

HN10105540444

## Effects of ear acupuncture on weight loss and serum levels of total cholesterol and triglyceride

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**Objectives:** Acupuncture seems to be effective in reducing body weight, body mass index (BMI), anthropometric measurements (e.g., waist and hip circumferences) and the serum levels of total cholesterol, triglyceride and low-density lipoprotein (LDL-C). On the other hand, it can increase the level of high-density lipoprotein (HDL-C) in clinical practice. In the present study, we aimed to evaluate the effects of ear acupuncture on weight, BMI, waist and hip circumferences and several biochemical parameters, e.g., serum levels of total cholesterol, triglyceride, HDL-C, LDL-C, HsCRP, albumin and prealbumin in male and female subjects.

**Materials and Methods:** The participants were divided into case and control groups. The case group (n=110) followed a low-calorie diet and used ear acupuncture and exercise. The subjects were recruited from the nutrition clinic of Ghaem Hospital, Mashhad, Iran. The acupoints on the ears included the Shenmen (TF4), stomach (CO4), hungry point, mouth. (CO1), center of ear (HX1) and Sanjiao (CO17); ear pressing plasters were applied for acupuncture. The control group (n=110) included subjects with low-calorie diets and placebo ear acupuncture. The acupoints on the ears included the hip, spleen, nose and esophagus (pressing plasters without seeds). Both groups received two treatment sessions per week for 45 days. Some biochemical parameters such as weight, BMI and waist/hip circumferences were measured at the beginning and six (immediately after the end of treatment) and twelve weeks after the initial intervention.

**Results:** A significant reduction was observed in W/C-H/C, weight and LDL-C, while total cholesterol, triglyceride and HDL-C levels did not significantly change in the case group. The difference in lipid profile between the two groups was significant.

**Conclusion:** It seems that ear acupuncture has

beneficial effects on anthropometric measurements, while it has no considerable effects on lipid profile in obese and overweight subjects.

**Keywords:** Ear acupuncture, Obesity, Total cholesterol, Triglyceride

HN10107940798

## The effects of bentonite and calendula on the improvement of diaper dermatitis in infants

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**Objectives:** Diaper dermatitis is a prevalent skin disorder among infants and children. This study aimed to compare the effects of bentonite and calendula plant on the improvement of diaper dermatitis in infants.

**Materials and Methods:** This double-blind randomized controlled trial was conducted on 60 outpatient infants diagnosed with diaper dermatitis referred to different health care centers and pediatric clinics of Khomein city, Iran. Data collection was performed using prepared checklists and direct observations, and obtained data were analyzed using t-test, Chi-square test, risk ratio and Fisher's exact test.

**Results:** In this study, mean age of the subjects was 6.55±5.35 months. In total, 93.3% of the lesions in the bentonite group started recovery within the first 6 hours of treatment, while this rate was estimated at 40% in the calendula group (p<0.001). In addition, the risk ratio of improvement within the first 6 hours of treatment was 7 times higher in the bentonite group. Also, 90% of the infants in the bentonite group and 36.7% of the subjects in the calendula group recovered completely after the first 3 days of intervention (p<0.001).

**Conclusion:** According to the results of this study, bentonite could be more effective in the improvement of diaper dermatitis among infants compared to calendula.

**Keywords:** Diaper dermatitis, Bentonite, Calendula

HN10104311025

## An overview on the principles of music therapy in health and sickness based on traditional Persian medicine

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**Objectives:** according to the classification of knowledge in the ancient wisdom, music is one of the branches of mathematics. Some sage physicians believed it as a necessary knowledge in medical education and training. Famous philosophers and physicians, such as Farabi and Ibn Sina, authored professional books and treatises about the theoretical and practical principles of music and its instruments, and some other like Qotb-al-din shirazi, was a proficient lute player. Teachings about medical applications of instrumental and vocal music appear in different types of manuscripts including medical literature, music treatises, mystical essays, and also in the ethnic traditions of Persian people. This study aimed to review the principles of music therapy in health and sickness states based on Persian medicine.

**Materials and Methods:** In this review, different sources including literature of Persian medicine, manuscripts on music, mystical texts, and official reports on ethnic musical traditions were searched. The textual findings were analyzed, classified and interpreted in order to categorize the medical usages of music, and also to discover the main principles and rules of music therapy from the Persian medicine perspective.

**Results:** According to the sources, music could play a pivotal role in maintaining physical health and treatment of some physical and mental ailments. Any medical approach to music should conform to certain rules, and several considerations should be concerned such as the compatibility of rhythms, melodies, and lyric content in accordance with the temperament and biopsychological characteristics of listeners, especially the states of the heart and brain.

**Conclusion:** Despite the changes in the configuration of Persian music, and physical alterations of music instruments in the recent centuries, we could discover new guidelines to apply the current

Persian music in health promotion and treatment of some diseases. Therefore, it is recommended that further comparative and interdisciplinary studies be conducted in this regard.

**Keywords:** Music, Treatment rules, Instrumental music, Traditional Persian medicine

HN10100780126

## The assessment of rose essence in treating intractable pharmacoresistant epilepsy in children

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**Objectives:** Epilepsy is a major neurological disorder among children with an approximate incidence of 45 per 100,000 cases per year. Although recently developed antiepileptic drugs (AEDs) could offer better adverse-event profile in comparison to the older-generation AEDs, they may still lead to significant central nervous system (CNS) defects. Rosa damascena is proven to have hypnotic, antispasmodic and relaxant properties which have therapeutic effects on abdominal and chest pains and cardiac strengthening. This study aimed to evaluate the effects of the R. damascena essence on controlling intractable pharmacoresistant epilepsy in children, between 3 to 12 year of age, admitted to the department of neurology of Ghaem Hospital, Mashhad, Iran.

**Materials and Methods:** In this simple random sampling, medical therapy was conducted in three stages. Initially, 500 cc of *R. damascena* essence was prepared and a concentration of 10% was obtained with medium-chain triglyceride (MCT). Afterwards, medical and placebo interventions were performed based on patients' referral prescription using a double-blind approach. The collected data were analyzed using Chi-square, Wilcoxon and Friedman tests and Pearson's correlation coefficient. Data processing was performed using SPSS and Minitab software packages.

**Results:** In total, we studied 16 patients (male: 56.3% and female: 43.8%), whose mean age was 8.7 years, and the mean age of seizure incidence (first-time seizure) was 16.17 months. The age range of incidence was between 3 days to 48 months. No history of epileptic seizures was observed in 12 cases (75%). In addition, there was a statistically significant difference between the frequency of seizures before and after the treatment with rose oil ( $p=0.000$ ). The seizures were suppressed in 3 cases (18.7%) and they completely receded in 12 patients (75%). Only in one case (6.25%), no significant differences were observed.

**Conclusion:** *Rosa damascena* oil could significantly decrease the frequency of epileptic seizures. However, it may not affect the duration of the fits. Moreover, no side effects or complications have been associated with *R. damascena* as adjuvant therapy for epileptic pharmacoresistant children.

**Keywords:** Epilepsy, Pharmacoresistant, *Rosadamsцена*

HN10102420145

### Preventive effect of peppermint gel on the incidence of pressure ulcers in patients with head traumas admitted to intensive care units

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**Objectives:** Pressure ulcer is a common problem

following patients' admission to intensive care units. Prevention of pressure ulcers, which is one of the main responsibilities of nurses, is regarded as a priority in patients with immobility or movement restrictions. Several methods have been proposed for the prevention of pressure ulcers, including the use of complementary medicine and medicinal plants. Mint is one of the effective herbs for the prevention of ulcers. Therefore, we aimed to evaluate the effect of mint gel on the prevention of pressure ulcers in patients with head traumas, admitted to intensive care units.

