in the omeprazole and placebo groups, respectively ($P = 0.032$). The mean amounts of blood transfused were 1.13 +/- 1.36 and 1.68 +/- 1.68 bags in the omeprazole and placebo groups, respectively ($P = 0.029$). The re-bleeding rate was lower in the omeprazole group than in the placebo group (12 vs. 26, respectively; $P = 0.022$).

Conclusion: Oral omeprazole is effective in decreasing the hospital stay, re-bleeding rate and the need for blood transfusion in high-risk ulcer bleeders treated with endoscopic injection therapy.

KeyWords Plus: upper gastrointestinal hemorrhage; acid; hemostasis; therapy; placebo; gastrin; pepsin

Citation: 52

Impact Factor: 3.201

Database Source: ISI

Antidiabetic effects of quercetin in streptozocin-induced diabetic rats

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Source: COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY
Volume: 135 **Issue:** 3 **Pages:** 357-364 **Published:** JUL 2003

Abstract: Effects of the intraperitoneal injection of quercetin in streptozocin-induced diabetic and normal rats were investigated and compared. Although quercetin had no effect on plasma glucose level of normal animals, it significantly and dose-dependently decreased the plasma glucose level of streptozocin-induced diabetic rats. Glucose tolerance tests of the diabetic animals approached those of normal rats, their plasma cholesterol and triglycerides were reduced significantly, while their hepatic glucokinase activity was significantly increased upon quercetin treatment. In normal rats, quercetin did not affect the glucose tolerance test, but resulted in an increase of plasma cholesterol and triglycerides and a decrease in hepatic glucokinase activity. No significant pathologic changes were noted in hepatocytes or kidney tubules and glomeruli. while the number of pancreatic islets significantly increased in both treated normal and diabetic groups. It is concluded that quercetin, a flavonoid with antioxidant properties brings about the regeneration of the pancreatic islets and probably increases insulin release in streptozocin-induced diabetic rats; thus exerting its beneficial antidiabetic effects. However, it may be of little value in normoglycemic animals. (C) 2003 Elsevier Inc. All rights reserved.

Author Keywords: cholesterol; diabetes; glucose tolerance; hepatic glucokinase; pancreatic islets; quercetin; streptozocin; triglycerides

Citation: 38

Impact Factor: 2.345

Database Source: ISI

Toward an optimal procedure for PC-ANN model building: Prediction of the carcinogenic activity of a large set of drugs

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Source: JOURNAL OF CHEMICAL INFORMATION AND MODELING **Volume:** 45 **Issue:** 1

Pages: 190-199 **Published:** JAN-FEB 2005

Abstract: The performances of the three novel QSAR algorithms, principal component-artificial neural network modeling method combining with three factor selection procedures named eigenvalue ranking, correlation ranking, and genetic algorithm (ER-PC-ANN, CR-PC-ANN, PC-GA-ANN, respectively), are compared by application of these model to the prediction of the carcinogenic activity of a large set of drugs (735 drugs) belonging to a diverse type of compounds. A total number of 1350 theoretical descriptors are calculated for each molecule. The matrix of calculated descriptors (with 735 x 1350 dimension) is subjected to PCA. 95% of the variances in the matrix are explained by the first 137 principal components (PC's). From the pool of 137 PC's, the factor selection methods (ER, CR, and GA) are employed to select the best set of PC's for PC-ANN modeling. In the ER-PC-ANN, the PC's are successively entered into the ANN based on their decreasing eigenvalue. In the CR-PC-ANN, the ANN is first employed to model the nonlinear relationship between each one of the PC's and the carcinogen activity separately. Then, the PC's are ranked based on their decreasing correlating ability and entered to the input layer of the network one after another. Finally, a search algorithm (i.e. genetic algorithm) is used to find the best set of PC's. Both the external and cross-validation methods are used to validate the performances of the resulting models. One is able to see that the results obtained by the PC-GA-ANN and CR-PC-ANN procedures are superior to those resulted from the EV-PC-ANN. Comparison of the results reveals that the results produced by the PC-GA-ANN algorithm are better than those produced by CR-PC-ANN. However, the difference is not significant.

KeyWords Plus: principal component regression; quantitative structure-activity; artificial neural-networks; channel antagonist activity; ab-initio theory; genetic algorithm; variable selection; adme evaluation; multivariate calibration; molecular descriptors

Citation:30

Impact Factor: 2.986

Database Source: ISI

Association of plasma folate, plasma total homocysteine, but not methylenetetrahydrofolate reductase C667T polymorphism, with bone mineral density in postmenopausal Iranian women: a cross-sectional study

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Source: BONE Volume: 35 Issue: 3 Pages: 760-765 Published: SEP 2004

Abstract: Polymorphisms of methylenetetrahydrofolate reductase (MTHFR) have been well documented to cause hyperhomocysteinemia, and recent studies suggest an association of C677T mutation of methylenetetrahydrofolate reductase with low bone mineral density (BMD). In this study, the association of plasma total homocysteine (Hey), plasma folate, and vitamin B 12 as well as methylenetetrahydrofolate reductase C667T polymorphism with bone mineral density at neck of femur and lumbar spine in 271 postmenopausal Iranian women was investigated.

Bone mineral density was measured by dual-energy X-ray absorptiometry. Restriction fragment length polymorphism was used for genotyping the methylenetetrahydrofolate reductase polymorphism. Plasma total homocysteine, plasma folate, and vitamin B12 were also determined. The bone mineral densities at the neck of femur and lumbar spine together with other clinical characteristics among methylenetetrahydrofolate reductase genotypes (CC, CT, and TT) were examined.

Bone mineral densities at both neck of femur ($r = -0.18$, $P = 0.003$) and lumbar spine ($r = -0.16$, $P = 0.01$) were significantly and negatively correlated with the logarithm of plasma total homocysteine. Bone mineral density at the lumbar spine was also significantly and positively associated with plasma folate ($r = 0.14$, $P = 0.02$). However, no correlation between methylenetetrahydrofolate reductase polymorphism with bone mineral density at neck of femur ($r = -0.01$, $P = 0.81$) and lumbar spine ($r = -0.04$, $P = 0.51$) was observed. The negative association of plasma total homocysteine with bone mineral density was no longer significant when adjusted for folate and vitamin B12. Plasma folate and age were the main predictors of plasma total homocysteine explaining 15.3% and 5.2% of the variance of plasma total homocysteine, respectively. Methylenetetrahydrofolate reductase polymorphism, however, was not associated with plasma folate ($r = 0.086$, $P = 0.17$) or vitamin B12 ($r = 0.05$, $P = 0.4$). Plasma folate was one of the main predictors explaining 3.0% and 1.7% of variance of the bone mineral density at femoral neck and lumbar spine, respectively.

Results from this study suggest hyperhomocysteinemia as a result of folate deficiency, but not methylenetetrahydrofolate reductase polymorphism, is independently associated with low bone mineral density and may contribute to the pathogenicity of osteoporosis in postmenopausal Iranian women. (C) 2004 Elsevier Inc. All rights reserved.

