



Eastern Journal of
Complementary &
Alternative Medicine

**The Peer Reviewed Journal
for
Complementary
and
Alternative Medicine**

EJCAM.ORG

Volume 2 - August, 2018



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Introduction

The Eastern Journal of Complementary and Alternative Medicine, EJCAM, is a peer reviewed journal affiliated with the Eastern School of Acupuncture and Traditional Medicine. EJCAM however acts independently from the school in pursuit of its own mission.

At EJCAM we consider the center of alternative medicine to be the medicine that derives from indigenous Chinese medicine that has a history of over 3000 years. In the United States, Chinese medicine has a relatively short history. It became better known here when the US and China developed relations in the 1970's. Since that time Chinese medicine has gained acceptance but has met with resistance from the scientific community. The resistance stems from the fact that acupuncture, herbs, and other forms of traditional medicine are derived from experience. In today's world medicine is accepted when science proves its statistical significance. Greater acceptance of traditional medicine will be achieved when scientific study provides the proof beyond what experience has already shown.

There are however whispers within the academic and lay world that medicine derived from experience does indeed have merit. This growing traction for experienced based medicine shows that traditional medicine is becoming more accepted. Using science and experience together can provide the best results for thinking researchers and practitioners.

Researchers in the field of traditional medicine still, however, need access to qualified peer review and widespread distribution of their work in order to achieve acceptance in the US. EJCAM aims to provide that review and distribution. The vision of EJCAM includes greater acceptance of traditional medicine and a healthcare field that offers people the best of traditional and western medicine. The words western, traditional, and complementary are only labels and ultimately should not separate the result that can be achieved. Integrated these types can be truly powerful. At EJCAM we are all of these. This integration can be a true blessing for humanity.

The articles and writings within EJCAM have all been given by dedicated people with no compensation for their work. The peer reviewers and editorial staff do their job truly out of the love for the medicine and the chance to add to that medicine whether it is western, traditional, or complementary. For everyone around our world who endeavors with this spirit, EJCAM is with you and honors your work.



The Mission of the Eastern Journal of Complementary and Alternative Medicine

The mission of EJCAM is to publish and distribute peer reviewed articles of complementary and alternative medicine that stimulate the knowledge of all medical professional healers and enhance the health and wellbeing of all people.

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Publisher

EJCAM is affiliated with the Eastern School of Acupuncture and Traditional Medicine which acts as the publisher and ownership of the journal is with the EJCAM Editorial Board. The Eastern School of Acupuncture and Traditional Medicine is located at 440 Franklin Street, Bloomfield, New Jersey, 07003. Correspondence to info@esatm.edu or 973-746-8717. Aida Morales-Almanzar, CEO

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Message to Authors

Authors are welcome to submit articles to EJCAM about topics such as acupuncture, moxabustion, Asian medicine, and complimentary or integrative western medicine. EJCAM publishes original research, clinical practice articles, case studies, systematic reviews, meta-analyses, literature reviews, conference proceedings, translations, and related topics. Capstone and thesis projects may also be submitted.

All submissions will be online. All submissions must meet review by the editor according to standards accepted by academic journals that utilize AMA reference. If initially acceptable, submissions are sent to peer reviewers who have expertise in the topic submitted. Articles reviewed by peer reviewers will result in the following: acceptance, acceptance with minor changes, rejection, or returned for major revisions.

EJCAM accepts original unpublished articles. If articles are accepted, authors provide publication rights to EJCAM. EJCAM reserves the right to reprint, under the discretion of the editor in chief and EJCAM Board, certain studies or articles previously published in other journals. Dual simultaneous publication may be considered under special circumstances. In special circumstances, EJCAM will republish articles that fit our mission and have authors' permission. In all cases, authors retain rights to intellectual properties. Authors provide rights to EJCAM for electronic and print publication and distribution as well as archiving storage.

Please submit article manuscripts to EJCAM Editor at gormleydmd@aol.com with subject "EJCAM Submit". Submissions will be acknowledged and the review process may take up to 90 days. At the end of the review process authors will be notified of manuscript status.

Message from the Editor

Our journal name is the Eastern Journal of Complementary and Alternative Medicine, EJCAM. This name indicates our roots of origin with the Eastern School of Acupuncture and Traditional Medicine and identifies the basis of our medicine. According to the National Institute of Health the following definitions apply: If a non-mainstream practice is used together with conventional medicine, it's considered "complementary." If a non-mainstream practice is used in place of conventional medicine, it's considered "alternative." EJCAM is both but also joins conventional medicine science and traditional medicine experience.

