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Evaluation of antioxidant properties in 28 herbs in IRAN

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Abstract

Background and Aim: The subject of free radicals and reactive oxygen species and their effects on the biological systems is one of the important subjects in medicine. These agents can irreversibly damage to the vital molecules such as nucleic acids, proteins, lipids and lipoproteins. Antioxidants can protect biological systems against these agents. Consuming of some herbs that have high amounts of antioxidant can be useful in human health. The aim of this study is the investigation of antioxidant properties in some herbs in IRAN.

Materials and Methods: on the basis of existing information in traditional medicine, twenty-eight herbs that were effective in lowering blood sugar, blood lipids, hypertension and arteriosclerosis were prepared. After that we determined the total antioxidant power by FRAP (Ferric Reducing / Antioxidant Power) method. Also we evaluate the ability of the extracts with different concentrations in inhibition of red blood cell (RBC) hemolysis induced by hydrogen peroxide (H_2O_2). The results were calculated and compared by mean and standard deviation obtained from experiments that were carried out minimum three times. The statistical test of the one sample t. test was used for comparison of different concentrations.

Results: In among of the plants aqueous extracts the most antioxidant power was observed in *Origanum Vulgare* L., *Rosa Damascena* Mill, *Salvia Officinalis* L., *Viscum Album* L., *Melilotus Officinalis*, lea of *Juglans Regia* L. and *Crataegus* Spp. Also there was a positive and significant correlation between antioxidant power of aqueous and alcoholic extracts ($r=0.671$, $P<0.001$). The plants with high antioxidant capacity showed more ability on the inhibition of RBC hemolysis induced by H_2O_2 ($P<0.05$) and with the increase of antioxidant power the inhibition rate of RBC hemolysis increased ($r=0.646$, $P<0.007$). Although some of the herbs had peroxidant properties and caused the increase of RBC hemolysis.

Conclusion: Since some of the traditional herbal medicine have high amounts of natural antioxidant and can naturalize the activity of free radicals, it is suggested that these herbs use for preventing of different diseases and also for helping to the treatment of some diseases in beside of new chemical drugs.

Key words: Herbal medicine; Antioxidants; Oxidative stress; FRAP; Red blood cell hemolysis

Ministernotomy versus median sternotomy for aortic valve surgery

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Abstract

Background and Aim: Minimally invasive aortic valve surgery reduces surgical trauma, complication, blood loss and hospital stay. We performed a case-control study to compare preoperative and early results of minimally invasive with conventional aortic valve surgery.

Materials and Methods: Between 1999 and 2004, 70 patients underwent isolated aortic valve surgery, of these patients, 20 patients underwent minimally invasive aortic valve surgery in 2003 that were matched to 20 patients of conventional group. All patients were re-explored until two months after aortic valve surgery and statistical analysis was done.

Results: In each group, 15 elective aortic valve replacement (75%), 3 valvoplasty (15%), and 2 sub-membrane resection (10%) were performed. Our results showed that ministernotomy does not appear to carry a greater risk but carries better cosmetic and outcome results.

Conclusion: We conclude that minimally invasive surgery (MIS) for aortic valve surgery (AVS) is a safe approach and can offer some advantages over the conventional surgery (CS) approach.

Key words: Ministernotomy; Minimally invasive; Cardiac surgery; Aortic valve replacement; Aortic valve repair

The relationship of Hirsutism with body mass index (BMI) and other Factors

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Abstract

Introduction and Aim: Hirsutism is defined as the excessive growth of thick dark hair in locations where hair growth in women usually is minimal or absent. There are many causes of hirsutism. Its causes can be idiopathic, ovarian diseases, adrenal and hypophysial disorders. The proposes of this study consist the determination of hirsutism frequency in Birjand students and evaluation of the relationship of hirsutism with body mass index (BMI) , Menstrual pattern, acne, history of PCOS, Skin and hair color, Familial history of hirsutism and menarche age.

Materials and Methods: This study was done in two stages. First, a cross- sectional study was done to determine the frequency of hirsutism among the Birjand high school students and Birjand university of Medical Sciences students in 2003-2004 (750 girls were chosen through multistage sampling), and then the case-control study (126 cases and 126 controls) was done to evaluate the relationship between hirsutism and related factors by measuring of height and weight of students and completion of a questionnaire. Data were analyzed by using SPSS package, Chi-Square, logistic regression analysis and t test.

Results: 126 (16.8%) cases of total 750 cases had hirsutism. 9.5% of hirsute persons and 0.8% of control group had BMI greater than 25 . ($P<0.05$)

Average BMI in the case group and control group was determined (20.7 and 19.6) respectively. 19.8% of case group (and 14.3% of control group) had abnormal menstrual pattern, 22.2% of case group (and 8.7% of control group) had active acne, 84.9% of case group (and 58.7% of control group) had dark black hair, 90.5% of case group (and 69.9% of control group) had dark skin. 6.3% of case group (and 4.8% of control group) had history of PCOS and 67.5% of case group (and 4% of control group) had positive familial history. ($P<0.05$) Menarche age in case group and control group was reported 13.5 years and 13.6 years respectively .($P>0.05$)

Conclusion: According to the results there is a significant relationship between hirsutism and BMI, acne, skin and hair color and familial history of hirsutism but there isn't a significant relationship between hirsutism with menstrual pattern , PCOS history and menarche age .

