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The Association of Traditional Chinese Medicine and Acupuncture UK

ATCM Research Updates

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Contents

The effects of artocarpin on wound healing: in vitro and in vivo studies.

https://www.ncbi.nlm.nih.gov/pubmed/18650264

Sci Rep. 2017 Nov 15;7(1):15599. doi: 10.1038/s41598-017-15876-7.
By Yeh CJ, Chen CC, Leu YL, Lin MW, Chiu MM, Wang SH.

Abstract

The skin protects the body against harmful substances and microorganisms. When the skin is damaged, wound healing must be finely regulated to restore the normal function of skin tissue. Artocarpin (ARTO), a prenylated flavonoid purified from the plant Artocarpus communis, has been reported to have anti-inflammatory and anti-cancer properties. The aim of the present study was to evaluate the wound healing potential and therapeutic mechanism of ARTO. Immunohistochemical staining of neutrophils and macrophages and mouse cytokine array analysis demonstrated that ARTO accelerates inflammatory progression and subsequently decreases persistent inflammation. ARTO increases collagen production and increases human fibroblast proliferation and migration by activating the P38 and JNK pathways. Moreover, ARTO increases the proliferation and migration of human keratinocytes through the ERK and P38 pathways and augments human endothelial cell proliferation and tube formation through the Akt and P38 pathways. Together, our data suggested that ARTO enhances skin wound healing, possibly by accelerating the inflammatory phase and by increasing myofibroblast differentiation, proliferation and migration of fibroblasts and keratinocytes, collagen synthesis and maturation, re-epithelialization, and angiogenesis. These findings indicate that ARTO has potential as a potent therapeutic agent for the treatment of skin wounds.

Escitalopram and NHT normalized stress-induced anhedonia and molecular neuroadaptations in a mouse model of depression.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0188043

PLoS One. 2017 Nov 15;12(11):e0188043. doi: 10.1371
By Burstein O, Franko M, Gale E, Handelsman A et al.,

Abstract

Anhedonia is defined as a diminished ability to obtain pleasure from otherwise positive stimuli. Anxiety and mood disorders have been previously associated with dysregulation of the reward system, with anhedonia as a

core element of major depressive disorder (MDD). The aim of the present study was to investigate whether stress-induced anhedonia could be prevented by treatments with escitalopram or novel herbal treatment (NHT) in an animal model of depression. Unpredictable chronic mild stress (UCMS) was administered for 4 weeks on ICR outbred mice. Following stress exposure, animals were randomly assigned to pharmacological treatment groups (i.e., saline, escitalopram or NHT). Treatments were delivered for 3 weeks. Hedonic tone was examined via ethanol and sucrose preferences. Biological indices pertinent to MDD and anhedonia were assessed: namely, hippocampal brain-derived neurotrophic factor (BDNF) and striatal dopamine receptor D2 (Drd2) mRNA expression levels. The results indicate that the UCMS-induced reductions in ethanol or sucrose preferences were normalized by escitalopram or NHT. This implies a resemblance between sucrose and ethanol in their hedonic-eliciting property. On a neurobiological aspect, UCMS-induced reduction in hippocampal BDNF levels was normalized by escitalopram or NHT, while UCMS-induced reduction in striatal Drd2 mRNA levels was normalized solely by NHT. The results accentuate the association of stress and anhedonia, and pinpoint a distinct effect for NHT on striatal Drd2 expression.

Association Between Use of Traditional Chinese Medicine Herbal Therapy and Survival Outcomes in Patients With Stage II and III Colorectal Cancer: A Multicenter Prospective Cohort Study.

https://academic.oup.com/jncimono/article/2017/52/lgx015/4617830

J Natl Cancer Inst Monogr. 2017 Nov 1;2017(52). doi: 10.1093
By Xu Y, Mao JJ, Sun L, Yang L, Li J, Hao Y, Li H, et al.,

Abstract

BACKGROUND:

Chinese cancer patients often use Traditional Chinese Medicine (TCM) h erbal medicine during or after active cancer treatments. However, little is known about how TCM herbal medicine impacts cancer outcomes. This study aimed to evaluate the association between TCM herbal therapy and survival outcomes in patients with stage II or III colorectal cancer.