We live in a time where information and ideas are expanding at great speed. Ideas and information needs to be shared. Our intention is to attract manuscripts of academic and research nature that will improve knowledge in the world of complementary and alternative medicine. EJCAM will spread knowledge.

Students, teachers, and practitioners of complementary and alternative medicine come from a wide range of backgrounds. The basic connection of these backgrounds and purposes is to improve life.

As EJCAM continues to develop we take a humble approach to our contribution to the lofty goal of improving life. We welcome assistance from all who believe in this goal. EJCAM aims to benefit many.

For EJCAM Volume 2 we have an interesting mix of articles including a case study on vasculitis, an interview with Dr Jeremy Steiner concerning electro acupuncture, a research proposal to reduce post-operative pain medication, a borrowed article on legumes by Dr McDougall, and a report of an upcoming pain conference. Our aim was to be ready to publish 3 articles by summer 2018 but we hope this early release is an indication that EJCAM is growing in several categories.

To all of our readers, writers, practitioners, students, teachers, patients and researchers, please enjoy our EJCAM Volume 2 and consider contributing to our next edition.

Welcome to our journal, EJCAM, Volume 2.

Thomas J Gormley, Editor in chief

P.S. I must add a note of sadness on the passing of Giovanni Maciocia this past March 9, 2018. Aside from my classroom teachers, he was the most influential person in my study of TCM acupuncture. I spent countless hours reading his book mainly about making sense of pattern theory of acupuncture. I expect that many students like myself owe their success with passing the national boards to Giovanni Maciocia. He helped me then, and I still keep his text nearby. A posthumous thank you goes to him!

A case study of hypersensitivity skin vasculitis treated with acupuncture

By Thomas J Gormley, DMD, LAc, MSAc

Abstract

Vasculitis is an inflammatory disease of the vasculature that can affect one or multiple organ systems. The cause can be known or unknown and the process can be acute or chronic. In Chinese medicine vasculitis can fit several patterns. In the case studied, the pattern was diagnosed and treated as damp heat affecting the skin of an 81-year-old female who had been exposed to a chemical that had inflamed her vasculature.

Key words: vasculitis, skin hypersensitivity, damp heat, acupuncture, Technetium TC 99M Sestamibi

Introduction

According to the Vasculitis Foundation, vasculitis is inflammation of the veins, arteries, and capillaries that causes changes to the vessel walls resulting in vessel narrowing, blockage, and blood and fluid leakage in the surrounding tissue. Damage and even death can result in the tissue supplied by the affected vasculature. Different forms of vasculitis can occur and the cause can be known or unknown. Some forms can improve without treatment but most cases require treatment. The different forms are classified by the size and location of the affected vessels.¹

The form of vasculitis studied in this case is known as hypersensitivity vasculitis. "Hypersensitivity vasculitis (HV) is often used to describe different types of vasculitis related to drug reactions, skin disorders or allergic vasculitis. The American College of Rheumatology established a list of criteria for the classification of HV. The criteria are: older than 16 years of age, use of a drug before the development of symptoms, skin rash, biopsy of the skin rash that shows neutrophils, a type of white blood cells, around a small vessel. The presence of a skin rash, usually red spots, is the main symptom in HV. HV may be caused by a specific drug or occur in association with an infection, but it may also be idiopathic, meaning there is no known cause. The drugs that are most frequently listed as being associated with the development of HV include: penicillin, cephalosporin, sulfonamide, some medicines used to control blood pressure (loop and thiazide-type diuretics), phenytoin and allopurinol. Infections that may be associated with HV include hepatitis B or C virus, chronic infection with bacteria and HIV virus. In most patients, symptoms begin 7 to 10 days after the exposure to the drug or infection but can be as short as two to seven days in some people."² In addition to a skin rash, organ systems can be involved. Kidney, liver, lung, heart, and brain can be involved in HV. This is a rare complication and may only be detected through testing. Urine sampling is usually required.²

Case study

In the case studied in this report, an 81-year-old female retired nurse with medically controlled hypertension and osteoporosis was undergoing diagnostic tests for hypercalcemia. A blood panel had indicated that the patient's blood calcium was elevated. Her physician ordered a parathyroid scan to check for gland abnormality.³ The scan consists of injection of a contrast medium, dye, Technetium TC 99M Sestamibi, which would be taken up by the parathyroid gland and show if the parathyroid gland was abnormal such as the presence of an adenoma.⁴⁻⁵ This type of test can be used for many different

organs, and the test is usually well accepted by patients. In rare instances patients can have unexpected allergic reactions.⁶

