**Selected by
Reinhard Saller
Zürich**

Latest Publications You Should Not Miss

Muriel P, Arauz J: Coffee and liver diseases. Fitoterapia 2010;81:297–305.

Coffee consumption is worldwide spread with few side effects. Interestingly, coffee intake has been inversely related to the serum enzyme activities gamma-glutamyltransferase, and alanine aminotransferase in studies performed in various countries. In addition, epidemiological results, taken together, indicate that coffee consumption is inversely related with hepatic cirrhosis; however, they cannot demonstrate a causative role of coffee with prevention of liver injury. Animal models and cell culture studies indicate that kahweol, diterpenes and cafestol (some coffee compounds) can function as blocking agents by modulating multiple enzymes involved in carcinogenic detoxification; these molecules also alter the xenotoxic metabolism by inducing the enzymes glutathione-S-transferase and inhibiting N-acetyltransferase. Drinking coffee has been associated with reduced risk of hepatic injury and cirrhosis, a major pathogenic step in the process of hepatocarcinogenesis, thus, the benefit that produces coffee consumption on hepatic cancer may be attributed to its inverse relation with cirrhosis, although allowance for clinical history of cirrhosis did not completely account for the inverse association. Therefore, it seems to be a continuum of the beneficial effect of coffee consumption on liver enzymes, cirrhosis and hepatocellular carcinoma. At present, it seems reasonable to propose experiments with animal models of liver damage and to test the effect of coffee, and/or isolated compounds of this beverage, not only to evaluate the possible causative role of coffee but also its action mechanism. Clinical prospective double blind studies are also needed.

Cooley K, Szczurko O, Perri D, Mills EJ, Bernhardt B, Zhou Q, Seely D: Naturopathic care for anxiety: a randomized controlled trial ISRCTN78958974. PLoS One 2009;4:e6628.

Background: Anxiety is a serious personal health condition and represents a substantial burden to overall quality of life. Additionally anxiety disorders represent a significant cost to the health care system as well as employers through benefits coverage and days missed due to incapacity.

This study sought to explore the effectiveness of naturopathic care on anxiety symptoms using a randomized trial.

Methods: Employees with moderate to severe anxiety of longer than 6 weeks duration were randomized based on age and gender to receive naturopathic care (NC) (n = 41) or standardized psychotherapy intervention (PT) (n = 40) over a period of 12 weeks. Blinding of investigators and participants during randomization and allocation was maintained. Participants in the NC group received dietary counseling, deep breathing relaxation techniques, a standard multi-vitamin, and the herbal medicine, ashwagandha (*Withania somnifera*) (300 mg b.i.d. standardized to 1.5% with anolides, prepared from root). The PT intervention received psychotherapy, and matched deep breathing relaxation techniques, and placebo. The primary outcome measure was the Beck Anxiety Inventory (BAI) and secondary outcome measures included the Short Form 36 (SF-36), Fatigue Symptom Inventory (FSI), and Measure Yourself Medical Outcomes Profile (MY-MOP) to measure anxiety, mental health, and quality of life respectively. Participants were blinded to the placebo-controlled intervention.

Results: Seventy-five participants (93%) were followed for 8 or more weeks on the trial. Final BAI scores decreased by 56.5% (p < 0.0001) in the NC group and 30.5% (p < 0.0001) in the PT group. BAI group scores were significantly decreased in the NC group compared to PT group (p = 0.003). Significant differences between groups were also observed in mental health, concentration, fatigue, social functioning, vitality, and overall quality of life with the NC group exhibiting greater clinical benefit. No serious adverse reactions were observed in either group.

Relevance: Many patients seek alternatives and/or complementary care to conventional anxiety treatments. To date, no study has evaluated the potential of a naturopathic treatment protocol to effectively treat anxiety. Knowledge of the efficacy, safety or risk of natural health products, and naturopathic treatments is important for physicians and the public in order to make informed decisions.

Interpretation: Both NC and PT led to significant improvements in patients' anxiety. Group comparison demonstrated a significant decrease in anxiety levels in the NC group over the PT group. Significant improvements in secondary quality of life measures were also observed in the NC group as compared to PT. The whole system of naturopathic care for anxiety needs to be investigated further including a closer examination of the individual components within the context of their additive effect.

Trial Registration: Controlled-Trials.com ISRCTN78958974.

Szczurko O, Cooley K, Mills EJ, Zhou Q, Perri D, Seely D: Naturopathic treatment of rotator cuff tendinitis among Canadian postal workers: A randomized controlled trial. Arthritis Rheum 2009; 61:1037–45.

Objective: To explore the effectiveness of naturopathic care (NC) on rotator cuff tendinitis using a prospective randomized clinical trial design.

Methods: Canadian postal workers with rotator cuff tendinitis for a duration of >6 weeks were randomized to receive NC (n = 43) or standardized physical exercises (PEs; n = 42) over 12 weeks. Participants in the NC group received dietary counseling, acupuncture, and Phlogenzym (2 tablets 3 times/day). The PE intervention group received passive, active-assisted, and active range of motion exercises and matched placebo. The primary outcome measure was the Shoulder Pain and Disability Index (SPADI), and secondary outcomes were the pain visual analog scale (VAS), Short Form 36 (SF-36), Measure Yourself Medical Outcomes Profile (MYMOP), and shoulder maximal range of motion. Participants and assessors were blinded to group and placebo allocation.