METHODS:
We conducted an eight-center prospective cohort study in China among patients who had undergone radical resection for stage II and III colorectal cancer. All patients received comprehensive conventional treatments according to National Comprehensive Cancer Network (NCCN) guidelines, and follow-up visits were conducted over five years. We defined high exposure as a patient's use of TCM individualized herbs for more than one year, ascertained via clinical interviews. The primary outcome was disease-free survival (DFS), with overall survival (OS) as a secondary outcome.

RESULTS:
Between April 2007 and February 2009, we enrolled 312 patients into the cohort; 166 (53.2%) met the definition of high exposure to TCM herbs. Adjusting for covariates, high exposure to TCM was associated with both better DFS (hazard ratio [HR] = 0.62, 95% confidence interval [CI] = 0.39 to 0.98) and OS (HR = 0.31, 95% CI = 0.14 to 0.68). In subgroup exploratory analysis, the effects demonstrated that the differences in outcomes were statistically significant in patients who had received chemotherapy.

CONCLUSION:
Longer duration of TCM herbal use is associated with improved survival outcomes in stage II and III colorectal cancer patients in China. More research is needed to evaluate the effects and underlying mechanisms of herbal medicine on colorectal cancer outcomes.

Inhibition activity of a traditional Chinese herbal formula Huang-Lian-Jie-Du-Tang and its major components found in its plasma profile on neuraminidase-1.

https://www.nature.com/articles/s41598-017-15733-7

Sci Rep. 2017 Nov 14;7(1):15549. doi: 10.1038/s41598-017-15733-7.
By Zhou X, Li H, Shi Z, Gao S, Wei S, Li K, et al.,

Abstract
Huang-Lian-Jie-Du-Tang (HLJDT), a traditional formula with four TCM herbs, has been used for hundred years for different diseases. The current study aimed to assess the inhibitory activity of HLJDT against H1N1 neuraminidase (NA-1), and identify potent NA-1 inhibitors from its plasma profile. The in vitro NA-1 study has shown that the water extract of HLJDT potently inhibited NA-1 (IC_{50} = 112.6 μg/ml; Ki = 55.6 μg/ml) in a competitive mode. The IC_{50} values of the water extracts of its four herbs were as follows: Coptidis Rhizoma,

96.1 μg/ml; Phellodendri Chinensis Cortex, 108.6 μg/ml; Scutellariae Radix, 303.5 μg/ml; Gardeniae Fructus, 285.0 μg/ml. Thirteen compounds found in the plasma profile of HLJDT were also identified as potent NA-1 inhibitors, which included jatrorrhizine, palmatine, epiberberine, geniposide, oroxylin A, berberine, coptisine, baicalein, wogonoside, phellodendrine, wogonin, oroxylin A-7-O-glucuronide and baicalin (sorted in ascending order by their IC_{50} values). Their inhibitory activities were consistent with molecular docking analysis when considering crystallographic water molecules in the ligand-binding pocket of NA-1. Our current findings suggested that HLJDT can be used as a complementary medicine for H1N1 infection and its potent active compounds can be developed as NA-1 inhibitors.

Can highly cited herbs in ancient Traditional Chinese medicine formulas and modern publications predict therapeutic targets for diabetes mellitus?

https://www.ncbi.nlm.nih.gov/pubmed/29102765

J Ethnopharmacol. 2017 Nov 1. pii: S0378-8741(17)33976-4. doi: 10.1016/

By Wang H, Shi S, Wang S.

Abstract

ETHNOPHARMACOLOGICAL RELEVANCE:

The prevalence of diabetes among all age groups worldwide was estimated to be more than 382 million in 2013. Traditional Chinese medicine(TCM) has been practiced for thousands of years, and substantial valuable experience and prescriptions have been accumulated in the TCM system for the treatment of diabetes. In recent decades, a large amount of experimental and clinical data has been published on the use of herbal medicines related to these ancient TCM prescriptions.

AIM OF THE STUDY:

This study aimed to discover a method for the investigation of potential antidiabetic herbs from the large amount of data in ancient TCM formulas and modern publications and to verify this method through an in vitro bioactivity study.