Author Keywords: osteoporosis; bone mineral density; methylenetetrahydrofolate reductase; plasma folate; homocysteine

Citation:30

Impact Factor: 3.966

Database Source: ISI

Correlation ranking procedure for factor selection in PC-ANN modeling and application to ADMETox evaluation

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Source: CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS **Volume: 75 Issue:2**

Pages: 231-245 **Published:** FEB 2005

Abstract: A correlation ranking procedure is proposed for selection of factors in principal component-artificial neural network (PC-ANN). The model was applied in the ADMETox evaluation to predict the carcinogenesis activity of 60 organic solvents and the blood brain barrier (BBB) partitioning of 115 diverse organic molecules. A total of 150 molecular descriptors, including quantum chemical, constitutional, topological and chemical descriptors were calculated. The resulted descriptors were subjected to principal component analysis (PCA), and a three-layered feed forward artificial neural network (ANN) model was employed to model the nonlinear relationship between the extracted principal components (PCs) and the activities. A correlation ranking procedure is proposed here to select the most relevant set of PCs. First, the nonlinear relationship between each one of the PCs was modeled by separate neural networks and the correlation ability of each PC with the activity data was determined. Then, the PCs were entered to the ANN model based on their decreasing correlation ability. The results supported that the proposed model could predict the carcinogenesis activity and logBBB of the organic compounds with percent relative error lower than 4%. Comparison of the results with two other existing factor selection methods named eigenvalue ranking (EV-PC-ANN) and genetic algorithm (PC-GA-ANN) revealed that the proposed model gave results near to the PC-GA-ANN method, while less accurate results were obtained by the EV-PC-ANN procedure. (C) 2004 Elsevier B.V. All rights reserved.

Author Keywords: PC-ANN; correlation ranking; genetic algorithm; QSAR; carcinogenic activity; blood-brain barrier

Citation:28

Impact Factor: 2.063

Database Source: ISI

Immunoglobulins and cellular constituents of the BAL fluid of patients with sulfur mustard gas-induced pulmonary fibrosis

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Source: CHEST **Volume:** 115 **Issue:** 5 **Pages:** 1346-1351 **Published:** MAY 1999

Abstract: Study objective: The acute heavy exposure to sulfur mustard gas can lead to pulmonary fibrosis (PF), This study was performed to determine the cellular and protein content of BAL fluid in 24 patients with sulfur mustard gas-induced PF,

Patients: Twenty-four veterans with sulfur mustard gas-induced PF and 18 nonexposed veterans serving as control subjects were enrolled into the study.

Measurements: Chest roentgenograms, pulmonary function tests (PFTs), tests for carbon monoxide diffusing capacity of the lung (DLCO), high-resolution CT scans of the chest, BAL via fiberoptic bronchoscopy, analyses of BAL fluids for cellular and protein constituents, and determinations of serum albumin and Ig levels were performed in all cases. A transbronchial lung biopsy was done in all patients following BAL,

Results: Neutrophilic alveolitis was the predominant feature. Neutrophils ($p = 0.0001$) and eosinophils ($p = 0.0001$) were the predominant cell types in the BAL fluid of patients with PF, There was a strong correlation between the BAL fluid neutrophil count ($\rho = 0.76$; $p = 0.0003$) or its percentage ($\rho = 0.77$; $p = 0.0003$) and the degree of fibrosis, Of the BAL fluid Ig levels, only the IgG level in the study group was significantly higher than the IgG level of the control group ($p = 0.0001$), Of the PFT physiologic parameters, only the percentage of DLCO showed a significant correlation with the degree of fibrosis ($\rho = -0.76$; $p < 0.001$).

Conclusion: The cellular constituents of BAL, fluid in patients with sulfur mustard gas-induced PF are very similar to the cellular constituents seen in patients with idiopathic PF, and this finding indicates the presence of an ongoing active alveolitis in PF.

Author Keywords: BAL; pulmonary fibrosis; sulfur mustard gas

Citation:26

Impact Factor: 4.143

Database Source: ISI

Symptom association probability and symptom sensitivity index: preferable but still suboptimal predictors of response to high dose omeprazole

Author(s): Taghavi SA, Ghasedi M, Saberi-Firoozi M, Alizadeh-Naeni M, Bagheri-Lankarani K, Kaviani MJ, Hamidpour L

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Source: GUT **Volume:** 54 **Issue:** 8 **Pages:** 1067-1071 **Published:** AUG 2005

Abstract: Background: Twenty four hour oesophageal pH monitoring is frequently used to quantify the association between a patient's symptom and gastro-oesophageal reflux. Three indices (symptom association probability (SAP), symptom index (SI), and symptom sensitivity index (SSI)) are used to quantify and establish this relation.

Aims: The aim of the present study was to compare these indices against the omeprazole test (OT) as an objective indicator of reflux induced symptoms.

Methods: Fifty two patients with a predominant symptom of heartburn were enrolled from gastroenterology and primary care clinics. Baseline symptom score was calculated at the first visit. All patients underwent 24 hour oesophageal pH monitoring, and symptom-reflux association indices were calculated. All patients were placed on high dose omeprazole (40 mg in the morning, 20 mg at night) after completion of pH monitoring and symptom score was recorded again after one week.

Results: Thirty eight patients completed the study. All three indices were significantly related to each other ($p < 0.001$). SAP and SSI (with a new cut off of 1.3, but not with the commonly used 5%) had statistically significant relations with OT ($p < 0.05$ for both). SSI had the highest positive and negative predictive values and sensitivity. The specificity of SSI and SAP was equal and lower than SI. Areas under the receiver operating characteristic (ROC) curve for the three indices were not significantly different from each other or from a hypothetical non-discriminating test. Per cent time pH,4, sex, and age had no relation to OT and no effect on its correlation with association indices. No cut off point could be found at which the results of SI could be related significantly to the OT results.

Conclusion: SAP and SSI are significantly related to symptomatic response to high dose omeprazole; however, they are far from perfect, with a significant number of discordant cases as well as relatively small areas under the ROC curves. We suggest that the new cut off of 1.3 be used for SSI in the future. Further research is needed to identify possible methods to improve the discrimination power of these indices or to identify possible patient characteristics that may affect this relation.

KeyWords Plus: gastroesophageal-reflux disease; diagnostic-test; parameter; acid

Citation:25

Impact Factor: 10.015

Database Source: ISI

Application of ab initio theory to QSAR study of 1,4-dihydropyridine-based calcium channel blockers using GA-MLR and PC-GA-ANN procedures

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Source: JOURNAL OF COMPUTATIONAL CHEMISTRY **Volume:** 25 **Issue:** 12 **Pages:** 1495-1503

Published: SEP 2004

Abstract: The usefulness of the quantum chemical descriptors, calculated at the level of the RHF theory using 6-31G basis set for QSAR study of 1,4-dihydropyridine-based calcium channel antagonist was examined. A data set containing 45 dihydropyridine derivatives with known activity was used. Multiple linear regressions combined with genetic algorithm for variable selection and an artificial neural network model combined with principal component analysis for dimension reduction and genetic algorithm for factor selection (PC-GA-ANN) were employed. Some multiparametric MLR equations with good statistical quality were obtained for different classes of dihydropyridine derivatives. The resulting equations suggest that the electronic properties of the atoms belonging to the backbone of the molecules as well as the conformation of the molecules affect the binding of these molecules with their receptor. In the PC-GA-ANN, The principal components of the descriptors data matrix were used as the input of the neural network and then genetic algorithm was applied to select the most relevant set of principal components. Two ANN models with five selected principal components were obtained. These models, which have high statistical qualities, can predict the activity of the molecules with prediction errors lower than +/-5%. (C) 2004 Wiley Periodicals, Inc.