Key words: Hirsutism, Body mass index (BMI), Menstrual pattern, Acne, Polycysticovary syndrome (PCOS)

Adverse effects of mass MR immunization in Birjand

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Abstract

Background and Aim: In 2003, measles-rubella mass immunization campaign was conducted for persons aged 5-25 years in IRAN. One of the important problems in mass immunization is “adverse effect”. The goal of this study is the survey of reported adverse effects after vaccination in Birjand.

Materials and Methods: This research is a sectional and descriptive study. The population under study was all vaccinated persons in mass campaign MR in Birjand city. Of this population those who had adverse effects after immunization were selected and variables (age, sex, adverse effect and time of appearing, place of vaccination, management and final condition of vacciner) were contemplated. Data were analyzed by using SPSS package and Chi-Square test.

Results: Of 163323 vaccinated persons, 98 cases of adverse effect were reported. 61.2% of adverse effects happened in women and 38.8% in men. More adverse effects happened in age 5-15 years (61.6%). 59.2% was urban and 40.8% was rural. However the common adverse effects were: nausea and vomiting (45.9%), headache (42.8%), dizziness (39.9%) and fever (36.7%). 98% of persons treated out patiently and 95.9% cured completely. The results indicated no significant difference between age, sex and appearing of adverse effect.

Conclusion: Adverse effects of immunization were mild and more cured completely.

Key words: Measles-rubella vaccine (MR); Mass campaign; Adverse effect

Prevalence of Un-intended pregnancies and its relationship with low birth weight

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Abstract

Background and Aim: Unintended pregnancy is still a common problem of our society and has negative outcomes of mother and child health.

Objective: To determine the prevalence of un-intended pregnancies and its relation with low-birth weight.

Materials and Methods: In a cross-sectional study, 260 pregnant women were investigated and their babies at birth were weighted.

Results: The prevalence of un-intended pregnancies was 36.9% - 28% for urban, 42.5% for sub-urban women. The incidence of LBW was 9.1% for intended pregnancies vs. 12.5% for unintended. The mean of weight for intended was 3280 ± 20 gr vs. 3180 ± 25 gr for unintended births. There is no significant difference.

Conclusion: The prevalence of unintended pregnancies has diminished comparing to 5 years earlier study and more studies should be designed to clarify the difference of the LBW rate among wanted and unwanted pregnancies.

Key words: LBW; Unintended pregnancy

The effect of Aspirin in post-CABG hemorrhage

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Abstract

Background and Aim: This study was done to evaluate the aspirin effect in the post-operative bleeding in patients with aortocoronary bypass surgery.

Materials and Methods: In this study 200 cases were studied. 100 patients were in the control group (that did not use aspirin at least 48 hours before the operation), and 100 patients were in the case group (that aspirin usage was continued).

Results: It was found that the post-operative bleeding was more in the case group than the control group, 6 and 12 hours after the surgery; and this difference was statistically significant.

Conclusion: According to the presented research, the patients with CABG who continue using aspirin are at a higher risk for post-operative hemorrhage than the patients that do not use aspirin at least 48 hours before the operation, so a most intensive post-operative follow-up should be done for them specially for post-operative bleeding.

Key words: Aspirin; CABG; Hemorrhage

Evaluation of the effect of Lomex® capsules in treatment of type I diarrhea

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Abstract

Background and Aim: Acute diarrhea diseases are not only as one of the major causes of disorders (about one billion disorders per year) but also the major cause of mortality in various countries all over the world.

Materials and Methods: The role of Lomex pearl in treatment of type I diarrhea in comparison with placebo is the purpose of this study. So this research was accomplished as a randomized double blind clinical trial and after their agreement, questionnaire containing: personal identifications, onset of the diarrhea, frequency of the defecation, fever, were completed by the patients and these 56 persons were randomized divided into two groups: the first group took Lomex pearl and the other one placebo, then the patients were evaluated after 24, 48, 72 hours.

Results: The results showed that the average time of cessation of diarrhea in patients who took oral pearl of Lomex® was 25.69 hours that is more valuable ($P=0.000$) compared to diarrhea in placebo group which was ceased after 50.15 hours. After 48 hours, the average rate of frequency of diarrhea that took Lomex was 1.6 ($P=0.000$) compared to placebo group, which were 4.59 ($P=0.000$).

Conclusion: Finally this study showed the superiority of herbal pearl Lomex ® in treatment of diarrhea compare to Placebo.

Key words: Type I diarrhea; Pearl; Lomex

Hydatic cyst in anterior wall of left ventricle with extension to interventricular septum

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Abstract

Hydatic disease or Echinococcosis is a health problem in the whole world. Incidence of the disease in different communities is related to the incidence of the disease in intermediate hosts for example sheep, cows and pigs. The disease is endemic in South America, Island, Australia, Newzeland and South Africa. In Iran there is areas infected by hidatid disease.

Cardiac hydatic disease is rare but sometime cases of cardiac hydatic disease published in medical journals. In this article, we reported echinococcosis in anterior wall of left ventricle and inte~~v~~entricular septum.

Key words: Hydatic cyst, Anterior wall of left ventricle, Echinococcosis