**Materials and Methods:** In this triple-blinded, clinical trial, 150 patients, admitted to the intensive care units of Shahid Rajaei Hospital of Shiraz and Imam Hassan Mojtaba Hospital of Darab, were evaluated. The patients were selected via convenience sampling and were randomly divided into control and intervention groups. A gel containing peppermint oil was used in the intervention group, whereas the control group received a placebo gel. Data were collected, using Braden Scale and the National Pressure Ulcer Advisory Panel. Data analysis was performed using Stata 9.2. Chi-square, Kolmogorov-Smirnov, t-test and log-rank test were performed.

**Results:** As the results indicated, the mean score of Braden Scale was 9 among patients. The incidence of pressure ulcers in the intervention and control groups was 2% and 11.5%, respectively.

**Conclusion:** The results showed that mint gel can be effective in the prevention of pressure ulcers in patients with head traumas, admitted to intensive care units. Therefore, this gel is recommended for preventing pressure ulcers in patients at risk.

**Keywords:** Intensive care unit, Head trauma, Peppermint gel, Pressure ulcer

HN10104800577

### Chinese herbs versus acupuncture as complementary medicine treatment of insomnia

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**Objectives:** Insomnia is a common complaint and many patients consult complementary medicine to improve their sleep parameters; some literature suggest acupuncture and Chinese herbs has been used for this purpose.

**Materials and Methods:** We studied the efficacy of Chinese herbs and acupuncture as complementary medicine for 4 weeks, in a randomized clinical trial involving 60 patients with insomnia who used Estazolam, but had problems in sleep parameters.

**Results:** We found using Chinese herbs and acupuncture combined with Estazolam can improve sleep parameters but they were not significantly different in treatment effects, sleep duration change, sleep disturbance change, sleep latency change, and day dysfunction after treatment ( $p$ -value  $> 0.05$ ). However, Chinese herbs with oral Estazolam were significantly more effective in night dream change and relapse rate after one month ( $p$ -value  $< 0.05$ ).

**Conclusion:** There is no significant difference between Chinese herbs and acupuncture, as complementary medicine treatment for insomnia, while using herbs is more effective than applying acupuncture in decreasing night dreams and relapse rate.

**Keywords:** Herbs, Acupuncture, Estazolam, Insomnia, Insomnia severity index

HN10101450039

## Efficacy of feverfew versus placebo or dihydroergotamine in treatment of migraines

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**Objectives:** Migraine is the second most common cause of headaches. There are several methods in treatment of migraine including herbal medicine. Tanacetum parthenium (feverfew), a kind of chrysanthemum is traditionally used for treatment of headaches. The aim of this research was to assess the effect of feverfew in treatment of migraine.

**Materials and Methods:** This is a double blinded clinical trial with patient observation for eight months. 168 participants were enrolled in three groups: feverfew, placebo and dihydroergotamine. Participants with migraines more frequent than three times a month were included in our research. Severity and frequency of headache and kind of the prescribed drug were the investigated variables in this study.

**Results:** 155 of 168 participants (92.26%) completed the three month study protocol. After 15 days, 40 people (75.5%) in the feverfew group, 28 people (60.9%) in the placebo group and 49 people (89.1%) in dihydroergotamine group were well or better than before treatment. After 45 and 105 days these percentages showed an increase but there was no significant difference between treatment periods. After medication, we observed a statistically significant reduction in these groups, compared to baseline, for number of migraine headaches, migraine days and headache severity. Although assessment of efficacy showed that dihydroergotamine and feverfew groups were better than placebo, only the difference between dihydroergotamine and placebo groups was significant ( $p < 0.05$ ).

**Conclusion:** feverfew is as effective as dihydroergotamine. Therefore, in some

conditions like hypertension, feverfew is a good alternative for migraine treatment.

**Keywords:** Headache, Migraine, Tanacetum parthenium, Dihydroergotamine, Placebo.

HN10101650054

### The effect of massage-therapy on a anxiety in breast cancer patients undergoing chemotherapy

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**Objectives:** Chemotherapy is one of the main breast cancer treatments, and one of the most prevalent psychological complications of chemotherapy is anxiety. Massage is one of the techniques used for alleviating anxiety.

**Materials and Methods:** This study was a quasi-experimental clinical trial in which 34 breast cancer patients undergoing chemotherapy were randomly selected. They were randomly divided into experimental and control groups of seventeen patients. The experimental group received three sessions of stroke and kneading massage and the control group did not receive any massage. To estimate patients' degree of anxiety, Spielberger anxiety questionnaire was employed. On the first day (the control session), the participants filled the demographic and Spielberger questionnaires. The experimental group, in addition to receiving the routine care and treatments, received massage therapy on the second, third and fourth days and filled Spielberger questionnaire 24 hours after massage. The control group only received the routine care and treatments.

**Results:** On the first day (the control session), no statistically significant difference was observed between the two groups, while on the second, third and fourth days, there was a statistically significant difference between them.

**Conclusion:** According to the findings, nurses can use massage therapy as an effective, inexpensive and available method for lowering anxiety.

**Keywords:** Anxiety, Breast cancer, hemotherapy, Massage therapy

HN10107570711

### Comparison of jaundice in infants fed with breast milk and additional quantities of manna

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**Objectives:** Consumption of manna is a common method for the treatment of jaundice in the Iranian traditional medicine. Therefore, evaluation of the effects of this herb on neonatal jaundice seems necessary. This futuristic study aimed to compare jaundice in infants fed with only breast milk with those fed with breast milk and additional quantities of manna.

**Materials and Methods:** This study was performed during 2005-2015 on 538 jaundice infants referred to Ghaem Hospital of Mashhad, Iran. Patients were divided into two groups of control (only breast milk, N=336) and case group (breast milk and manna, N=197). Demographic features, laboratory findings and clinical symptoms of the subjects were evaluated using descriptive and analytical methods.

**Results:** In this study, there were significant differences between the age at referral, frequency of feeding, and frequency of urination between the groups. Moreover, significant differences were observed between the groups in terms of lethargy, restlessness, lactation status, breast milk reflex and breast problems (p<0.05).

**Conclusion:** According to the results of this study, consumption of manna in addition to breast milk not only decreases the level of bilirubin, but it also delays the referral age of

parents for jaundice. In addition, use of this herb reduces the frequency of urination and feeding, delays breast milk reflex and increases lethargy and restlessness in infants.

**Keywords:** Manna, Jaundice, Breastfeeding, Breast problems

HN10104680470

### Comparison of the effects of SP10 point acupressure and vitamin E on the pain severity of primary dysmenorrhea

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**Objectives:** Dysmenorrhea, or painful menstruation, is a common gynecologic disorder, and at least 50% of women experience it at the reproductive age. This study aimed to compare the effects of acupressure on SP10 point and use of vitamin E on the pain severity of primary dysmenorrhea in female students of Gonabad University of Medical Sciences, Iran.

**Materials and Methods:** This quasi-experimental study was conducted on 70 students with primary dysmenorrhea who met the inclusion criteria. Subjects were randomly divided into two groups of acupressure and vitamin E use and were evaluated within two cycles. Both groups were instructed to mark the pain severity of dysmenorrhea at the onset of pain using a pain measurement device. Acupressure subjects were previously trained to find the SP10 point. During the intervention, they stood on both feet for at least 5 minutes

(6 seconds pressure, 2 seconds rest) and recorded the pain severity of dysmenorrhea immediately after the intervention. Subjects in the vitamin E group used a 200-unit gelatin capsule, and after one hour, recorded the pain severity. Data analysis was performed using SPSS and repeated ANOVA.