MATERIALS AND METHODS:

In our review, the most frequently cited TCM herbs were selected as potential antidiabetic herb candidates on the basis of TCM philosophical theory (ancient TCM formulas) and Western medicine philosophical theory (modern publications). The ethanol and aqueous extracts of the selected herbs were screened for their α-

glucosidase inhibitory, glucose-stimulated insulin secretion (GSIS), and intestinal glucose transport inhibitory effects.

RESULTS:

Twelve herbs [Terminalia chebula Retz., fructus immaturus, dried; Poria cocos (Schw) Wolf., sclerotium, dried; Zea mays L., stigma, dried; Pueraria lobata (Willd.) Ohwi, radix, dried; Cucurbita moschata (Duch. ex Lam.) Duch. ex Poiret, fructus, dried; Lycium barbarum L., fructus, dried; Glycine max (L.) Merr., semen, fermented; Glycyrrhiza uralensis Fisch., radix and rhizoma, dried; Dioscorea opposita Thunb., rhizoma, dried; Morus alba L., folium, dried, Morus alba L., fructus, dried; and Polygonatum odoratum (Mill.) Druce, rhizoma, dried] were finally selected as candidates with potential glucose-lowering effects after a review was performed of herbs that are frequently cited in ancient TCM formulas and modern publications. The bioactive study results demonstrated that both the ethanol extracts and crude polysaccharides of M. alba L., fructus, dried, and M. alba L., folium, dried, and the crude polysaccharides of T. chebula Retz., fructus immaturus, dried, exhibited α-glucosidase inhibitory effects. Moreover, the crude polysaccharides of P. cocos (Schw) Wolf., sclerotium, dried; Z. mays L., stigma, dried; and T. chebula Retz., fructus immaturus, dried, exhibited favorable GSIS effects, and the ethanol extracts of P. odoratum (Mill.) Druce, rhizoma, dried; T. chebula Retz., fructus immaturus, dried; and G. uralensis Fisch., radix and rhizoma, dried, significantly decreased glucose transport across the cell monolayer.

CONCLUSIONS:

Our review and the preliminary bioactive study revealed that 10 of the 12 recommended edible TCM herbs had favorable antidiabetic effects, demonstrating that TCM herbs with a high prescription and publication frequency may provide insights into the potential therapeutic targets of diabetes mellitus and may aid in the discovery of effective compounds complementary to currently used medicines. Such a literature and medicine review is a useful method of exploring potential antidiabetic herbs by using the wealth of information in ancient TCM formulas and modern publications.

Characteristics of Chinese herbal medicine usage and its effect on survival of lung cancer patients in Taiwan.

https://www.ncbi.nlm.nih.gov/pubmed/29100936

J Ethnopharmacol. 2017 Oct 31. pii: S0378-8741(17)32626-0. doi: 10.1016/

By Li TM, Yu YH, Tsai FJ, Cheng CF, Wu YC, Ho TJ,

Abstract

ETHNOPHARMACOLOGICAL RELEVANCE:

In Taiwan, lung cancer remains one of the deadliest cancers. Survival of lung cancer patients remains low, ranging from 6% to 18%. Studies have shown that Chinese herbal medicine (CHM) can be used to induce cell apoptosis and exhibit anti-inflammatory activities in cancer cells.

AIM OF THE STUDY:

This study aimed to investigate the frequencies and patterns of CHM treatment for lung cancer patients and the effect of CHM on their survival probability in Taiwan.

MATERIALS AND METHODS:

We identified 6,939 lung cancer patients (ICD-9-CM: 162). We allocated 264 CHM users and 528 CHM-non users, matched for age, gender, duration, and regular treatment. Chi-square test, conditional multivariable logistic regression, Kaplan-Meier method, and the log-rank test were used in this study.

RESULTS:

The CHM group was characterized by a longer follow up time and more cases of hyperlipidemia and liver cirrhosis. This group exhibited a lower mortality hazard ratio (0.48, 95% confidence interval [0.39-0.61], $p < 0.001$), after adjusting for comorbidities. The trend was also observed that the cumulative survival probability was higher in CHM than in non-CHM users ($p < 0.0001$, log rank test). Analysis of their CHM prescription pattern revealed that Bu-Zhong-Yi-Qi-Tang (BZYQT), Xiang-Sha-Liu-Jun-Zi-Tang (XSLJZT), and Bai-He-Gu-Jin-Tang (BHGJT); and Bei-Mu (BM), Xing-Ren (XR) and Ge-Gen (GG) were found to be the top three formulas and herbs, respectively. Among them, BM was the core CHM of the major cluster, and Jie-Geng (JG) and Mai-Men-Dong-Tang (MMDT) were important CHMs by CHM network analysis.