Author Keywords: QSAR; dihydropyridine; calcium channel; ab initio; genetic algorithm; artificial neural network; PC-GA-ANN

Citation:23

Impact Factor: 4.297

Database Source: ISI

The expression of p53, c-erbB-1 and c-erbB-2 molecules and their correlation with prognostic markers in patients with head and neck tumors

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Source: CANCER LETTERS **Volume:** 184 **Issue:** 2 **Pages:** 223-230 **Published:** OCT 2002

Abstract: Molecular prognostic and predictive factors have extensively been studied in different cancers during the past decades, some of which were found to be useful in diagnosis, follow up or even treatment of some malignant tumors. To assess the significance of c-erbB-1, c-erbB-2 and p53 expression in head and neck tumors among Iranian patients and their correlation with known prognostic factors, samples from 53 patients with squamous cell carcinomas of larynx and tongue were studied immunohistochemically. Strong immunoreactivity of c-erbB-1, c-erbB-2 and p53 was observed in 37 (70%), 40 (76%) and 37 (70%) of cases, respectively. The coexpression of these molecules was detected in 27 (50.9%) samples. Neither histological grading nor nodal involvement revealed correlation with c-erbB-1 and/or c-erbB-2 expression. No correlation was found between p53 expression and histological grade. However, a significant positive association was observed between p53 expression and nodal involvement. This data, which is the first report on head and neck squamous cell carcinomas (HNSCC) in Iran, indicates the significance of p53 protein expression which may result from p53 tumor suppressor gene inactivation in lymph node metastasis of HNSCC among Iranian patients. (C) 2002 Elsevier Science Ireland Ltd. All rights reserved.

Author Keywords: head and neck squamous cell carcinomas; c-erbB-1; c-erbB-2; p53; Iranian

Citation:22

Impact Factor: 3.398

Database Source: ISI

Evaluation of the immunomodulatory effects of five herbal plants

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Source: JOURNAL OF ETHNOPHARMACOLOGY **Volume:** 72 **Issue:** 1-2 **Pages:** 167-172

Published: SEP 2000

Abstract: A group of medicinal plants including, *Silybum marianum*, *Matricaria chamomilla*, *Calendula officinalis*, *Cichorium intybus* and *Dracocephalum kotschyi* which grow in Iran, were extracted with ethanol 70% and the mitogenic activity was examined both on human peripheral blood lymphocytes and thymocytes. Effect of these extracts on proliferative responsiveness of human lymphocytes to phytohemagglutinin (PHA) and on the mixed lymphocyte reaction (MLR) was also investigated. The results obtained indicated that none of the extracts had a direct mitogenic effect on human lymphocytes or thymocytes (stimulation index, SI < 0.07). Among the plants studied, *C. intybus* and *C. officinalis* showed a complete inhibitory effect on the proliferation of lymphocytes in the presence of PHA (SI range 0.01-0.49). A dose dependent inhibitory effect was obtained in the case of *D. kotschyi*. Extract of *M. chamomilla* showed almost no stimulatory effect. A significant decrease in proliferation assay due to 0.1-10 μ g/ml of *S. marianum* was observed (SI < 0.46, P < 0.05). In MLR, a markedly stimulatory effect with some lower concentrations of all the extracts except *Dracocephalum* was detected. The highest stimulatory effect was due to 100 μ g/ml of *S. marianum* (SI 2.82). Treatment of mixed lymphocytes with 0.1-10 μ g/ml of *C. officinalis* (SI range 1.34-1.80) and 10 μ g/ml of *M. chamomilla* and *C. intybus* (SI 2.18 and 1.70, respectively) strongly increased the cell proliferation. In conclusion, this in vitro study revealed the capacity of all the extracts except *Dracocephalum* to enhance the proliferation of lymphocytes after stimulation with the allogenic cells. (C) 2000 Elsevier Science Ireland Ltd. All rights reserved.

Author Keywords: *silybum marianum*; *matricaria chamomilla*; *calendula officinalis*; *cichorium intybus*; *dracocephalum kotschyi*; lymphocyte proliferation

Citation:22

Impact Factor: 2.049

Database Source: ISI

Overweight and obesity in adults aged 20-74 in southern Iran

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Source: INTERNATIONAL JOURNAL OF OBESITY **Volume:** 20 **Issue:** 10 **Pages:** 963-965 **Published:** OCT 1996

Abstract: OBJECTIVE: There is paucity of data on actual weight patterns among Iranians. It was the purpose of this study to provide estimates of prevalence of overweight and obesity among adult population aged 20-74 in southern Iran.

DESIGN AND METHODS: In a cross-sectional study during January 1993 to September 1994, anthropometric measurements, including height and weight, were obtained in a randomly selected sample population (n = 3378), aged 20-74 years, and permanently resident of the southern province of Fars in Iran. Body mass index (BMI) (kg/m²) was calculated for each individual, and the results were categorized for each sex by age groups of 5 years.

RESULTS: The mean body mass index was 22.8 +/- 4.6 (+/- SD) for men and 23.6 +/- 6.6 (+/- SD) for women. Men had their highest BMI in their late forties and women did so in their early fifties. Twenty-five percent of men and 30% of women were overweight (BMI = 26-30). Eight percent of women and 2.5% of men were obese (BMI > 30).

CONCLUSIONS: Contrary to the commonly-held belief that overweight and obesity are generally uncommon in Iran, this study revealed that both are prevalent in the adult population of southern Iran and both are more frequent among women than men. The frequency for either overweight or obesity in Iran is expected to increase further as life becomes increasingly sedentary unless early intervention by promotion of healthy life styles and provision of nutritional information to the public is implemented.

Author Keywords: body mass index; overweight; obesity; prevalence; Fars; southern Iran

Citation:22

Impact Factor: 3.56

Database Source: ISI

Needle aspiration for suppurative post-bcg adenitis

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Source: ARCHIVES OF DISEASE IN CHILDHOOD **Volume:** 71 **Issue:** 5 **Pages:** 446-447 **Published:** NOV 1994

Abstract: The effect of needle aspiration in suppurative post-BCG adenitis was studied. Nodes that had been aspirated (43 patients) regressed in 25 (58%) and 41 (95%) patients two and six months after aspiration. In the control group (34 patients) regression occurred in three (9%) and 22 (65%) patients. Spontaneous drainage with sinus tract formation was also significantly less in the aspirated group at six months (7% v 44%).

KeyWords Plus: Lymphadenitis; Vaccination

Citation:18

Impact Factor: 2.786

Database Source: ISI

Pharmacokinetic consequences of pegylation

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Source: DRUG DELIVERY **Volume:** 13 **Issue:** 6 **Pages:** 399-409 **Published:** NOV-DEC 2006

Abstract: Pegylation, generally described as the molecular attachment of polyethylene glycols (PEGs) with different molecular weights to active drug molecules or surface treatment of drug-bearing particles with PEGs, is one of the most promising and extensively studied strategies with the goal of improving the pharmacokinetic behavior of the therapeutic drugs. A variety of PEGs, both linear and branched, with different molecular weights have been exploited successfully for use in this procedure in the form of reactive PEG species. Both reversible and irreversible PEG-drug conjugates have been prepared with relative advantages/disadvantages. The main pharmacokinetic outcomes of pegylation are summarized as changes occurring in overall circulation life-span, tissue distribution pattern, and elimination pathway of the parent drug/particle. Based on these favorable pharmacokinetic consequences leading to desired pharmacodynamic outcomes, a variety of proteins/peptides as well as small molecule drugs have been pegylated and evaluated successfully. Also a number of corresponding products have been approved by the U.S. FDA for specific clinical indications and some others are underway. In this article, the chemistry, rationale, strategies, pharmacokinetic outcomes, and therapeutic possibilities of pegylated drugs are reviewed with pharmacokinetic aspects presented with more details.