**Results:** Before intervention, mean of pain severity within the first cycle was  $6.14 \pm 0.27$  and  $6.25 \pm 0.26$  in the acupressure and vitamin E groups, respectively. After the intervention, these values changed to  $4.14 \pm 0.34$  and  $4.12 \pm 0.32$ , respectively, which had a statistically significant reduction in both groups ( $p < 0.05$ ). Moreover, the intervention had a significant effect on the reduction of dysmenorrhea pain severity during the second cycle ( $p < 0.05$ ). Final results indicated that treatment with vitamin E and acupressure has no significant difference in the treatment of the pain caused by dysmenorrhea ( $p > 0.05$ ).

**Conclusion:** According to the results of this study, different medical approaches, such as acupressure, could be effective in the treatment of common problems due to the lack of side effects compared to other drugs, such as vitamin E.

**Keywords:** Acupressure, SP10 point, Vitamin E, Primary dysmenorrhea

HN10105020467

### Evaluation of the effects of microemulsion (nano size) of sour cherry kernel extracts on oxidative stress and stroke in isolated hearts of rats

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**Objectives:** Medicinal herbs can be a good alternative for chemical drugs, considering their fewer side-effects and lower costs. Herbal preparation can be a good strategy to increase

resistance to myocardial ischemia and reduce the severity of contractile dysfunction following ischemia. Sour cherry kernel extracts possess antioxidant compounds. Therefore, in this study, the protective effects of sour cherry kernel extracts on heart tissues were studied.

**Materials and Methods:** In this study, 100, 250 and 500 mg/kg doses of sour cherry kernel extracts were produced, using nano microemulsion technique. First, the animals were anesthetized and connected to the ventilator device. Then, the chest was opened and the aorta was cannulated and connected to the Langendorff setup. Lactate dehydrogenase, creatine kinase, total antioxidant, glutathione peroxidase and superoxide dismutase were measured using a kit and the extent of heart damage was evaluated using the software.

**Results:** The results showed that low doses of the extract did not have significant effects on antioxidant enzymes. On the other hand, the level of antioxidant enzymes significantly increased by using moderate or higher doses of the extract. Malondialdehyde level significantly reduced by using high doses of the extract. Also, different concentrations of the extract showed dose-dependent effects on reducing the extent of heart damage.

**Conclusion:** The results showed that microemulsion of sour cherry kernel extract has preventive and protective effects on ischemic heart conditions by increasing antioxidant enzymes and decreasing lipid oxidation and the extent of heart damage.

**Keywords:** Microemulsion, Oxidative stress, Isolated heart, Rat, Sour cherry kernel

HN10104640551

## Main strategies for treatment of obesity based on Iranian traditional medicine

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**Objectives:** Obesity is defined as abnormal or

excessive fat accumulation which can cause dysfunction. Obesity has more than doubled since 1980. Obesity is a risk factor for diabetes, hypertension, hyperlipidemia, cardiovascular disease and metabolic syndrome. Current treatments of obesity are based on nutrition, exercise, behavioral therapy, medication and surgery.

**Materials and Methods:** In this study, the words related to obesity were investigated in the main texts of Iranian traditional medicine (ITM) with an emphasis on treatment.

**Results:** According to ITM, obesity was referred to using the terms "Saman Mofrat" and "Farbehi". In this medical system, the principal treatment methods are lifestyle, nutrition and sleep pattern modification, exercise and bathing. Some recommendations including reducing food and use of warm and dry tempered foods, reducing sleep, increasing physical activity, dry sauna, the use of weight-loss friendly foods, beverages and medications (so-called Mohazzel in ITM), phlegmatic humors breaking down agents (so-called Moqattee in ITM) emesis therapy, humid dryer drugs (so-called Mohallel and Mojaffef in ITM), laxatives and diuretics. The recommended herbs are caraway, ammi, oregano, rue, olive and squill. Combination drugs such as Triphala and Maajoon Communi and Sekanjabyn Onsoly can also be useful in treating obesity. Dalk (massage) and anointment with warm-tempered oil and solvent oil like Dill and Qost are also recommended.

**Conclusion:** It is necessary to carry out clinical trials on the basis of the therapeutic approaches of ITM for obesity treatment.

**Keywords:** Iranian traditional medicine, Obesity, Saman mofrat

HN10106910598

## Treatment of acute aluminum phosphate poisoning with poor prognosis for survival using the methods of traditional medicine: a case series

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**Objectives:** Acute poisoning with aluminum phosphate (chemical rice tablet) is associated

with high mortality rates. Modern medicine offers no definite medical care for this condition, and available methods commonly involve symptomatic treatments. Overall mortality rate among patients with rice tablet poisoning has been estimated at 50-99%.

**Materials and Methods:** In the traditional medicine, there are several methods used for the treatment of poisoning, depending on the temperament of the patient and type of poisoning. These methods mostly involve body detoxification, which prevents further damage to cells and organs. In this type of treatment, various methods such as bloodletting, aroma therapy, enema, use of traditional antidotes and natural compounds (yellow apple juice), and massage therapy are commonly applied.

**Results:** In this study, we presented 17 cases of treated poisoning (survival: 100%), including 9 women and 8 men, who were referred with poor prognosis for survival.

**Conclusion:** Normally, poisoning with more than 1.67 g of aluminum phosphate, blood pH of <7.18, and HCO<sub>3</sub> level of <10 mEq/L is associated with 100% chance of death. On average, consumed dosage of aluminum phosphate in our treated patients was more than 3 g (at least 7 rice tablets). Moreover, more than 80% of these patients had blood pH of >7.19 and HCO<sub>3</sub> level of <10 mEq/L. Therefore, it could be concluded that detoxification, as a traditional method, is significantly effective in the treatment of patients with rice tablet poisoning.

**Keywords:** Acute poisoning, Rice tablet, Case series, Survival

HN10102370098

## The significance of healthy nutrition in health maintenance and disease treatment from the perspective of Rhazes

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**Objectives:** From the perspective of the Iranian school of traditional medicine, maintaining the

health and wellbeing of humans is the number one concern, and treatment of disease is the second duty of the physician. In teachings of traditional Iranian medicine, maintaining health is established based on six essentials. "Food and Drink" is one of the most important of the Six Essentials. According to this important principle, good nutrition from the perspective of Rhazes (AD. 251-311) is an important step in maintaining health and treating diseases.

**Materials and Methods:** This is a review study, where some of the most important works of Rhazes in the field of nutrition and proper eating such as, Manafe-Aghzieah, Al-havi and Al-Morshed were investigated and his teachings in maintaining health and food therapy prior to drug therapy were collected and categorized.

**Results:** Many of the sages in Iranian medical tradition have considered proper nutrition an important step in maintaining health and preventing diseases. Abu Bakr Muhammad Ibn Zakariya Razi, is one those sages who believes that a proper nutrition education for the public can be considered as an important tool for maintaining health, which a wise physician can acquaint patients with. He recognized proper nutrition or recommendation of a proper diet as the first and the most important treatment measure.

**Conclusion:** From the perspective of Iranian school of traditional medicine, since people differ in temperament and makeup, it is necessary that the physician prescribe a proper food plan according to temperament diagnosis and full attention to the characteristics of each individual. Foods, due to their temperamental quality leave positive or negative effects on different organs affecting both the body and the mind. Many of sages and physicians in the past including Rhazes, have considered proper nutrition an important step in maintaining health and preventing diseases. We aim to state some recommendations by Rhazes for food hygiene and healthy eating, maintaining health, treatment of the patient with food before drug therapy, and relation to exercise and bathing.