CONCLUSION:

The use of CHM as an adjunctive therapy may reduce the mortality hazard ratio of lung cancer patients. The investigation of their comprehensive CHM prescription patterns might be useful in future large-scale, randomized clinical investigations of agent effectiveness, safety, and potential interactions with conventional treatments for lung cancer patients.

Two phenolic antioxidants in Suoyang enhance viability of •OH-damaged mesenchymal stem cells: comparison and mechanistic chemistry.

https://www.ncbi.nlm.nih.gov/pubmed/29086885
Chem Cent J. 2017 Aug 25;11(1):84. doi: 10.1186/s13065-017-0313-1.
By Xie Y, Li X, Xu J, Jiang Q, Xie H, He J, Chen D.

Abstract

BACKGROUND:

Suoyang originates from a psammophyte named Cynomorium songaricum Rupr and has been known as a phenolic-antioxidant-enriched traditional Chinese herbal medicine. The present study attempted to investigate the protective effect of phenolic antioxidants in Suoyang towards •OH-mediated MSCs and then further discusses the chemical mechanisms.

METHODS:

The lyophilized aqueous extract of Suoyang (LAS) was prepared and characterized using HPLC. Then, two phenolic antioxidant references, epicatechin and luteolin-7-O-β-D-glucoside, along with LAS, were investigated for their effects on the viability of •OH-treated MSCs using the 3-(4, 5-dimethylthiazol-2-yl)-2,5-diphenyl (MTT) assay. The comparison and mechanistic chemistry of epicatechin and luteolin-7-O-β-D-glucoside were further explored using various antioxidant assays, including PTIO•-scavenging, FRAP (ferric ion reducing antioxidant power), $ABTS^{+}$•-scavenging, and DPPH•-scavenging. Their Fe^{2+}-binding capacities were also compared using ultraviolet (UV) spectra.

RESULTS:

The HPLC analysis indicated that there are 8 phenolic antioxidants in LAS, including epicatechin, luteolin-7-O-β-D-glucoside, gallic acid, protocatechuic acid, catechin, isoquercitrin, phlorizin, and naringenin. The MTT assay revealed that epicatechin could more effectively increase the survival of •OH-treated MSCs than luteolin-7-O-β-D-glucoside. Similarly, epicatechin exhibited higher antioxidant abilities than luteolin-7-O-β-D-glucoside in the DPPH•-scavenging, $ABTS^{+}$•-scavenging, FRAP, and PTIO•-scavenging assays. In the Fe^{2+}-binding assay, luteolin-7-O-β-D-glucoside gave a stronger UV peak at 600 nm, with $\varepsilon = 2.62 \times 10^{6}$ M^{-1} cm^{-1}, while epicatechin produced two peaks at 450 nm ($\varepsilon = 8.47 \times 10^{5}$ M^{-1} cm^{-1}) and 750 nm ($\varepsilon = 9.68 \times 10^{5}$ M^{-1} cm^{-1}).

CONCLUSION:

As two reference antioxidants in Suoyang, epicatechin and luteolin-7-O-β-D-glucoside can enhance the viability of •OH-damaged MSCs. Such

a beneficial effect may be from their antioxidant effects, including direct-antioxidant and indirect-antioxidant (i.e., Fe^{2+}-binding) processes. In the direct-antioxidant process, proton (H^+), one electron (e), or even hydrogen-atom (•H) transfer may occur to fulfill radical-scavenging (especially •OH-scavenging); in this aspect, epicatechin is superior to luteolin-7-O-β-D-glucoside due to the presence of more phenolic -OHs. The additional -OHs can also be responsible for the better cytoprotective effect. In terms of indirect-antioxidant potential, however, epicatechin is inferior to luteolin-7-O-β-D-glucoside due to the absence of a hydroxyl-keto moiety. These findings will provide new information about medicinal psammophytes for MSC transplantation.