Results: Seventy-seven participants (87%) completed > or = 8 weeks of the trial. Final total SPADI scores decreased by 54.5% ($P < 0.0001$) in the NC group and by 18% ($P = 0.0241$) in the PE group. Between-group differences in changes to SPADI scores showed statistically significant decreases in shoulder pain and disability in the NC group compared with the PE group ($P < 0.0001$). Significant differences between groups were also observed in the pain VAS, MYMOP, SF-36, and shoulder extension, flexion, and abduction, with the NC group showing superiority in each outcome. No serious adverse reactions were observed.

Conclusion: NC and PE provided significant improvements, with greater improvement in shoulder function in the NC group compared with the PE group. Statistically significant improvements in quality of life measures were observed in the NC group as compared with the PE group.

Fioravanti A, Bellisai B, Capitani S, Manica P, Paolazzi G, Galeazzi M. Phytothermotherapy: A possible complementary therapy for fibromyalgia patients. Clin Exp Rheumatol 2009;27(suppl 56):S29–32.

Objective: It is a traditional practice in the Alpine region of Trentino and Alto Adige (Italy) to use phytothermotherapeutic treatment with fermenting grass ('hay baths') for rheumatic diseases. However, despite its long history and popularity, a clinical validation of the efficacy and tolerability of the treatment has yet to be found in current literature. Fibromyalgia syndrome (FMS) is characterised by generalised musculoskeletal pain, high tender point counts, sleep disturbance, fatigue, headaches, irritable bowel syndrome, frequent psychological distress and depressed mood. There is no standard therapy regime for FMS and the variety of medical treatments used have given limited benefits. The aim of this study was to assess the efficacy and tolerability of a cycle of phytothermotherapy through a single-blind, controlled, randomised trial, in patients with primary FMS.

Methods: Fifty-six patients with primary FMS according to the ACR criteria were randomly allocated to two groups: 30 were submitted to phytothermotherapy at the thermal resort of Garniga Terme (Trento, Italy) and the other 26 were considered as controls. All patients were evaluated by FIQ, Tender Points Count, HAQ and AIMS1 at baseline, after 10 days, then after 12 and 24 weeks.

Results: Patients submitted to phytothermotherapy showed visible and significant improvement of all evaluation parameters at the end of the treatment, which persisted during the follow-up period. No significant difference was found in the control group. Regarding the tolerability, none of the patients presented side effects.

Conclusions: Our results suggest the efficacy and the tolerability of phytothermotherapy in patients with primary FMS.

Canning S, Waterman M, Orsi N, Ayres J, Simpson N, Dye L: The efficacy of Hypericum perforatum (St John's wort) for the treatment of premenstrual syndrome: a randomized, double-blind, placebo-controlled trial. CNS Drugs 2010;24(3):207–25.

Background: Premenstrual syndrome (PMS) is a common condition. Some of the most widely prescribed medications are selective serotonin reuptake inhibitors (SSRIs), based on the hypothesized role of serotonin in the production of PMS symptoms. PMS sufferers, especially those experiencing mild to moderate symptoms, are often reluctant to take this form of medication and instead buy over-the-counter preparations to treat their symptoms, for which the evidence base with regard to efficacy is limited. Hypericum perforatum (St John's wort) influences the serotonergic system. As such, this widely available herbal remedy deserves attention as a PMS treatment.

Objective: To investigate the effectiveness of Hypericum perforatum on symptoms of PMS.

Study Design: This randomized, double-blind, placebo-controlled, crossover study was conducted between November 2005 and June 2007.

Setting: Institute of Psychological Sciences, University of Leeds, Leeds, UK.

Participation: 36 women aged 18–45 years with regular menstrual cycles (25–35 days), who were prospectively diagnosed with mild PMS.

Intervention: Women who remained eligible after three screening cycles (n = 36) underwent a two-cycle placebo run-in phase. They were then randomly assigned to receive Hypericum perforatum tablets 900 mg/day (standardized to 0.18% hypericin; 3.38% hyperforin) or identical placebo tablets for two menstrual cycles. After a placebo-treated washout cycle, the women crossed over to receive placebo or Hypericum perforatum for two additional cycles.

Main Outcome Measures: Symptoms were rated daily throughout the trial using the Daily Symptom Report. Secondary outcome measures were the State Anxiety Inventory, Beck Depression Inventory, Aggression Questionnaire and Barratt Impulsiveness Scale. Plasma hormone (follicle-stimulating hormone [FSH], luteinizing hormone [LH], estradiol, progesterone, prolactin and testosterone) and cytokine (interleukin [IL]-1beta, IL-6, IL-8, interferon [IFN]-gamma and tumour necrosis factor [TNF]-alpha) levels were measured in the follicular and luteal phases during Hypericum perforatum and placebo treatment.

Results: Hypericum perforatum was statistically superior to placebo in improving physical and behavioural symptoms of PMS ($p < 0.05$). There were no significant effects of Hypericum perforatum compared with placebo treatment for mood- and pain-related PMS symptoms ($p > 0.05$). Plasma hormone (FSH, LH, estradiol, progesterone, prolactin and testosterone) and cytokine (IL-1beta, IL-6, IL-8, IFNgamma and TNFalpha) levels, and weekly reports of anxiety, depression, aggression and impulsivity, also did not differ significantly during the Hypericum perforatum and placebo cycles ($p > 0.05$).

Conclusion: Daily treatment with Hypericum perforatum was more effective than placebo treatment for the most common physical and behavioural symptoms associated with PMS. As proinflammatory cytokine levels did not differ significantly between Hypericum perforatum and placebo treatment, these beneficial effects are unlikely to be produced through this mechanism of action alone. Further work is needed to determine whether pain- and mood-related PMS symptoms benefit from longer treatment duration.

Trial registration number (International Standard Randomised Controlled Trial Number Register): ISRCTN31487459.