The patient was given the dye medium scan and tolerated the procedure well. The following day the patient reported itchy skin and the day after the skin itch worsened and she developed a mild fever with malaise. Signs and symptoms worsened as the day proceeded and she went to the local hospital emergency department, ED. The ED physician diagnosed the problem as skin vasculitis based on signs and symptoms and concluded that she had an adverse reaction to the test dye. The ED physician prescribed oral prednisone, which the patient refused due to a history of negative reaction to that medication. Prednisone has multiple side effects including hypertension, weight gain, bone thinning, and mood swings.⁷ None of these potential side effects would be compatible considering the patient's medical history. The patient returned home and called for an acupuncture appointment. She was seen the following day (day 3).

On day three she was seen at the acupuncture office. Her history of acupuncture treatment included the treatment of facial cosmetic acupuncture and treatment of left knee arthritic pain. Her medical history included normal childhood diseases, normal delivery of three children, and trauma to her left knee and face subsequent to a motor vehicle accident 25 years previous. She takes Diovan for hypertension that is controlled and annual Reclast injections for osteoporosis which has stabilized. She is otherwise appropriately fit and healthy. After an interview of what had recently occurred, the patient was examined. Her tongue showed red body and mild scalloped red edges with a mild greasy yellow coating extending from the mid to low jiao surfaces of the tongue. The pulse was rapid and wiry on the right side and slippery on the left.

An external examination revealed moderate swelling of the lower limbs, generalized skin redness of the lower limbs, abdomen, chest and back, and raised red petechiae on the lower limbs, abdomen, chest, and back. The skin in those areas was itchy. On palpation the patient confirmed discomfort in the chest and liver areas of the torso. The patient reported generalized weakness and an elevated temperature of 101F compared to her normal temperature of 96F. At the examination, the patient was unaware of the extent of the swelling, redness and raised lesions on her skin until they were pointed out to her. This unawareness was explained by the apparent suddenness of the changes and the extensive nature of her malaise. The stage of this illness was acute and apparently worsening rapidly.

These signs and symptoms indicated damp heat especially in the lower and mid jiaos.⁸ Further consideration indicated the damp heat was affecting the spleen and liver based on the tongue and pulse.⁹ According to the levels, this disease showed that it was at the Qi level due to the tongue signs, but that Qi was still upright according to the tongue and pulse.¹⁰ The disease also was at the blood level according to the appearance of red raised petechiae.¹⁰ All indications were that the patient was in a significant battle at the interior level to keep the pathogen from progressing deeper.¹⁰

In western medicine the dye had brought about an allergic reaction which resulted in inflammatory damage to the vasculature which weakened the vessel walls and allowed leakage of fluid into the skin.² The leakage resulted in swelling that accumulated in the lower limbs. The inflammation in the capillaries resulted in the skin redness and raised petechial lesions.² In Chinese medicine the dye medium was considered to be the invading wind evil. An exogenous toxin can be a cause of heat according to Chinese medicine.⁷ Dampness can be a result of several factors including a long-standing spleen qi vacuity or in

this case a depressed liver which invaded the spleen.⁶ Chinese medical treatment would have to reduce the dampness and heat as well as restore balance between the liver and spleen.⁹



Figure 1 above shows the patients lower left leg and ankle in anterior view. Scattered raised petechial red spots are on the skin, and the indentation of the skin at the just removed stocking shows significant edema at the location of the ankle bones. This is a pre-acupuncture picture on day 3.

A plan of treatment was devised to reduce dampness and heat while moving liver qi and supporting the spleen. Additional effect would regulate qi and blood especially in the middle and lower jiaos.