A summary and evaluation of current evidence for myocardial infarction with Chinese medicine.

https://www.ncbi.nlm.nih.gov/pubmed/29079906

Chin J Integr Med. 2017 Oct 27. doi: 10.1007/s11655-017-2824-y.
By Wang Y, Xiao L, Mu W, Yu HL, Zhang S, Tian GH, Shang HC.

Abstract

OBJECTIVE:

To provide evidence-based recommendations for clinical application and provoke thoughts for future researchers by conducting a comprehensive summary and evaluation of the current evidence profifile for the role of Chinese medicine (CM) in treating myocardial infarction (MI).

METHODS:

Online databases including PubMed, EMBase, Cochrane Library, Chinese National Knowledge Infrastructure (CNKI), Chinese Biomedical Medicine (CBM), VIP Journal Integration Platform, and Wanfang database were systematically searched for literatures on CM in treating MI. After screening, studies were categorized into 5 types, i.e. systematic review (SR), randomized controlled trial (RCT), observational study, case report and basic research. General information was abstracted, and the quality levels of these studies and their conclusions were summarized and assessed.

RESULTS:

A total of 452 studies including 10 SRs, 123 RCTs, 47 observational studies, 28 case reports, and 244 basic researches were selected. Clinical studies centered primarily on herbal decoction and mostly were not rigorously performed. High-quality studies were predominantly

on Chinese patent medicines (CPMs) such as Danshen Injection (), Shenmai Injection (), Shengmai Injection () and Qishen Yiqi Dripping Pills (). The most frequently observed pattern of drug combination was decoction plus injection. Results of SRs and clinical studies showed that CM may reduce mortality, decrease risk of complication, reduce myocardial injury, improve cardiac function and inhibit ventricular remodeling. Findings from basic researches also supported the positive role of CM in reducing infarct size and myocardial injury, promoting angiogenesis, preventing ventricular remodeling and improving cardiac function. According to the current evidence body, CM has proven effects in the prevention and treatment of MI. It is also found that the effects of CPMs vary with indications. For instance, Shenmai Injection has been found to be especially effective for reducing the incidence of acute clinical events, while CPMs with qi-nourishing and blood-circulating properties have been proven to be effective in inhibiting ventricular remodeling. High quality evidence supports the use of CM injection for acute MI and CPM for secondary prevention. Reports on adverse events and other safety outcomes associated with CM for MI are scarce.

CONCLUSIONS:

Sufficient evidence supported the use of CM as an adjuvant to Western medicine for preventing and treating MI. The choice of drug use varies with disease stage and treatment objective. However, the quality of the evidence body remains to be enhanced.

Clinical Research on Traditional Chinese Medicine compounds and their preparations for Amyotrophic Lateral Sclerosis.

https://www.ncbi.nlm.nih.gov/pubmed/29078263

Biomed Pharmacother. 2017 Oct 19;96:854-864. doi: 10.1016/

By Zhu J, Shen L, Lin X, Hong Y, Feng Y.

Abstract

PURPOSE:

Amyotrophic lateral sclerosis (ALS) is a chronic, fatal neurodegenerative disease which leads to progressive muscle atrophy and paralysis. In order to summarize the characteristics of Traditional Chinese Medicine compounds and their preparations in the prevention and treatment of ALS through analyzing the mechanism, action site, and symptoms according to effective clinical research.

METHODS:

We searched ALS, motor neuron disease, chemical drugs, herbal medicine, Chinese medicine, Traditional Chinese Medicine (TCM), and various combinations of these terms in databases including the PudMed, Springer, Ovid, Google, China National Knowledge Infrastructure, and Wanfang databases.

RESULT:

It was found that the chemical drugs almost had not sufficient evidence to show their effectiveness in the treatment of ALS, except RILUZOLE. According to the characteristics of clinical symptoms of ALS, Chinese medicine practitioners believe that this disease belongs to the category of "atrophic disease". In clinical research, many Chinese herbal formulas had good clinical efficacies in the treatment of ALS with multiple targets, multiple links, and few side effects. And four kinds of dialectical treatment had been developed based on Clinical data analysis and the use of dialectical therapy: Benefiting the kidney; Declaring the lungs; Enhancing the Qi; and Dredging the meridian.