**Keywords:** Iranian traditional medicine, Rhazes, Healthy nutrition, Maintaining health

HN10103430209

## The efficacy of lemon balm and combination of lemon balm and nepeta menthoides in menstrual bleeding among students with premenstrual syndrome: a randomized controlled trial

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**Objectives:** Increased menstrual bleeding leads to anemia and decreased quality of life in women. The present study aimed to determine the efficacy of sole use of lemon balm and combination of lemon balm and Nepeta menthoides in menstrual bleeding among students with premenstrual syndrome.

**Materials and Methods:** This triple-blinded, randomized controlled trial was conducted on 93 female students, aged  $\geq 18$  years. The intervention groups received 500 mg lemon balm capsules and a combination of lemon balm and Nepeta menthoides, respectively. The control group received 500 mg placebo capsules in the luteal phase for two consecutive menstrual cycles twice per day. Pictorial Blood Loss Assessment Chart (Higham chart) was completed at baseline and one and two months following the intervention. Data were analyzed, using Chi-square, one-way ANOVA, ANCOVA and repeated measures ANOVA.

**Results:** Differences in baseline characteristics and Higham scores were not statistically significant between the three groups ( $p > 0.05$ ). General linear analysis, based on the pre-intervention menstrual bleeding level, showed no statistically significant difference among the three groups in terms of the mean menstrual bleeding in the first ( $p = 0.602$ ) and second ( $p = 0.148$ ) menstrual periods after the intervention.

**Conclusion:** Based on the results of this study,

treatment with lemon balm and combined use of lemon balm and Nepeta menthoides did not decrease menstrual bleeding in students with premenstrual syndrome. However, further clinical studies should be performed to assess the efficacy of lemon balm and Nepeta menthoides in reproductive women in order to decide whether they are applicable in clinical settings.

**Keywords:** Lemon balm, Menstrual bleeding, Melissa officinalis, Nepeta menthoides, Premenstrual syndrome

HN10105680441

## The efficacy of topical citrullus colocynthis oil on patients with painful diabetic neuropathy; randomized controlled trial

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**Objectives:** To examine the safety and efficacy of Citrullus colocynthis (C. colocynthis) topical formulation to treat patients suffering from painful diabetic polyneuropathy (PDPN).

**Materials and Methods:** The study was designed to be a two-arm, double-blind randomized placebo-controlled clinical trial, using a parallel design. Sixty patients with painful PDPN were randomly assigned to receive either the topical formulation for C. Colocynthis (1:1 allocation ratio) or receive the placebo, throughout the duration of the experiment, three months. Patients were then evaluated both before and

after the intervention in terms of the Neuropathic Pain Scale, electro-diagnostic findings, World Health Organization BREF quality of life scores and any reported adverse events.

**Results:** The mean changes in pain score were significantly higher in the C. Colocynthis group (3.89, CI: 3.19-4.60) than the scores observed in the placebo group (2.28, CI: 1.66- 2.90) ( $p$  value < 0.001). Mean changes in nerve conduction velocity of the tibial nerve, distal latency of the superficial peroneal and sural nerve, as well as sensory amplitude of the sural nerve in the intervention group were statistically significantly higher than those observed in the placebo group ( $p$  value < 0.001). No statistically significant differences were seen between the mean changes in values of any other nerve conduction. In the different domains of WHOQOL-BREF, only the mean change in scores of physical domain had shown any significant improvements, when compared to the placebo group

**Conclusion:** Application of topical formulation of C. Colocynthis fruit extract has been shown to significantly decrease pain in patients suffering with PDPN. However, it also may have some uncertain and unknown effects on nerve functions and the physical domain of quality of life. As a result further investigations into studies with larger samples and of longer duration are required, before applications of this formulation is widely used as a viable treatment method. (Clinical Trials.gov ID: NCT02155361)

**Keywords:** Diabetes mellitus, Herbal medicine; Citrullus colocynthis; Diabetic neuropathies; Iranian traditional medicine

HN10106660616

### Emergency treatment of kidney stones in the Iranian traditional medicine

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**Objectives:** Kidney stone is a prevalent disorder in different populations. According to statistics, 5-10% of people are diagnosed with this disorder. Kidney stones have a long history of occurrence.

In the manuscripts of traditional medicine, specific chapters were written regarding the incidence of kidney stones and their treatment.

**Materials and Methods:** This qualitative study was conducted by reviewing reliable sources of traditional medicine about the incidence of kidney stones. Content analysis was performed to find the related data about the emergency treatment of kidney stones, and the results were presented in algorithms.

**Results:** In this study, treatment of kidney stones in emergency situations involving renal colic is explained through different stages according to the guidelines of traditional medicine. If the implementation of each stage results in successful outcome, there is no need for continuing the treatment to the next level. In the primary approach, the patient should be evaluated in terms of the presence or absence of blood domination, constipation and nausea.

**Conclusion:** According to the results of this study, emergency treatment of kidney stones mainly aims to reduce pain in the patients. At the first encounter, this could be achieved by the use of analgesics and sedative drugs. Moreover, decompression of the stone from nerve endings, moving the stone and material deviation are among the common principles used for the treatment of kidney stones in the traditional medicine.

**Keywords:** Kidney stone, Emergency treatment, Traditional medicine, Renal colic

HN10108310905

### Economic evaluation of complementary and alternative medicine: a systematic review

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**Objectives:** Despite the growing body of evidence

confirming the efficacy of complementary and alternative medicine (CAM), as well as the increasing need for economic evaluation of CAM interventions, the most appropriate methodological approaches are still debatable. Accurate economic evaluation is essential to providing valid scientific evidence and raising the awareness of medical authorities about the efficacy of CAM therapies. This systematic review aimed to assess the current pertinent literature and extract appropriate methodological approaches for the economic evaluation of CAM, highlighting the complexities and challenges involved in these evaluations.

**Materials and Methods:** In this systematic review, we searched for empirical and non-empirical studies in different databases including Ovid, Medline, EBSCO, CINAHL, SciVerse and Scopus during 2000-2015. Literature search strategy consisted of a combination of MeSH and free-text terms such as 'Economics', 'Economic Evaluation', 'Costs and Cost Analysis', 'Cost-Benefit Analysis', 'Medicine, Traditional' and 'Alternative Medicine'. In addition, a specific scale was set for the inclusion criteria in order to identify the titles and abstracts of related articles. Relevant data were extracted independently and entered in standardized forms by the researchers. After the organization of detailed data and results of the selected studies, a narrative synthesis was presented on the economic evaluation of CAM and recommendations regarding the most appropriate methodological approaches.

**Conclusion:** The results of this systematic review will provide an opportunity for CAM researchers and practitioners to address the most appropriate analysis in the economic evaluation of CAM therapies. Furthermore, such analysis will raise the awareness of policy makers about the cost-efficiency of different CAM methods, aiming to expand standard practices of conventional medicine.

**Keywords:** Economics, Economic evaluation, Alternative medicine, Systematic review

HN10109201062

## Postoperative effects of reflexology on the physiological parameters of patients with appendicitis

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**Objectives:** Surgical procedures could cause stress in the patients, ultimately leading to pain and physiological reactions in their body. Today, there is a growing interest in non-pharmacological and complementary methods to reduce medical complications. Reflexology is a complementary approach used to promote the overall health status of patients through applying pressure on certain areas of palms, feet and ears. This study aimed to determine the effects of reflexology on the pain and vital signs of patients undergoing appendectomy.

**Materials and Methods:** This clinical trial was conducted at the Emergency Surgery Department of Imam Reza Hospital of Mashhad, Iran in 2013. Physiological parameters were compared among 105 patients before the intervention, immediately after the intervention, and at one, 6 and 24 hours after the surgery. Subjects were divided into three groups of intervention, control and placebo. Patients in the intervention group received pressure on specific areas of their right feet (10 minutes) and the shenmen (TF4) of the right ear (one minute). Obtained results were evaluated at 95% confidence interval, and data analysis was performed using SPSS V.12.