Author Keywords: PEG; pegylated drugs; pegylation; pharmacokinetic; systemic drug delivery

Citation: 17

Impact Factor: 1.642

Database Source: ISI

A prospective, randomized study comparing laparoscopic ovarian cystectomy versus fenestration and coagulation in patients with endometriomas

Author(s): Alborzi S, Momtahan M, Parsanezhad ME, Dehbashi S, Zolghadri J, Alborzi S

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Source: FERTILITY AND STERILITY **Volume:** 82 **Issue:** 6 **Pages:** 1633-1637 **Published:** DEC 2004

Abstract: Objective: To determine the difference between two laparoscopic methods for the management of endometriomas with regard to recurrence of signs and symptoms and pregnancy rate.

Design: Prospective, randomized clinical trial.

Setting: Infertility and gynecologic endoscopy units of two medical university hospitals.

Patient(s): One hundred patients with endometriomas who had either infertility or pelvic pain.

Intervention(s): Patients were randomly divided into two groups; one group underwent cystectomy (group 1), and fenestration and coagulation were performed for the other (group 2).

Main Outcome Measure(s): A comparison of recurrence of signs and symptoms of endometriomas and pregnancy rates in two groups.

Result(s): Fifty-two patients were studied in group 1 and 48 in group 2. The recurrence of symptoms, such as pelvic pain and dysmenorrhea, was 15.8% in group 1 and 56.7% in group 2 after 2 years. The rate of reoperation was 5.8% in group 1 and 22.9% in group 2 and these differences were statistically significant. The cumulative pregnancy rate was significantly higher in group 1 (59.4%) than in group 2 (23.3%) at 1-year follow-up.

Conclusion(s): Laparoscopic cystectomy of endometriomas is a better choice than fenestration and coagulation because the former technique leads to a lower recurrence of signs and symptoms and a lower rate of reoperation and a higher cumulative pregnancy rate than the latter. (C) 2004 by American Society for Reproductive Medicine.

Author Keywords: endometrioma; endometriosis; cystectomy; fenestration and coagulation; cumulative pregnancy rate

Citation:16

Impact Factor: 3.168

Database Source: ISI

Detection of BK virus and JC virus DNA in urine samples from immunocompromised (HIV-infected) and immunocompetent (HIV-non-infected) patients using polymerase chain reaction and microplate hybridization

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Source: JOURNAL OF CLINICAL VIROLOGY **Volume:** 29 **Issue:** 4 **Pages:** 224-229 **Published:** APR 2004

Abstract: Background: The majority of the human population is infected with two human polyomaviruses BK virus (BKV) and JC virus (JCV) during childhood. After initial infection both viruses persist within renal system. Reactivation of both viruses may be linked with immunodeficiency or immunosuppressive therapy. Objective: To evaluate the relationship between immunodeficiency and viraemia, prevalence of BK and JC viraemia over time was investigated in a cohort of HIV seropositive individuals at different stages of disease. The excretion in this group was compared with virus excretion in their HIV seronegative partners and in an unselected cohort of patients attending a Genito-Urinary Medicine (GUM) clinic. Study design: The excretion of BKV and JCV DNA in multiple urine samples from HIV-infected patients at different stages of disease and their HIV-negative partners, and in single samples from a cohort of patients at a GUM clinic was investigated. A microplate hybridisation method was developed to increase both the sensitivity and specificity of detection of the PCR product. The method was also applied to estimate the DNA copy numbers of BKV and JCV in urine samples. Results: Within the HIV group, the level of immunosuppression (CD4+ category) was not associated with JCV viraemia. By contrast, there was a modest correlation between immunodeficiency as indicated by a decline in CD4+ count and BKV viraemia. Shedding of both BKV and JCV DNA together in urine samples of HIV-infected patients was much higher than in control groups ($P = 0.02$), indicating that HIV infection may associate with polyomavirus reactivation. The incidence of flu-like syndrome was much higher in HIV-infected asymptomatic individuals than acquired immunodeficiency syndrome (AIDS)-related complex (ARC)/AIDS patients. In general, the concentration of BKV DNA viraemia (DNA copy number) was dependent to CD4+ counts ($P = 0.008$) while concentration of JCV DNA was independent to CD4+ cell count ($P = 0.54$). The prevalence of BKV and JCV DNA in patients who were infected with *C. trachomatis* was 9/50 (18%) and 11/50 (22%), respectively. BKV and JCV DNA was detected in 3/19 (15%) and 2/19 (10%) of patients who were infected with *N. gonorrhoea*. Results suggested that persons infected with *C. trachomatis* were more likely to show BKV and JCV viraemia. Conclusion: These results confirm that shedding of BK and JC viruses in urine is not exclusively found in immunosuppression, it may also occur in healthy individuals. The frequency of virus excretion is however, apparently increased in HIV-infected patients, although no firm statistical difference could be established. One of the interesting aspects of these findings was the relatively high incidence of BKV and JCV viraemia in both control groups, i.e. HIV-negative partners of HIV-infected patients and patients attending a GUM clinic. (C) 2003 Elsevier B.V. All rights reserved.

Author Keywords: HIV; BK virus; JC virus; immunocompromised; PCR

Citation: 16

Impact Factor: 3.468

Database Source: ISI

Synthesis of N-alkylated derivatives of imidazole as antibacterial agents

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Source: BIOORGANIC & MEDICINAL CHEMISTRY LETTERS **Volume:** 13 **Issue:** 17
Pages: 2863-2865 **Published:** SEP 2003

Abstract: N-Alkylation of imidazole, 2-methylimidazole and 2-methyl-4-nitroimidazole have been carried out to achieve effective antibacterial agents. The products were then investigated for antibacterial activity against Escherichia coil, Staphylococcus aureus and Pseudomonas aeruginosa. Antibacterial effects of 1-alkylimidazole derivatives increase as the number of carbons in alkyl chain increases up to nine carbons. Also substitution of 2-methyl and 2-methyl-4-nitro groups on imidazole ring increases the antibacterial activity. (C) 2003 Elsevier Ltd. All rights reserved.

Author Keywords: Epoxide; Giardiasis; Imidazole; Metronidazole

Citation:15

Impact Factor: 2.604

Database Source: ISI

Prevalences of migraine and tension-type headache in adolescent girls of Shiraz (Southern Iran)

Author(s): Ayatollahi SMT, Moradi F, Ayatollahi SAR

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Source: HEADACHE **Volume:** 42 **Issue:** 4 **Pages:** 287-290 **Published:** APR 2002

Abstract: Objective.-To determine the prevalences of migraine and tension-type headache in teenaged girls attending schools in Shiraz (southern Iran).

Background.-Studies of headache prevalence are numerous, and findings have varied according to the specific population and region involved. No data are available regarding headache prevalence among Iranian teenagers.

Methods.-A random sample of 1868 teenaged girls (aged 11 to 18 years) was evaluated, and 507 subjects reported headache. The headache disorders were classified on the basis of a clinical interview, general physical and neurologic examinations, and the diagnostic criteria of the International Headache Society. Logistic regression was used for data analysis.

Results.-Overall prevalence rate for migraine was 6.1% (95% CI, 5.0 to 7.2) and for tension-type headache, 12.1% (95% CI, 10.6 to 13.6). Migraine and tension-type headache were significantly associated.