CONCLUSION:

In this review, we provide an overview of chemical drugs and Traditional Chinese Medicine compoun d and its preparations in therapy of ALS as well as how they may contribute to the ALS pathogenesis, thereby offering some clues for further studies.

A metabolic mechanism analysis of Fuzheng-Huayu formula for improving liver cirrhosis with traditional Chinese medicine syndromes.

https://www.ncbi.nlm.nih.gov/pubmed/29072258

Acta Pharmacol Sin. 2017 Oct 26. doi: 10.1038/aps.2017.101.

By Song YN, Chen J, Cai FF, Lu YY, Chen QL, Zhang YY, Liu P, Su SB.

Abstract

Fuzheng-Huayu formula (FZHY), a Chinese herbal mixture pre¬scription, has been proven effective in treating liver fibrosis and cirrhosis in both clinical trials and animal experiments. In this study we assessed the metabolic mechanisms of traditional Chinese medicine (TCM) syndrome-based FZHY treatment in liver cirrhosis (LC). A total of 113 participants, including 50 healthy controls and 63 LC patients, were recruited. According to the diagnosis and differentiation of the TCM syndromes, the LC patients were classified into 5 TCM syndrome groups including the liver stagnation syndrome (LSS), spleen deficiency and damp overabun¬dance syndrome (SDDOS),

damp-heat accumulation syndrome (DHAS), liver-kidney Yin deficiency syndrome (LKYDS), and blood stagnation syndrome (BSS), and administered FZHY for 6 months. FZHY treatment significantly decreased serum levels of hyaluronic acid (HA), a biochemical marker for LC, as well as TCM syndrome scores (the TCM syndrome scores were decreased in all the groups with significant decreases in the LSS and LKYDS groups). Furthermore, FZHY treatment gradually shifted the metabolic profiles of LC patients from a pathologic state to a healthy state, especially in LC patients with LSS and LKYDS. Twenty-one differently altered metabolites (DAMs) were identified, including carbohydrates, amino acids, fatty acids, etc. with 9 DAMs in LSS patients, 9 in LKYDS patients, and 4 in other patients. The metabolic pathways involved in the conversion of amino acids and the body's detoxification process were regulated first, followed by the pathways involved in the body's energy supply process. In conclusion, the evaluation of the effect of TCM syndrome-based FZHY treatment show that FZHY has a better effect on LKYDS and LSS than on the other TCM syndromes, and the metabolic mechanisms might be involved in the increased detoxification function in LKYDS and the improvement of energy supply in LSS, which provides important evidence for the clinical application of TCM syndrome-based treatment.

In silico system pharmacology for the potential bioactive ingredients contained in Xingnaojing Injection () and Its material basis for sepsis treatment.

https://www.ncbi.nlm.nih.gov/pubmed/29039067

Chin J Integr Med. 2017 Oct 17. doi: 10.1007/s11655-017-2421-0.
By Ma ST, Feng CT, Xiong YX, Zhang XL, Miao CG, Yu H.

Abstract

OBJECTIVE:

To elucidate the action mechanism of Xingnaojing Injection (, XNJI) for sepsis, and to target screen the potential bioactive ingredients.

METHODS:

An integrated protocol that combines in silico target screen (molecular docking) and database mapping was employed to find the potential inhibitors from XNJI for the sepsis-related targets and to establish the compound-target (C-T) interaction network. The XNJI's bioactive components database was investigated and the sepsis-associated targets were comprehensively constructed; the 3D structure of adenosine receptor A2a and 5-

lipoxygenase proteins were established and evaluated with homology modeling method; system network pharmacology for sepsis treatment was studied between the bioactive ingredients and the sepsis targets using computational biology methods to distinguish inhibitors from non inhibitors for the selected sepsis-related targets and C-T network construction.

RESULTS:

Multiple bioactive compounds in the XNJI were found to interact with multiple sepsis targets. The 32 bioactive ingredients were generated from XNJI in pharmacological system, and 21 potential targets were predicted to the sepsis disease; the biological activities for some potential inhibitors had been experimentally confirmed, highlighting the reliability of in silico target screen. Further integrated C-T network showed that these bioactive components together probably display synergistic action for sepsis treatment.

CONCLUSIONS:

The uncovered mechanism may offer a superior insight for understanding the theory of the Chinese herbal medicine for combating sepsis. Moreover, the potential inhibitors for the sepsis-related targets may provide a good source to find new lead compounds against sepsis disease.