**Results:** In this study, mean of systolic blood pressure, diastolic blood pressure, heart rate, respiratory rate and pain intensity reduced in all the subjects during the treatment period, which was statistically significant. However, no statistically significant difference was observed in the mean reduction of systolic blood pressure, diastolic blood pressure, heart rate and temperature in the study groups. Additionally, reduction of pain intensity and respiratory rate was variable between the groups. In fact, the difference in the mean of respiratory rate was statistically significant between the intervention and control groups ( $p=0.001$ ). Also, differences in pain level between the intervention and control groups ( $p\leq 0.001$ ) and intervention and placebo groups were significant ( $p\leq 0.001$ ).

**Conclusion:** According to the results of this study, postoperative reflexology could be effective in pain reduction and respiratory

improvement, while it had no effects on blood pressure, heart rate and temperature of the patients. Therefore, it is recommended that reflexology be applied as a complementary method to diminish pain in patients with appendicitis.

**Keywords:** Pain, Appendectomy, Vital signs, Reflexology

HN10104530310

## Concept of chiropractic and its indications

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This study is an overview of the background and basic concepts of chiropractic, which comprises of the normal motions of spinal and related articulations, general considerations of spinal fixation, different approaches towards subluxation and a comparison of traditional and modern definitions of vertebral subluxation complex. All societies suffer from some form of neuromusculoskeletal disorders. Consequently, allopathic and chiropractic physicians are in pursuit of the same objective, i.e., assisting patients, although they use different approaches for ideal treatment. Allopathic models of treatment are well known by the majority, and many patients are under multi-disciplinary care. Therefore, it is crucial to raise awareness about the concept of chiropractic and its indications.

HN10105640662

## Evaluation of the effects of mallow products on proctitis induced by hip radiation in patients with prostate cancer

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**Objectives:** Radiation-induced proctitis is a common complication of radiotherapy, which sometimes leads to treatment discontinuation. Currently, no specific preventive or treatment strategies have been proposed. In this study, the effects of mallow products on the prevention of proctitis were evaluated in patients with prostate cancer receiving hip radiotherapy.

**Materials and Methods:** In this double-blinded clinical trial, 80 patients with prostate cancer were divided into two equal groups. The subjects received 4 g sachets containing mallow products (mixed in warm water) three times a day since the first day of radiotherapy until two weeks following the procedure. The incidence and grading of proctitis were evaluated based on the criteria by the Radiation Therapy Oncology Group (RTOG). Also, the severity of symptoms such as diarrhea, anal irritation, cramps, bleeding and mucous discharge were measured by a visual analogue scale.

**Results:** Finally, 65 patients were enrolled in the study. In 23% of the test group and 10% of the placebo group, no symptoms were reported. Grade II proctitis (based on RTOG scale) was reported in 26.6% of subjects in the placebo group and 11% of cases in the test group; however, this difference was not statistically significant ( $p=0.059$ ). The most common complaint of patients in both groups was anal irritation; however, its intensity was significantly lower in the test group, compared to the placebo group ( $p<0.05$ ). Moreover, the

placebo group required adjuvant drugs earlier than the test group.

**Conclusion:** Mallow as an anti-inflammatory and wound healing agent could clearly decrease anal irritation, which is a disturbing complication of radiation-induced proctitis.

**Keywords:** Anal irritation, Mallow, Proctitis, Prostate cancer, Traditional Iranian medicine

HN10105370438

### The role of traditional indian medicine (ayurveda) and use of medicinal plants for cancer prevention and management

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**Objectives:** Cancer has always been a life-threatening condition among humans. Various methods have been applied with the help of natural products and medicinal plants for the control and treatment of different cancers. Ayurveda is an ancient system of traditional Indian medicine, practiced to enhance patients' health and natural treatment. Ayurvedic literature categorizes cancer into two main types: swelling with inflammation or without inflammation, also known as *Arbuda* (major neoplasm) or *Granthi* (minor neoplasm).

**Materials and Methods:** For cancer treatment and control, Ayurveda focuses on health improvement, restoration to the normal status, spiritual approaches and treatment with natural products, especially medicinal herb combinations. Personalized medicines with herbal preparations are used according to specific constitutional types (*doshas*) in the body. Healthy diet, internal and external purification (e.g., Shodhana and Panchakarma), decoctions, medicated oils, mineral supplements and herbal formulations with other *Rasayanas* are suggested for cancer treatment, although in advanced conditions,

surgical removal of the tumor is performed.

**Results:** The literature review indicated the effects of medicinal herb preparation on the purification and detoxification of internal organs, as well as the systemic and topical effects of these compounds for enhancing the immune system and treating the affected organs via multiple biochemical pathways.

**Conclusion:** The observed effects could be related to different active phytoconstituents, which act as antioxidant and antineoplastic agents to support various organs affected by the tumor and promote cancer prevention, health improvement and disease control.

**Keywords:** Ayurveda, Cancer, Prevention, Control

HN10103370177

### The effect of foot reflexology on fatigue severity in patients undergoing hemodialysis treatment

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**Objectives:** Fatigue is one of the most common side effects, which is known to be a major stressor and a debilitating complaint. This study aimed to study the effect of sole reflexology on fatigue severity in patients undergoing hemodialysis.

**Materials and Methods:** This study was a clinical trial, conducted on 52 patients undergoing hemodialysis in the Dialysis Center, Imam Khomeini Hospital in Zabol city in two experimental (26 patients) and control (26 patients) groups. Information-gathering was through a demographic questionnaire and fatigue severity investigation. After completion of the questionnaire by the subjects, foot reflexology was performed by a trained researcher for the experimental group for two 30 minute sessions per week during 5 weeks. Fatigue severities in both groups were evaluated again at the end of the third and fifth weeks. Data were analyzed using independent t-test, chi-square test, Fisher's

exact test, and analysis of variance with two-sided repeated measures.

**Results:** In this study, means of fatigue severity score in patients undergoing hemodialysis in the test group before and after foot reflexology, showed a significant difference; also, two-sided analysis of variance with repeated measures showed there is significant difference after intervention in terms of the intensity of fatigue between the two groups ( $p < 0.001$ ).

**Conclusion:** Based on the results of this study, reflexology, which is a low-cost and safe method, significantly reduces fatigue in patients treated with hemodialysis.

**Keywords:** Reflexology of foot, Fatigue, Hemodialysis

HN10102990151

### Effects of homeopathy on the treatment of infections in children

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**Objectives:** Upper respiratory tract infection (URTI) is a common condition among children. Homeopathy is a form of complementary medicine used for the prevention or treatment of children with URTI. This study aimed to evaluate the effects of homeopathy and conventional medicine on the treatment of children with URTI.

**Materials and Methods:** In this review article, literature search was conducted during June 2009-2013, and six clinical trials examining the use of homeopathy for the prevention or treatment of children with URTI were identified.

**Results:** According to the findings of the reviewed articles, there was a significant difference in the median total symptom score in patients receiving homeopathy compared to the recipients of placebo in control groups ( $p = 0.026$ ). In addition, “homeopathic strategies”

yielded significantly better results compared to “antibiotic strategies” in terms of medical efficacy ( $p < 0.001$ ). In general, about %81.5 of the patients investigated in the studies were symptom-free or had significant improvements after receiving homeopathic treatments. Adverse side-effects caused by the administered drugs were not reported in the articles.