Conclusions.-It is concluded that exposition of subjects to sunlight, type of food, and a family history of headache had most significant effects on occurrence of migraine and tension-type headaches.

Author Keywords: epidemiology; prevalence; headache; migraine; tension-type headache; teenaged girls

Citation:14

Impact Factor: 2.358

Database Source: ISI

Present situation of echinococcosis in the Middle East and Arabic North Africa

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Source: PARASITOLOGY INTERNATIONAL **Volume:** 55 **Pages:** S197-S202 **Published:** 2006

Abstract: Echinococcosis is one of the major zoonotic parasitic diseases in the Middle East and Arabic North Africa from Morocco to Egypt. Both cystic and alveolar echinococcosis has been reported from these areas. However, cystic echinococcosis is more prevalent and has been reported from all countries in the Middle East and Arabic North Africa. Alveolar echinococcosis is less prevalent and has been reported only from Iran, Turkey, Iraq and Tunisia. Present situation of echinococcosis in dogs and other definitive hosts, animal intermediate hosts and humans in the Middle East and Arabic North Africa has been reviewed. *Echinococcus granulosus* is highly prevalent in Iran, Turkey, Iraq, Morocco, Tunisia, and Libya. In the Levant countries, the cystic echinococcosis is also highly endemic. In Oman, it is endemic with low prevalence and a very low level in Cyprus. Various surveys have indicated that hydatid cysts are commonly found in sheep, cattle, goats and camels throughout the Middle East and Arabic North Africa. Sheep are the most infected animals of these regions. Most of studies on human have been focused on surgical reports although several population studies have been performed using serological and imaging techniques. Human cystic echinococcosis (CE) is prevalent in the Middle East and Arabic North Africa. It is hyper endemic in Iran, Turkey, Iraq, Jordan, Morocco, Libya, Tunisia, and Algeria, and endemic in Egypt. Studies on the strain specificities of *E. granulosus* in the Middle East revealed sheep strain (G1) present in sheep, goats, cattle, camels and humans, and the camel strain (G6) in camels, sheep, cattle as well as humans. Dog/sheep strain seems to be more prevalent in the foregoing regions in documented reports from Iran and Jordan. However, a strain of *E. granulosus*, which resembles the horse strain (G4) strain, has been reported from Jordan. Strain specifications of *E. granulosus* in Arabic North Africa showed that sheep/dog strain (G I) have been reported from Tunisia and Libya both from humans and animals. However, in Egypt the human cases reported are of camel/dog strain. (C) 2005 Elsevier Ireland Ltd. All rights reserved.

Author Keywords: Echinococcosis; Middle East; Arabic North Africa; Human; Animal; Strain; Prevalence

Citation: 13

Impact Factor: 1.776

Database Source: ISI

Simultaneous spectrophotometric determination of carbamazepine and phenytoin in serum by PLS regression and comparison with HPLC

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Source: TALANTA **Volume:** 65 **Issue:** 1 **Pages:** 21-28 **Published:** JAN 15 2005

Abstract: Carbamazepine (CBZ) and phenytoin (PHT) are two antiepileptic drugs which are used simultaneously. In this paper a partial least-squares (PLS) calibration method is described for the simultaneous spectrophotometric determination of CBZ and PHT in plasma. Standard binary mixtures of CBZ and PHT have been resolved by application of PLS-1 to their UV spectra. Then, the binary standard solutions, spiked to plasma, were prepared and after the extraction of the drugs, their corresponding UV spectrum were analyzed by PLS regression to calculate the concentration of drugs in unknown plasma. A leave one out cross-validation procedure was employed to find the optimum numbers of latent variables using PRESS. A HPLC method was also applied for simultaneous determination of two drugs in the plasma and in methanol. The mean recoveries obtained by PLS were 98.4 and 98.2 for CBZ and PHT and those obtained by HPLC were 100.1 and 101.7, respectively. Although, the HPLC method showed better performance than PLS, it was found that the results obtained by PLS were comparable with those obtained by HPLC method. (C) 2004 Elsevier B.V. All rights reserved.

Author Keywords: carbamazepine; phenytoin; PLS; plasma; HPLC; spectrophotometry

Citation: 13

Impact Factor: 3.374

Database Source: ISI

Nicotinamide: a potential addition to the anti-psoriatic weaponry

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Source: FASEB JOURNAL **Volume:** 17 **Issue:** 11 **Pages:** 1377-1379 **Published:** AUG 2003

Abstract: Psoriasis is an inflammatory disorder characterized by a T helper type 1 cell cytokine pattern. Increased expression of adhesion molecules, prominent neutrophil accumulation, and increased production of nitric oxide are characteristics of this disorder. Moreover, histamine and proteases are supposed to participate in the pathogenesis of psoriasis. Nicotinamide is an inhibitor of poly (ADP-ribose) polymerase-1 (PARP-1) that, through enhancement of nuclear kappa B-mediated transcription, plays a pivotal role in the expression of inflammatory cytokines, chemokines, adhesion molecules, and inflammatory mediators. Through interaction with CD38 and inhibition of IL-1, IL-12, and TNF-alpha production, nicotinamide produces a mild TH2 bias. Nicotinamide is a potent phosphodiesterase inhibitor and suppresses neutrophil chemotaxis and mast cell histamine release. It inhibits nitric oxide synthase mRNA induction and suppresses antigen-induced lymphocyte transformation. Nicotinamide increases the biosynthesis of ceramides, which upon degradation produce sphingosine. Sphingosine inhibits protein kinase C (PKC) and decreases basal cell proliferation dependent on PKC. Taken together, it can be reasoned that nicotinamide could be a useful addition to anti-psoriatic armamentarium. The combination of nicotinamide and thalidomide or methotrexate provided a powerful synergistic inhibition of murine collagen-induced arthritis. Nicotinamide decreased the methotrexate-induced hepatotoxicity. The above combinations may prove to have a powerful anti-psoriatic effect as well. As PARP inhibitors could exert anti-retroviral effect, nicotinamide could also be of special value in the treatment of HIV-infected psoriatics.

Author Keywords: AIDS; interleukin 12; nicotinamide; PARP; psoriasis; protein kinase C; T helper cell; treatment; tumor necrosis factor-alpha

Citation: 13

Impact Factor: 6.791

Database Source: ISI

The effect of polymer blends on release profiles of diclofenac sodium from matrices

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Source: EUROPEAN JOURNAL OF PHARMACEUTICS AND BIOPHARMACEUTICS **Volume:** 55 **Issue:** 3
Pages: 351-355 **Published:** MAY 2003

Abstract: The purpose of this study was to evaluate the effect of polymer blends on the in vitro release profile of diclofenac sodium. Several controlled release matrices of diclofenac sodium with different proportions of hydroxypropyl methylcellulose (HPMC; viscosity grade 60 and 500 mPa.s), carbopol 940 and lactose as a water soluble filler were prepared. The results showed that when HPMC (viscosity grade 60 mPa.s) alone was used as matrix former, diclofenac sodium was released fast but the release rate became slower with HPMC (viscosity grade 500 mPa.s) at higher polymer/drug ratios (more than 0.8:1). However in lower polymer/drug ratios (lower than 0.7:1) the release rate still was fast. The results showed that carbopol can extend the release time appreciably but the release profiles had considerable fluctuations, and drug release in first hours was slow but increased appreciably with time at the end of profiles. When an appropriate blend of HPMC (viscosity grade 60 or 500 mPa.s) and carbopol 940 was used, the drug release became more uniform and its kinetic approached to zero order and release fluctuations were diminished. The results with these polymer blends showed that it is possible to reduce the total amounts of polymer in each formulation. According to kinetic analysis data, drug release from these matrix tablets did not follow Fick's law of diffusion and the results were in agreement with the earlier reports. (C) 2003 Elsevier Science B.V. All rights reserved.