Acupoints chosen for the treatment included:

Sanyinjiao, Spleen 6 to fortify the spleen, resolve damp, and harmonize the liver

Fengchi, Gall bladder 20 to reduce wind evil

Zusanli, Stomach 36 to fortify the spleen and resolve damp

Zhonggwan, Ren 12 to support the spleen and middle jiao, and regulate qi

Qihai, Ren 6 to support qi, regulate blood, and rescue yang

Xingjian, Liver 2 to clear liver heat and wind, spread liver qi, stop bleeding, and support the lower jiao

Quchi, Large intestine 11 to clear heat, cool blood, and alleviate itching

Yinlingquan, Spleen 9 to reduce damp, regulate spleen, and open water passages

Xuehai, Spleen 10 to invigorate blood, dispel stasis, and benefit skin

Zhangmen, Liver 13 to reduce liver and spleen congestion, and regulate the middle and lower jiaos

40-gauge, 30 mm stainless steel DBC needles were used for 20 minutes duration in a perpendicular or angular fashion without stimulation. Right and left bilateral points were treated. Depth and angle of needle skin penetration was consistent with Deadman standards at each location.¹¹ The patient was instructed to hydrate more than usual by drinking water which would assist the kidneys to eliminate the medium chemical from the body. The patient was also given the normally recommended post treatment instructions to moderate all activity and avoid excesses of physical and psychological activity during the day of treatment. This treatment protocol was completed on the first and second days of treatment (days 3 and 10).

The patient was contacted by telephone the following day (day 4) and she indicated that her temperature was normal and the swelling was reducing.

Examination one week later (day 10) showed a significant reduction in the swelling, skin redness, and raised red lesions. The yellow coat on the tongue was gone, the tongue body was light red. The pulse was 76 and no longer wiry. Since the skin was still mildly red with minimal red raised lesions, the same acupoints were treated in the same manner.

The patient was seen the following week (day 17) and all of the signs and symptoms of damp heat were eliminated. The patient reported feeling normal. No treatment was done and the patient was advised to eat, exercise, and rest in her regular healthy manner. She reported that she would see her physician to follow up on the evaluation of the parathyroid calcium problem. She planned to consult for recommendations of Chinese medical assistance as the need required.

Figure 2 below shows the patients lower left leg and ankle in anterior view. There is noticed disappearance of the scattered raised petechial red spots formerly on the skin and the area of the ankle shows no edematous indentation in the location of the ankle bones. This is a picture on day 17.



A search of the literature regarding the use of acupuncture for skin hypersensitivity vasculitis revealed no peer reviewed articles. "The attributive effect of acupuncture has been investigated in inflammatory diseases, including asthma, rhinitis, inflammatory bowel disease, rheumatoid arthritis, epicondylitis, complex regional pain syndrome type 1 and vasculitis."¹² There are however no large controlled studies to confirm this. Freek et al completed a journal review and discussed the use of acupuncture effects on inflammation including the effect on vasculitis in general.¹² The effect on inflammation was attributed to acupuncture's activation of mediators including the neuropeptides: substance P, neurokinin A, neuropeptide Y, vaso-active intestinal peptide, bradykinin, calcitonin gene related peptide, b-endorphin; cytokines: IL-1b, IL-2, IL-4, IL-6, IL-10, IFN-g, TNF-a; and other vaso-active, substances: nitric oxide, eicosanoids, and serotonin.¹² The use of Chinese medicine for damp heat could be found in several scholarly texts including: Machioche, Wiseman, Dang, and Wu.⁹⁻¹³⁻¹⁴⁻¹⁵

Discussion

This case concluded with successful resolution of the damp heat and physical signs and symptoms. After the case was reviewed there came about a debate as to the diagnosis and choice of points treated. It was suggested that the root cause was liver qi and kidney yin deficiency.

The review considered that the empty heat is at the middle towards the lower jiao. Because of the liver qi and kidney yin deficiency, and invasion of external pathogenic factor, this caused the blood stasis and blood heat blood toxicity. Qi did not move and resulted in no driving of blood. This resulted in blood stasis and heat. The points used in this case were good to move qi, invigorate and cool blood, and resolve damp in the lower jiao after reducing the blood stasis and clearing blood heat.

Consideration for alternate choice of points could include Ren 9 to clear accumulation of water in the lower jiao and reduce swelling. Spleen 6 may not be a good choice to resolve damp but in this case, it was a good point to promote flow of liver qi and nourish the kidney yin.

Conclusion

The method of treating skin hypersensitivity vasculitis with Chinese medicine in the case studied is based on the western medical diagnosis of the patient with this form of vasculitis and Chinese medical diagnosis of the pattern of damp heat. The use of acupuncture to treat damp heat is a common practice in Chinese medicine as indicated by its inclusion in the scholarly texts. This method is based on experience, history, and interpretation of ancient writings. It cannot be stated academically that the acupuncture was successful in curing the vasculitis since this one case is considered anecdotal, however, Chinese medicine is observational and practitioners would consider that the treatment brought about improved balance and reduction of disease to be clinically successful. In order to state that the acupuncture was causal, a double blinded controlled study of adequate sample size would be required. Thus, a study of this nature is recommended to further the investigation of acupuncture being used for hypersensitivity skin vasculitis.