**Conclusion:** In comparison with placebo and antibiotic treatments, individualized homeopathy is a more cost-effective method for children with URTI, tonsillitis and acute sinusitis. However, current data are generally inadequate to support homeopathy for the prevention or treatment of children with URTI, and more clinical trials are required in this regard.

**Keywords:** Homeopathy, Upper respiratory tract infection (URTI), Children

HN10100090516

### Herbal medicines for management of chronic liver Disease (CLD): a review study

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**Objectives:** Chronic liver Disease (CLD) is a serious health problem world-wide. Conventional medical treatments are available for CLD. Some people with CLD also try complementary health approaches, especially medicinal herbs. Recent reports about medicinal herbs highlight

their protective activities in liver diseases. This study aimed to investigate the herbal medicines for treating liver diseases and patient attitudes toward treatment.

**Materials and Method:** Electronic databases including PubMed, Scopus, and Cochrane library were searched to access in vitro, in vivo and clinical studies about the efficacy of medicinal herbs in liver diseases. This paper focuses on six medicinal herbs: milk thistle (*Silybum marianum*), turmeric (*Curcuma longa*), green tea (*Camellia sinensis*), licorice (*Glycyrrhiza glabra*), ginger (*Zingiber officinale*), and Artichoke (*Cynara scolymus* L).

**Results:** Milk thistle is the most common herb taken by people with liver disease. *Silybum marianum* has shown therapeutic effects. Turmeric and artichoke are useful in evaluating the results; green tea and ginger for treatment of fatty liver, milk thistle for chronic hepatitis, liver damage caused by alcohol have shown conflicting results, but in reducing blood fat and cholesterol excretion was effective. Other medicinal herbs require more research.

**Conclusion:** There are currently sufficient evidences for treating liver diseases with medicinal herbs. The present review found herbal medicines significantly effective when compared with placebo on normalization of liver enzymes. In patients with liver disease, it is necessary to have information on clinical and/or histological stage of the liver disease, the presence or absence of cirrhosis, the type of virus, and other well proven prognostic indicators, when assessing the efficacy of medicinal herbs.

**Keywords:** Medicinal herbs, Complementary and alternative medicine, Liver disease

HN10103860221

## Effects of laughter therapy on the treatment of fatigue in cancer patients undergoing chemotherapy

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**Objectives:** Fatigue is one of the most common and complex problems associated with cancer and its treatment. This study aimed to determine the effects of laughter therapy on the treatment of fatigue in cancer patients undergoing chemotherapy.

**Materials and Methods:** This randomized clinical trial was performed on all the cancer patients admitted at Namazi Medical Sciences Hospital and AMIR Oncology Hospital in Shiraz, Iran. Subjects were divided into two groups of control and intervention, and 90 samples were selected using available sampling method based on the features of the study units. Intervention included laughter therapy for 16 weeks in eight 30-minute sessions during the day. To perform the therapy, we used CDs containing funny videos and clips. Moreover, fatigue questionnaires were completed by the patients before, during and after the intervention. Subjects in the control group received common care only, and both groups were compared at the end of the intervention (IRCT: 2015012620819N1).

**Results:** In this study, mean of fatigue score before intervention in the control and therapy group was  $13.49 \pm 40.04$  and  $13.70 \pm 40.26$ , respectively. However, a significant difference was observed in the obtained scores of both groups after 8 sessions of intervention (intervention:  $6.91 \pm 15.74$ , control:  $9.42 \pm 44.78$ ) ( $p < 0.0001$ ).

**Conclusion:** According to the results of this study, laughter therapy is effective in the reduction of fatigue among cancer patients. Therefore, providing a happy environment for these patients could improve their overall health.

**Keywords:** Laughter therapy, Fatigue, Chemotherapy

HN10105500419

## Evaluation of the effects of supermint (mint essence) on abdominal pain following colonoscopy

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**Objectives:** Colonoscopy is an invasive method, which can be painful for the patients, especially children. The aim of this study was to evaluate the effects of oral drops of supermint (mint essence) on pain and satisfaction in patients after colonoscopy.

**Materials and Methods:** In this clinical trial, 101 patients undergoing colonoscopy were selected via available sampling and were randomly divided into two groups. The control group (n=50) did not receive any medicines, while the case group (n=51) received 20 oral drops of supermint at 30 min before colonoscopy. After colonoscopy, patients' pain and satisfaction were assessed, using standard questionnaires. Data were analyzed by analytical and descriptive tests (t-test).

**Results:** The mean score of abdominal pain (out of 10) was  $2.500 \pm 0.527$  in the control group and  $1.625 \pm 0.491$  in the case group ( $p > 0.05$ ). Overall, 8% and 17.6% of children in the control and case groups were highly satisfied, respectively. The mean score of patient satisfaction was  $2.607 \pm 0.566$  in the case group and  $1.833 \pm 0.389$  in the control group ( $p > 0.05$ ). Duration of colonoscopy was significantly shorter in the case group, compared to the control group ( $p < 0.05$ ).

**Conclusion:** Administration of mint essence for children before colonoscopy reduced abdominal pain and increased patient satisfaction after colonoscopy.

**Keywords:** Abdominal pain, Colonoscopy, Mint, Supermint

HN10109241067

## Efficacy and safety of supplementation with curcuminoids in the treatment of patients with osteoarthritis: a randomized controlled trial

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**Objectives:** Treatment of osteoarthritis (OA) is a challenging process due to the inefficacy and long-term, adverse complications of available medications. Curcuminoids are polyphenolic phytochemicals with remarkable anti-inflammatory properties and protective effects on chondrocytes. This study aimed to investigate the clinical efficacy of curcuminoids in the treatment of patients with knee OA.

**Materials and Methods:** This double-blind, placebo-controlled, parallel-group pilot clinical trial was conducted on patients presented with mild-to-moderate knee OA. In total, 19 patients were prescribed with curcuminoids (1500 mg/day), and 21 patients were assigned to the matching placebo for 6 weeks. Efficacy measures included changes in VAS, WOMAC and LPFI scores during the experiment. In addition, serum levels of glutathione (GSH), malondialdehyde (MDA), super oxide dismutase (SOD), interleukin (IL)-4, IL-6, C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), tumor necrosis factor (TNF)- $\alpha$  and transforming growth factor (TGF)- $\beta$  were measured at baseline and the end of treatment period in both study groups.

**Results:** In this study, no significant differences were observed between the age, gender and body mass index of the subjects and VAS, WOMAC and LPFI scores at baseline ( $p > 0.05$ ). Moreover, treatment with curcuminoids resulted in insignificant reductions in WOMAC ( $p = 0.001$ ), VAS ( $p < 0.001$ ) and LPFI scores ( $p = 0.013$ ) compared to the placebo subjects. Also, there was a significant increase in serum SOD activity ( $p < 0.001$ ), a significant borderline elevation in GSH concentrations ( $p = 0.064$ ) and a significant reduction in MDA concentrations ( $p = 0.044$ ) in the patients receiving curcuminoids compared to the placebo group. Regarding the inflammatory biomarkers, no significant difference was observed between the study groups. It is also noteworthy that curcuminoids were reported to be safe and well-tolerated agents during the

treatment.

**Conclusion:** According to the results of this study, curcuminoids could be effective and safe alternatives for the treatment of OA patients. The anti-arthritic effects of curcuminoids appear to be mainly associated with the antioxidant properties of these polyphenols, rather than their anti-inflammatory activity.