Prevention of Type 2 Diabetes with the Chinese Herbal Medicine Tianqi Capsule: A Systematic Review and Meta-Analysis.

https://www.ncbi.nlm.nih.gov/pubmed/29027648

Diabetes Ther. 2017 Dec;8(6):1227-1242. doi: 10.1007/s13300-017-0316-x.
Pang B, Zhang Y, Liu J, He LS, Zheng YJ, Lian FM, Tong XL.

Abstract

INTRODUCTION:

Prevention of the rapid growth in incidence of type 2 diabetes (T2DM) is a big challenge for clinicians. In China, many trials have indicated that Tianqi capsule, which contains several Chinese herbal medicines as part of a large healing system called traditional Chinesemedicine, could decrease the incidence of T2DM. The review assessed the effectiveness of Tianqi capsule in prevention of T2DM.

METHODS:

Seven electronic databases were searched to identify eligible trials published from the inception of the databases up until May 1, 2017. Randomized controlled trials (RCTs) of Tianqi capsule for impaired glucose tolerance (IGT) were included. Data extraction and quality assessment were performed according to the

Cochrane review standards. A random or a fixed effect model was used to analyze outcomes which were expressed as risk ratios (RRs) or mean differences (MD), and I^2 statistics were used to assess heterogeneity.

RESULTS:

Six trials were identified that included 1027 subjects. Meta-analysis showed that subjects who received Tianqi capsule plus lifestyle modification (LM) were less likely to progress to T2DM compared to controls (RR 0.55, 95% CI 0.44-0.68). Subjects who received Tianqi capsule plus LM were more likely to have glucose return to normal compared to controls (RR 0.69; 95% CI 0.62-0.78); and they had reduced fasting plasma glucose (FBG) (MD - 0.35; 95% CI - 0.55 to - 0.16) and 2-h plasma glucose (2 h PG) (MD - 1.04; 95% CI - 1.75 to - 0.32). There was no statistical difference between the two groups for IGT stabilized incidence (RR 0.89; 95% CI 0.71-1.12). No obvious adverse events occurred.

CONCLUSION:

In patients with IGT, Tianqi capsule reduced the risk of progression to T2DM and increased the possibility of regression toward normoglycemia. As a result of the limited number of RCTs and the methodological drawbacks of the included studies, the results should be interpreted with caution.

In vitro antimicrobial effects of a novel Penta herbs concoction for atopic dermatitis.

https://www.ncbi.nlm.nih.gov/pubmed/29098912

J Dermatolog Treat. 2017 Nov 9:1-3. doi: 10.1080/09546634.2017.1395804.
By Hon KL, Ip M, Wong CK, Chan BCL, Leung PC, Leung TF.

Abstract

BACKGROUND:

In a series of bench and clinical trials, our group has determined the immunologic effects and clinical efficacy of a concoction of five herbal ingredients (PentaHerbs Formula, PHF) in treating children with atopic eczema (AE). This study investigates the antimicrobial effects that may be induced with PHF treatment.

METHODS:

We investigated the effects of PHF on the minimal inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) of Staphylococcus aureus and various bacteria that are commonly present on the skin of patients with AE.

RESULTS:

Staphylococcus aureus ATCC 25923, Methicllin resistant Staphylococcus

aureus (MRSA) ATCC BAA-43, Enterococcus faecalis ATCC 29212, Pseudomonas aeruginosa ATCC 27853, Escherichia coli ATCC 25922, Enterobacter cloacae ATCC 13047, Proteus vulgaris ATCC 6380, and Acinetobacter baumannii ATCC 19606 were tested. PHF was more effective against Staphylococcus aureus ATCC 25923 and Methicllin resistant Staphylococcus aureus (MRSA) ATCC BAA-43. MIC and MBC were 1 and 25 mg/mL, respectively.

CONCLUSION:

PHF was more effective against Staphylococcus aureus ATCC 25923 and Methicllin resistant Staphylococcus aureus (MRSA) ATCC BAA-43t. PHF may be developed into a Staphylococcus aureus targeting topical application.

Research Committee wishing all ATCM members

A Merry Christmas & Happy New Year 2018!