Author Keywords: diclofenac sodium; matrices; hydrophilic polymer; carbopol; hydroxypropyl methylcellulose

Citation: 13

Impact Factor: 2.611

Database Source: ISI

Use of dexamethasone and clomiphene citrate in the treatment of clomiphene citrate-resistant patients with polycystic ovary syndrome and normal dehydroepiandrosterone sulfate levels: a prospective, double-blind, placebo-controlled trial

Author(s): Parsanezhad ME, Alborzi S, Motazedian S, Omrani G

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Source: FERTILITY AND STERILITY **Volume:** 78 **Issue:** 5 **Pages:** 1001-1004 **Published:** NOV 2002

Abstract: Objective: To evaluate the effects of short-course administration of dexamethasone (DEX) combined with clomiphene citrate (CC) in CC-resistant patients with polycystic ovary syndrome (PCOS) and normal DHEAS levels. Design: Prospective, double-blind, placebo-controlled, randomized study.

Setting: Referral university hospitals. Patient(s): Two hundred thirty women with PCOS and normal DHEAS who failed to ovulate after a routine protocol of CC. Intervention(s): The treatment group received 200 mg of CC from day 5 to day 9 and 2 mg of DEX from day 5 to day 14 of the menstrual cycle. The control group received the same protocol of CC combined with placebo.

Main Outcome Measure(s): Follicular development, hormonal status, ovulation rate, pregnancy rate.

Result(s): Mean follicular diameters were 18.4124 +/- 2.4314 mm and 13.8585 +/- 2.0722 mm for the treatment and control groups, respectively. Eighty-eight percent of the treatment group and 20% of the control group had evidence of ovulation. The difference in the cumulative pregnancy rate in the treatment and control groups was statistically significant.

Conclusion(s): Hormonal levels, follicular development, and cumulative pregnancy rates improved with the addition of DEX to CC in CC-resistant patients with PCOS and normal DHEAS. This regimen is recommended before any gonadotropin therapy or surgical intervention. (C) 2002 by American Society for Reproductive Medicine.

Author Keywords: polycystic ovary; DHEAS; clomiphene citrate; dexamethasone

Citation: 13

Impact Factor: 3.168

Database Source: ISI

Ile to Val polymorphism at codon 655 of HER-2 gene and breast cancer risk in Iranian women

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Source: CANCER LETTERS **Volume:** 215 **Issue:** 1 **Pages:** 83-87 **Published:** NOV 2004

Abstract: The earlier reports on the association between the Ile to Val polymorphism at codon 655 of HER-2 and susceptibility to breast cancer has not been found to hold true for all ethnic populations. Two hundred and four cases and 138 controls were collected to investigate the association of HER-2 Ile(655)Val polymorphism with the risk of breast cancer development and progression in Iranian population. This association was not found to be significant in the present study (OR = 1.16, 95% CI: 0.67-2.03). The association between HER-2 genotypes frequency and clinicopathological data was also insignificant, suggesting that the HER-2 polymorphism at codon 655 is unlikely to be a susceptibility locus in Iranian patients with breast cancer. 2004 Elsevier Ireland Ltd. (C) All rights reserved.

Author Keywords: breast cancer; HER-2; polymorphism; prognostic factor

Citation: 12

Impact Factor: 3.398

Database Source: ISI

Comparison of the effectiveness of single intrauterine insemination (IUI) versus double IUI per cycle in infertile patients

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Source: FERTILITY AND STERILITY **Volume:** 80 **Issue:** 3 **Pages:** 595-599 **Published:** SEP 2003

Abstract: Objective: To compare a single periovulatory intrauterine insemination (IUI) with a regimen based on double IUI, performed during preovulatory and periovulatory periods, in patients undergoing controlled ovarian hyperstimulation (COH).

Design: Prospective, randomized study. Setting: Infertility and endocrinology units of a medical university.

Patient(s): One hundred ten patients with male factor, cervical factor, and unexplained infertility who were undergoing 486 cycles of COH with IUI. Intervention(s): The patients were randomly divided into two groups. One group underwent single IUI in the first cycle and double IUI in the second cycle; this alternating pattern was continued up to six cycles unless pregnancy occurred. For patients in the second group, double IUI was performed in the first cycle and single IUI in the second cycle; this pattern was repeated as in the first group. Main Outcome Measure(s): Relationship of single and double IUI to rates of clinical pregnancy and abortion. Result(s): Forty-two women became pregnant, with an overall pregnancy rate per cycle of 8.6% and pregnancy rate per couple of 38.2%. Pregnancy rate per cycle was 7.9% in single IUI cycles and was 9.4% in double IUI cycles; these findings were not statistically significant.

Conclusion(s): Among patients undergoing COH-IUI, results of single and double IUI do not statistically differ. (C)2003 by American Society for Reproductive Medicine.

Author Keywords: intrauterine insemination; superovulation; double insemination

Citation: 12

Impact Factor: 3.168

Database Source: ISI

Polymerase chain reaction for diagnosis of cutaneous leishmaniasis in histologically positive, suspicious and negative skin biopsies

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Source: DERMATOLOGY **Volume:** 205 **Issue:** 1 **Pages:** 18-24 **Published:** 2002

Abstract: Background: Cutaneous leishmaniasis (CL) is a major problem in many tropical and subtropical countries. The clinical diagnosis should be confirmed by identification of the parasite in biopsy or smear or by tissue culture. The sensitivity of direct microscopy is not high, and tissue culture is not uniformly available and successful. Polymerase chain reaction (PCR) is a sensitive test for the detection of low amounts of DNA in tissues. Objective: We applied PCR on paraffin-embedded skin biopsies to assess the validity of this method in the diagnosis of cutaneous leishmaniasis. Methods: DNA extraction from paraffin blocks was performed by the heat method, and PCR was carried out using the primers for the Leishmania-specific 120-base-pair fragment of kinetoplast DNA minicircles. Paraffin blocks of gelatin-embedded formalin-fixed *Leishmania tropica*, taken from culture, served as positive controls. Negative controls were the skin biopsies of patients whose clinicopathologic diagnoses were not cutaneous leishmaniasis. Results: PCR showed the parasite in all 33 cases whose skin biopsies had shown the *Leishmania* parasite by light microscopy. PCR results were also positive in 24 cases out of 29 where microscopic examination of skin biopsies had failed to detect the amastigote but their clinical diagnosis was CL. The sensitivity of PCR in the diagnosis of CL was 92%. None of the nonleishmaniasis cases showed positive results (specificity 100%). PCR results were positive in 52 out of 54 cases whose skin biopsies showed granulomatous inflammation. Evaluation of the histopathologic findings showed that the presence of vaguely formed immature granuloma was directly and the detection of mature well-formed granuloma was inversely correlated with the detection of the parasite in biopsies ($p < 0.01$). Conclusion: PCR on paraffin-embedded tissue is a highly sensitive and specific test for the diagnosis of CL, and detection of granulomatous inflammation is a highly reliable histopathologic finding in suspected cases. Copyright (C) 2002 S. KargerAG, Basel.