**Keywords:** Curcuminoids, Osteoarthritis, Oxidative stress, Inflammation, Randomized controlled trial

HN10102830164

### Comparison of the effects of plantago psyllium and oral omeprazole on gastroesophageal reflux in patients with functional constipation

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**Objectives:** Gastroesophageal reflux disease (GERD) is one of the most common diseases of the digestive system. Complications caused by GERD include erosive esophagitis, Barrett's esophagus and esophageal cancer. Recently, clinical evidence has suggested that treating functional constipation as a major movement disorder of the digestive system could be effective in the treatment of GERD.

**Materials and Methods:** This study was conducted on 132 patients presented with the history of GERD (3 years) approved by upper endoscopy and simultaneous functional constipation. Subjects were divided into two

groups and compared in terms of the effects of omeprazole and Plantago psyllium on the treatment of recurrent GERD. Data analysis was performed using SPSS V.16.

**Results:** Out of 132 patients, 49.2% were male (N=65, 32 in Plantago psyllium group, 33 in omeprazole group), and 50.8% were female (33 in Plantago psyllium group, 34 in omeprazole group). Mean age of the patients in the Plantago psyllium and omeprazole groups was 11.641± and 12.641.0± years, respectively. In addition, response to treatment in the Plantago psyllium group was 89.2% (N=58), and mean duration of response was 2.26.6± days. As for the omeprazole group, treatment response was 94% (N=63), and mean duration of response was 2.33.03± days. In this regard, the difference between the groups was not considered as significant (p=0.31). Moreover, recurrence in the Plantago psyllium group was estimated at 24.1% (N=14), and duration of recurrence was 25.269.8± days. As for the omeprazole group, recurrence was 69.8% (N=44), and duration of recurrence was 15.816.1± days, which was indicative of a significant difference between the groups (p<0.001).

**Conclusion:** According to the results of this study, treatment of GERD along with functional constipation with Plantago psyllium leads to a more considerable reduction in the symptoms and recurrence of the disease, compared to omeprazole.

**Keywords:** Gastroesophageal reflux, Functional constipation, Plantago psyllium, Omeprazole

HN10106670623

### Comparison of the effects of three traditional Iranian plants on insulin resistance in diabetic model induced by high fructose diet in rats

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**Objectives:** Diabetes is a common metabolic disease that is characterized by hyperglycemia. The major cause of this metabolic disorder is resistance to insulin as a result of overuse of carbohydrates, especially fructose. The aim of this study was to compare the effects of three traditional Iranian

plants on insulin resistance in diabetic model induced by high fructose diet in rats.

**Materials and Methods:** Diabetes was induced in male Wistar rats using a 21% fructose solution as drinking water for 8 weeks. Diabetic rats received a 21% fructose solution plus 10% aqueous herbal extracts of either of three plants (*Trigonella foenum-graecum*, *Fumaria officinalis* L, or *Urtica dioica*) with drinking water for another 8 weeks. Blood glucose, serum insulin, and urine glucose were measured in controls and diabetic animals.

**Results:** Blood glucose, plasma insulin, urine glucose and urine volume were increased significantly after 8 weeks of high fructose feeding ( $p < 0.05$ ); the aqueous extract of *Trigonella foenum-graecum* in diet diminishes the insulin, weight and blood glucose in comparison with the control group ( $p < 0.05$ ). Results from the *Fumaria officinalis* group did not show any significant difference with those of the untreated diabetic group. Comparison between the two herbal extracts showed significantly better efficacy of *Trigonella foenum*.

**Conclusion:** According to the findings, *Trigonella foenum* extract improves insulin resistance through reducing blood glucose, while hypoglycemia effect of *Urtica dioica* extract was in part due to reduction of intestinal absorption. *Fumaria* aqueous extract has no special effect on diabetes parameters.

**Keywords:** Diabetes, Metabolic disorder, Insulin resistance, Fructose

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### Efficacy of chiropractic in disease treatment: a systematic review

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**Objectives:** Chiropractic is a complementary medical approach with growing popularity across the world over recent decades. This health profession is mainly concerned with the diagnosis, treatment and prevention of neuromusculoskeletal disorders and their effects on general health. This study aimed to evaluate the efficacy of chiropractic in the treatment of different diseases.

**Materials and Methods:** In this systematic review, literature search was conducted in different databases including Cochrane, Medline, Google Scholar and Scirus, and all the systematic reviews about chiropractic were identified. Collected articles mainly discussed the effectiveness of chiropractic in the treatment of specific diseases, with evidence from at least one clinical trial. Extracted data included the name of the first author, type of disease and intervention, number and type of applied research methods, meta-analyses, number of subjects and general results of the study.

**Results:** In total, we found 23 systematic reviews about chiropractic, and 11 articles in accordance with the inclusion criteria were investigated in this study. Diseases addressed in the studied articles included back pain, neck pain, upper-extremity conditions, infant colic, autism spectrum disorders, asthma, gastrointestinal diseases, fibromyalgia, sport injuries and carpal tunnel syndrome.

**Conclusion:** According to the results of this study, chiropractic could have positive effects on the improvement of neck pain, trigger points of neck and shoulder and sport injuries. As for other disorders, such as asthma and infant colic, further clinical trials with larger sample sizes and high-quality research methodology are required.

**Keywords:** Chiropractic, Systematic review, Efficacy, Treatment, Disease

HN10104380290

### Effects of pressure stimulation of the nei guan (PC6) point on the nausea and vomiting in pregnant women

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**Objectives:** Many recommendations and treatments are available for nausea, vomiting and gagging during pregnancy; for instance, planned diet, behavioral methods, and use of antiemetic drugs. Pressure stimulation of the PC6 point (Nei Guan point) is an ancient approach used in traditional Chinese medicine, which could effectively control nausea. This non-invasive method has the least amount of side effects, no costs and high efficacy. Regarding the concerns of pregnant women about nausea and vomiting and the possible side effects of medication therapy, this study aimed to review a safe and rapid method for the treatment of these problems among pregnant women.

**Materials and Methods:** This study was conducted on 90 pregnant women during their first pregnancy, with the gestational age of <12 weeks. Subjects suffered from nausea (with and without vomiting) and were randomly divided into three groups of 30. The first group received treatment with pressure stimulation on the Nei Guan point, second group received pressure treatment on a placebo point, and the third group received treatment with vitamin B6. In all groups, the first day was considered as the control phase. From the second day on, pressure was applied manually on the Nei Guan point four times per day (10 minutes each time) upon waking up in the morning, at noon, in the evening and before going to bed. Depending on the tolerance of the patient, maximum pressure was applied continuously on the PC6 point. If the patient had nausea during treatment intervals, one session was held one day ahead of the schedule with the same frequency (four times daily). In the second group, pressure was applied to the placebo point. Second day of the treatment was considered as the start of intervention continuing for five days.

**Results:** In this study, mean age of the subjects was  $26.404.37 \pm$  years, and mean of gestational age was  $9.231.64 \pm$  months. Results of the Rhodes Index about the duration and severity of nausea and vomiting for all groups indicated a significant improvement in the symptoms of the acupressure

group. In addition, no significant changes were observed in the drug treatment group, while the severity of symptoms significantly increased in the placebo group. At the end of the second day, 80.1%, 73.4%, and 71.1% of the patients in the acupressure group showed improvement in the symptoms of nausea, vomiting and gagging, respectively, which was significantly different from other study groups.

**Conclusion:** According to the results of this study, acupressure on the Nei Guan (PC6) point could decrease the frequency and severity of discomfort after nausea, vomiting and gagging, compared to placebo and drug treatment interventions. Therefore, acupressure could be used for the treatment of these problems during pregnancy since it has no side effects and heavy costs.