Author Keywords: cutaneous leishmaniasis; polymerase chain reaction; granuloma

Citation:12

Impact Factor: 1.886

Database Source: ISI

A controlled trial of buprenorphine treatment for opium dependence: the first experience from Iran

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Source: DRUG AND ALCOHOL DEPENDENCE **Volume:** 66 **Issue:** 2 **Pages:** 111-114 **Published:** APR 2002

Abstract: **Aims:** To evaluate the effect of a 4 mg/day sublingual dose of buprenorphine in the maintenance treatment of opium dependence in comparison with a 1 mg/day dose over an 18-week treatment period. As a secondary objective, the results were determined concurrently for subjects treated with a 2 mg/day dose. **Design:** Subjects were assigned randomly to three dosage groups. **Participants:** 330 consecutive (320 men and 10 women) opium addicts who met the DSM-IV criteria for opioid dependence and were seeking treatment. **Intervention:** Subjects received a 1, 2 or 4 mg/day dose of buprenorphine and were treated in an outpatient clinic where they also received a weekly 1-hour clinical counseling session. **Measurements:** Addiction Severity Index, retention in treatment, and illegal opioid use as determined by random urine testing. **Findings:** The mean age was 37.5 years (SD = 11.4, range 19-72). Overall, 194 (58.8%,) of the patients completed the 18 week study. Completion rates by dosage groups were 47.3% for the 1 mg group, 58.2% for the 2 mg group and 70.9% for the 4 mg group ($\chi^2(2) = 12.7$, $df = 2$, $P = 0.0017$). **Conclusions:** The results support the efficacy and safety of buprenorphine for opium addiction and suggest that an adequate dose of buprenorphine would help to increase the success rate. (C) 2002 Elsevier Science Ireland Ltd. All rights reserved.

Author Keywords: buprenorphine; opium dependence; retention in treatment

Citation:12

Impact Factor: 3.222

Database Source: ISI

A randomized, double-blind, placebo-controlled trial of supplementary vitamins E, C and their combination for treatment of haemodialysis cramps

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Source: NEPHROLOGY DIALYSIS TRANSPLANTATION **Volume:** 16 **Issue:** 7 **Pages:** 1448-1451
Published: JUL 2001

Abstract: Background. Muscle cramps that improve after carnitine or vitamin E therapies are common in haemodialysis (HD) patients. Because vitamin C participates in carnitine biosynthesis, and its levels are reduced in uraemia, subclinical vitamin C depletion may contribute to HD cramps. Our aim was to determine the effects of vitamins C, E and their combination on the frequency and intensity of HD cramps.

Methods. In this placebo-controlled, double-blind study, 60 HD-patients were randomized into four therapeutic groups. Each group (n=15) received six identical capsules daily for 8 weeks, containing one of the following: vitamin E (400 mg), vitamin C (250 mg), their combination, or placebo.

Results. The frequency and intensity of HD cramps decreased significantly in all three vitamin groups compared with the placebo group at the end of the trial, and compared with the pre-treatment values. At the end of the trial, vitamins E, C, their combination, and placebo produced cramp reductions of 54, 61, 97 and 7%, respectively. The percentage cramp reduction had no significant correlation with age, sex, aetiology of end-stage renal disease, serum electrolytes or HD duration, but showed a positive correlation ($r=0.33$, $P = 0.01$) with the type of therapy. No vitamin-related adverse effects were encountered during the trial.

Conclusion. Short-term treatment with the combination of vitamins E and C is safe and effective in reducing HD cramps: however, its safety for prolonged therapy has yet to be evaluated in HD patients.

Author Keywords: haemodialysis; muscle cramps; placebo; vitamin C; vitamin E

Citation:12

Impact Factor: 3.167

Database Source: ISI

Does fluoxetine have any effect on the cognition of patients with mild cognitive impairment? A double-blind, placebo-controlled, clinical trial

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Source: JOURNAL OF CLINICAL PSYCHOPHARMACOLOGY **Volume:** 27 **Issue:** 1 **Pages:** 67-70 **Published:** FEB 2007

Abstract: Objectives: Mild cognitive impairment (MCI) may be a prodromal state for Alzheimer disease. Recent research suggest a role for other neuronal systems such as monoaminergic hypofunction beside cholinergic dysfunction in age-related cognitive decline. In several studies, selective serotonin reuptake inhibitors demonstrated promotion of neurogenesis in the hippocampus. In this study, the effects of fluoxetine, a selective serotonin reuptake inhibitor, on memory and cognition of patients with mild cognitive impairment has been studied.

Method: Fifty-eight nondepressed patients with MCI were randomly assigned to take fluoxetine or placebo. The patients were administered the Structured Clinical Interview for DSM-IV (Diagnosis and Statistical Manual for Mental Disorders, Fourth Edition) Disorders, the Mini-Mental Status Examination (MMSE), subtests from the Persian standardized Wechsler Memory Scale III (WMS-III) preintervention. Forty-four patients completed the 8-week trial. Treatment response was defined as improvement in the scores of MMSE, subtests of WMS-III, and Clinical Global Impression.

Result: The patients in the fluoxetine group showed improvement in MMSE and immediate and delayed logical memory scores of WMS-III. The placebo group had no significant changes in the cognitive measurements.

Conclusion: Fluoxetine enhanced memory and cognition in the patients. This was consistent with previous studies that emphasized the role of fluoxetine in improving memory and promoting neurogenesis in the hippocampus. However, this is a preliminary study with small sample size, and larger double-blind placebo-controlled studies are needed to confirm these findings.

KeyWords Plus: ALZHEIMERS-DISEASE; NEUROGENESIS; MEMORY; SYMPTOMS; DEMENTIA; SYSTEMS; BRAIN

Citation: 11

Impact Factor: 3.878

Database Source: ISI

Synthesis, study of 3D structures, and pharmacological activities of lipophilic nitroimidazolyl-1,4-dihydropyridines as calcium channel antagonist

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Source: BIOORGANIC & MEDICINAL CHEMISTRY **Volume:** 14 **Issue:** 14 **Pages:** 4842-4849

Published: JUL 2006

Abstract: QSAR studies indicated that the potency of nifedipine analogues was dependent upon lipophilicity, an electronic term and separated terms for each position on the DHP ring. Changes in the substitution pattern at the C-3, C-4, and C-5 positions of DHPs alter potency, tissue selectivity, and the conformation of the 1,4-DHP ring. In this project a group of alkyl ester analogues of new derivatives of nifedipine, in which the ortho-nitrophenyl group at position 4 is replaced by a 1-methyl-5-nitro-2-imidazolyl substituent, and the methyl group at position 6 is replaced by a phenyl substituent, were synthesized and evaluated as calcium channel antagonist using the high K⁺ contraction of guinea-pig ileal longitudinal smooth muscle. The results for asymmetrical esters showed that lengthening of the substituent in C-3 ester substituent increased activity. When increasing of the length is accompanied by increasing the hindrance, the activity decreased. The results demonstrate that all compounds were more active or similar in effect to that of the reference drug nifedipine. (c) 2006 Elsevier Ltd. All rights reserved.

Author Keywords: lipophilic-DHP; 1,4-dihydropyridine; calcium channel antagonist; 5-nitroimidazole; three-dimensional structure

Citation: 11

Impact Factor: 2.662

Database Source: ISI

Cytotoxic T lymphocyte antigen-4 gene in breast cancer

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Source: BREAST CANCER RESEARCH AND TREATMENT **Volume:** 86 **Issue:** 1 **Pages:** 1-7
Published: JUL 2004

Abstract: The exon 1 polymorphism (49A/G) of ctla-4 gene corresponds to an amino acid exchange (threonine to alanine) in the leader peptide of the expressed protein. There are reports concerning the higher level of G allele in subjects with various autoimmune diseases, which has resulted in the hypothesis that CTLA-4 may play a role in regulating self-tolerance by the immune system and in the pathogenesis of autoimmune disorders. This study was undertaken to investigate the correlation of exon 1 (49A/G) polymorphism in the ctla-4 gene and breast cancer. The ctla-4 49A/G polymorphism was studied in 197 women with primary breast cancer and 151 age/sex matched normal individuals. The results indicated a significant difference between frequency of ctla-4 genotypes in patients and controls. The frequency of GG genotype was significantly decreased in breast cancer patients compared to controls (4.6% v.s. 12.6%, $P = 0.012$). There was also a significant positive correlation between tumor size and the existence of AA genotype in patients ($P = 0.016$). In addition, a positive correlation between AA genotype and lymph node involvement was observed ($P = 0.042$). The observed decrease in the frequency of GG genotype in the breast cancer patients is contrary to the frequently reported increase of GG genotype in autoimmune diseases. In addition, the data implies that polymorphism of ctla-4 exon 1 contributes in tumor progression

Author Keywords: breast cancer; ctla-4; lymph node involvement; tumor size

Citation: 11

Impact Factor: 4.453

Database Source: ISI

Inherited coagulation disorders in southern Iran

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Source: HAEMOPHILIA **Volume:** 8 **Issue:** 6 **Pages:** 740-744 **Published:** NOV 2002

Abstract: A comprehensive survey concerning the Shiraz Hemophilia Society and the associated haemophilia treatment centre was undertaken in April 2002 to collect data on demographics, signs and symptoms in the southern Iranian population with haemophilia and allied disorders. The total number of patients with coagulation disorders was 367. Haemophilia A (factor [F] VIII deficiency) was found in 271, 39 had haemophilia B (FIX deficiency) and 24 had von Willebrand disease. The rare coagulation disorders (n = 33) included 11 patients with FX deficiency; 10 with FVII; six with FXIII; two with afibrinogenaemia; two with FXI; one with combined FVIII and FV; and one with combined FVII, FVIII and FIX deficiency. The prevalence was 6.64 per 100 000 inhabitants. The most common symptoms were haemarthrosis, haematomas and epistaxis. None of the patients were human immunodeficiency virus positive but 47 (15%) were hepatitis C virus positive and two (0.7%) were hepatitis B positive, so that the rate of transfusion-transmitted infections was lower compared with other populations.

Author Keywords: haemophilia; hereditary bleeding disorders; rare coagulation disorders; Shiraz Hemophilia Society; southern Iran

Citation: 11

Impact Factor: 1.947

Database Source: ISI

Living non-related versus related renal transplantation - its relationship to the social status, age and gender of recipients and donors

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Source: NEPHROLOGY DIALYSIS TRANSPLANTATION **Volume:** 14 **Issue:** 11 **Pages:** 2621-2624
Published: NOV 1999

Abstract: Background. Persistent differences between social classes and genders exist in the quality of medical care due to disparities in need and access. Methods. 149 haemodialysis (HD) patients including 114 renal transplant candidates, and their proposed live donors were interviewed and followed for 4 years. Differences in need and access were analysed among the living non-related compared to related renal transplant according to social status, age and gender of recipients and donors. Also the motive for organ-donation as well as the recipient's survival was compared between living non-related and related renal transplantation. Results. The proportion of females among renal transplant candidates was significantly lower than among HD-patients. Females were significantly less likely to be recipients, but more likely to be donors of renal allografts, particularly if they were unemployed. Initially all of the living non-related donors claimed to have altruistic motives for organ-donation but gift rewarding, drug abuse, unemployment, and economical deadlock, urgent need of money were significantly frequent than among living related donors. The donation process lasted significantly longer in females and in living non-related donors and there was a trend for higher mortality in recipient of living non-related grafts. Almost all of the living non-related donors disappeared after organ-donation without subsequent follow-up. Conclusions. Females are transplanted less frequently, but donate kidneys more frequently than males in living non-related transplantation programmes. There is an excess of vulnerable people among living non-related donors.

Author Keywords: end-stage renal disease; ethics; gender; haemodialysis; living related and non-related renal transplant; social status

Citation: 11

Impact Factor: 3.167

Database Source: ISI

Supracondylar fracture of the femur - closed or open reduction

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Source: JOURNAL OF TRAUMA-INJURY INFECTION AND CRITICAL CARE **Volume:** 34 **Issue:** 4
Pages: 499-502 **Published:** APR 1993

Abstract: Fifty-one cases of supracondylar fracture of the femur with a mean follow-up of 29 months were retrospectively studied. Thirty-one fractures were open; most had major soft tissue damage. Open management was used for 32 of the fractures with good to excellent results in 81%, while a good or excellent outcome was attained in only 42% of the 19 fractures treated nonsurgically. Malunion was observed in seven cases treated by closed methods and in only one case treated by open reduction. The patients treated surgically also had shorter average hospital stays and a better range of motion in the knee, while the rates of deep infection (three cases) and nonunion (two cases) were similarly distributed between the surgically and nonsurgically managed groups. Twelve patients required closed knee manipulation to improve knee motion, five in the group treated by closed reduction and seven in the group treated surgically with an average gain in motion of 52 degrees in the former and 42 degrees in the latter group.

KeyWords Plus: DISTAL

Citation:10

Impact Factor: 2.334

Database Source: ISI

National Nosocomial Infection Surveillance System-Based study in Iran: Additional hospital stay attributable to nosocomial infections

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Source: AMERICAN JOURNAL OF INFECTION CONTROL **Volume:** 31 **Issue:** 8 **Pages:** 465-468
Published: DEC 2003

Abstract: Background: Nosocomial infection is a serious health and financial problem. The purpose of this study was to determine the extra hospital stay attributable to nosocomial infections for patients undergoing surgery.

Method: All patients undergoing surgery admitted from March 1, 1999, to February 28, 2000, to the 38-bed general surgery ward within a university hospital in Shiraz, Iran, were included in this study. The study was planned as a pairwise-matched case-control study nested in cohort design. A case was defined as any patient with 1 of 4 of the following nosocomial infections: urinary tract infection; surgical site infection, bloodstream infection; or pneumonia, whereby definitions for the nosocomial infections were on the basis of National Nosocomial Infection Surveillance system definitions. For each patient, an appropriate match was selected, which resulted in 69 pairs of study patients.

Results: The total incidence of nosocomial infection during the study period was 17.59%. The mean extra length of hospitalization as a result of all major kinds of nosocomial infections was 6.62 days total, which was obtained using 4.4, 5.33, 8.73, and 9.2 extra days for urinary tract infection, pneumonia, surgical site infection, and bloodstream infection, respectively.

Conclusion: Nosocomial infections add considerable costs to the health care system in Iran. Therefore, the development of strategies and concepts to reduce the incidence of nosocomial infections is cost-effective and warranted, and an appropriate surveillance system on the basis of international criteria is the cornerstone for this task.

KeyWords Plus: surgical-site infections; blood-stream infection; length-of-stay; excess length; extra costs; mortality; impact; unit

Citation:10

Impact Factor: 1.907

Database Source: ISI