**Keywords:** Nei Guan point, Nausea and vomiting, Pregnancy, Acupressure

HN10103770836

### An investigation of the relationship between depression and dyspepsia from Avicenna's point of view

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**Objectives:** Depression is a common mental disorder and the leading cause of disability throughout the world. Comorbidity between depression and dyspepsia is common. Due to the importance of depression as a serious condition, various etiologies have been explained for it. In psychiatry resources, it has been mentioned that distress like depression causes gastrointestinal disorders. However, we have not found enough evidence to confirm specified gastrointestinal disorders causing depression. In this study, we present evidence from traditional Iranian medicine demonstrating that disturbance

in digestive process can be induced from depression.

**Materials and Methods:** Resources of traditional Iranian medicine and modern psychiatry together with recently published articles on depression and dyspepsia from electronic databases such as PubMed were reviewed.

**Results:** Avicenna, a brilliant scholar of traditional medicine, believed that indigestion can lead to depression. Indigestion may occur due to imbalance between food's quality and quantity, as well as some gastric disorders and disturbances in activities that should be avoided after eating. These factors cause formation of bad humors, abnormal function of brain and eventually, occurrence of depression. We found a few evidence from modern medicine confirming this hypothesis.

**Conclusions:** According to Avicenna's point of view, indigestion is the source of various disorders and the cause of many important disorders such as depression. Risk of depression may be lowered by using preventive and curative methods mentioned for indigestion in traditional Iranian medicine.

**Keywords:** Depression, Dyspepsia, Medicine, Traditional

HN10107640732

## Digestion process and causes and complications of indigestion from the perspective of Iranian traditional medicine

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**Objectives:** The process of food digestion, is one of the most important physiologic processes in human body. From the perspective of Iranian traditional medicine, digestion begins in the mouth and continues to supply materials for the formation of organs or natural (vegetative) spirit

in the body. Digestion is traditionally divided into four steps including gastric digestion, hepatic digestion, intravascular digestion and digestion within the organs. In Iranian traditional medical system it is believed that inadequate digestion of food in the gastrointestinal tract can affect many physiological functions and also can play the role of a trigger for some inflammatory reactions or vascular events. In this review article, we are seeking the views of Iranian traditional medicine practitioners about digestion and causes and consequences of inadequate food digestion.

**Materials and Methods:** Most important Iranian traditional medicine literature that covers a period of a thousand years were searched. Persian and Arabic words or phrases that implied inadequate digestion, undigested foods or raw humors including "Faj", "Fajeh", "Khām", "Khelt-e Khām", "Nāgavaride", "Nāpokhteh", "Hazm nāyāfteh", "Gheyr-e nazij" and "Gheyr-e monhazem" were chosen as keywords.

**Results:** According to Iranian traditional medicine, causes of impaired digestion and raw humor production in the body can be divided into external and internal. External causes include: using raw foods such as cereals, beans and raw fruits; failure to produce proper foodstuff as in the bread dough production process; improper cooking of foods such as insufficient or excessive heating during cooking; failure to observe proper order when eating; eating foods that do not fit together like drinking cold water or dairy consumption with meals; intense physical activity; long bathing; sexual intercourse or anger immediately after food intake. Among the internal causes of impaired digestion and raw humor production, gastrointestinal tract diseases especially gastric, hepatic and intestinal dysfunction (called Su-e Mezajin Iranian traditional medicine) are more important. Also, the complications that arise as a result of these diseases such as bloating and gas production in the stomach and intestines, diarrhea and constipation can lead to impairment of digestion in a negative cycle.

**Conclusion:** Given the importance of digestion from the view of Iranian traditional medicine, it seems necessary to pay special attention to this process in the field of maintaining health and handling related diseases. Undigested foods or raw humors can predispose individuals to gastrointestinal

disorders, abdominal pain, slow blood flow in the blood vessels especially capillaries and microcirculation and slow flow and cell transportation especially in hepatic sinusoids. Besides, some inflammatory reactions, such as certain autoimmune disorders, swelling of the extremities or eyelids and muscle spasms can be attributed to this phenomenon.

**Keywords:** Digestion; Undigested foods; Raw humors; Iranian traditional medicine

HN10101270034

## Legal challenges of traditional and complementary medicine in Iran

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**Objectives:** Knowledge and experience are the major components of medicine. These basic components are dependent on medical ethics and medical laws. Medical ethics represent the internalized norms of this profession, whereas medical laws embody the norms and standards. Medical law is a new branch in the field of legislation, which studies a set of rules and regulations governing medical and pharmaceutical domains. Today, traditional medicine due to facing various challenges needs legislations more than modern medicine. The first challenge is accepting and recognizing traditional medicine as a confirmed branch of medical studies. In the absence of laws, establishing schools or departments of traditional medicine by the ministries of health alone does not fill the void of legislative issues. This challenge is also observed in European countries regarding complementary medicine, and several claims have been made against complementary medicine clinics by patients, trade unions of physicians or drug cartels. Therefore, it is necessary to provide a legal theoretical foundation to defend traditional and complementary medicine.

**Materials and Methods:** This was a legal analysis study.

**Results:** The findings of this study showed that “public choice” theory and principle of

“freedom of contract”, on which the article 10 of Iranian Civil Law is based, can provide the best theoretical basis for permitting various activities of traditional and complementary medicine.

**Conclusion:** The emphasis of the new generation of human rights on “health rights” prevents any monopolization to ensure health protection in different parts of the world. On the other hand, using the indigenous knowledge of different ethnicities for self-treatment and health can advocate this right. Various challenges were considered and discussed in this article, which could not be easily resolved under the paradigm of conventional medicine. The author believes that by regulating independent union laws for traditional medicine in both medicine and treatment domains, we are able to establish rules and terms, which are more congruent with complementary and traditional medicine. We can also slowly move towards the formation of a specialized, independent medical system. Otherwise, most of the activities in this field of medicine are considered fraud, based on the medical laws of our country. In fact, temporary licenses and ignoring authorities cannot fill the void of a comprehensive and supportive legal system for complementary and traditional medicine in our country.

**Keywords:** Freedom of contract, Health rights, Legal challenges, Trade system, Traditional medicine

HN10107600718

## Anti-allergic and anti-cancer properties of camel milk and urine

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Camel is a livestock that can produce functional products containing pharmaceutical

properties with minimal requirements. In the Iranian traditional medicine, camel milk is associated with several dietary and pharmaceutical features and is known as the smoothest and most diluted kind of milk. Camel milk could be used for ending obstructions, relieving constipation, and absorbency of inner “Oram”, as well as rigid and cayenne mucus. Camel milk contains no  $\beta$ -lactoglobulin and is not considered as an allergen, while it is known to have anti-allergic agents, such as lactoferrin and specific immunoglobulins (i.e., nanobodies). Lactoferrin stimulates the proliferation, differentiation and activation of the immune system cells, resulting in the enhancement of immune response. In addition, it is capable of inhibiting the growth of carcinoma cells in the mammary glands during the G1S stage. Tumor growth inhibition by lactoferrin could be associated with cell apoptosis through the

activation of FAS signaling pathway. Whey acidic protein (WAP) is the second major constituent of camel milk proteins. Since the structure of WAP is similar to that of serine protease inhibitors, it could prevent laminin degradation and the subsequent attack of cancer cells through inhibiting the existing proteases in the basement membrane surrounding epithelial breast cells. Moreover, WAP could suppress tumor progress in MCF-7 cells through reducing the expression of angiopoietin-2 gene. According to the literature of the Iranian traditional medicine, camel urine has anti-cholinergic properties and could be used for Bronchodilation. Furthermore, it has anti-allergic agents and could cause apoptosis and cancer cell death through increasing the inhibition of two apoptosis protein inhibitors of survivin and Bcl-2.

**Keywords:** Camel milk, Camel urine, Anti-allergic, Anti-cancer