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About the author

Dr Thomas Gormley is a graduate of Rutgers Dental School, New Jersey Institute of Technology, and The Eastern School of Acupuncture and Traditional Medicine. He maintains a private practice in Belleville, New Jersey, and is an assistant clinical professor and attending for St Joseph's University Medical Center in Paterson, New Jersey and New York Medical College. He integrates western medicine, nutrition, and Asian medicine for dental and medical diseases. He can be contacted at gormleydmd@aol.com. Dr Gormley receives no financial benefit related to this article.

Interview with Dr Jeremy Steiner, DAOM, on Electro Acupuncture Medicine

Conducted by EJCAM editor, Dr Thomas Gormley.

Each volume of EJCAM will include an interview with important people in the field of complementary and alternative medicine. In this volume Dr Jeremy Steiner, DAOM is the interviewee. Dr Steiner was chosen because of his vision and knowledge of acupuncture most notably and currently, Electro-Acupuncture Medicine, EAM, which will be the focus of this interview. Questions were prepared by EJCAM editor, Dr Thomas Gormley, who has been a student of Dr Steiner and completed his Masters in Acupuncture learning about EAM from Dr Steiner.

“Dr Steiner, thank you for taking time from your busy schedule and agreeing to do this interview. The purpose of this interview is to help people learn about your exciting work in Electro Acupuncture Medicine.

1. What first attracted you to become interested in EA?

The human body has an electrical nature. Each of our cells is a tiny battery complete with positive and negative charges such as calcium, potassium, sodium, and chloride.

2. How much of an influence was the work of Dr Helms?

I was directly influenced by Dr. N. Nowicki, Kiiko Matsumoto, Dr. B. Robinson, Dr. G. Einstein and Dr. T. Corbin. Indirectly I am influenced by Dr. J. Helms, Dr. B. Pomeranz, Dr. B. Strittmatter, Dr. F. Bahr, Dr. P. Nogier, and Dr. A. Elorriaga Claraco. All these people had a tremendous influence on me and continue to be a source of inspiration.

3. In terms of EAM theory of stimulating the body to release neurotransmitters and neuropeptides, whose work is most important?

Dr. Nowicki, and Dr. Pomeranz.

4. If you could research the science of EAM, what would you be most interested in studying?

I am currently working on a clinical research. It is in the field of the anti-inflammatory effects of EAM.

5. Would you compare manual stimulation of the acupuncture needle to electrical stimulation?

Dr. Langevan has done a lot of work in the field of what happens when we insert a needle into tissue, and what happens to the fascia when we spin the needle. She has uncovered more than 40 effects occur upon insertion of an acupuncture needle. When we add pulsed electrons to the needles, we achieve an entirely different cascade of effects.

6. Which is easier and more effective?

Both require extensive training and proper licensing.

7. Would you explain why EAM is superior to transcutaneous electrical nerve stimulation, TENS.

When a TENS is used, the amplitude needs to be turned up high enough to bypass the resistance of the skin. This triggers a body protection mechanism and the effects are not long term. Also, the designer of TENS units never intended it to be used on painful areas. It was meant to treat nerves involved in painful conditions. EAM is superior because we can modulate internal organ functions, trigger the release of powerful anti-inflammatory neurotransmitters as well as endogenous opioids for pain relief. The results can last weeks, months, or years, because we are modulating the human body to produce these happy healthy endogenous chemicals autonomously without the need for further input from the practitioner.

8. Do you think traditional acupuncturists have resistance to using EA because its development has been driven by physician medical acupuncturists?

I think if we look into history, we have to correct what we believe about acupuncture. In the 1990's they found a frozen human from around 5300 years ago. He was found along the mountainous border of Italy and Austria. They nicknamed him Otzi. He was found with scars on many TCM acupoints. This raises many questions about the origins of Acupuncture. There is also some historical data which shows the use of electricity in ancient Egypt as medicine.

9. Do you think that EAM is more useful for treating some forms of disease? If so, which?

EAM is most powerful and useful in modulating and stimulating the nervous system to secrete all-natural medicines. The nervous system is not just a series of wires that bring electrical signals to organs, muscles, and other tissues. It is a gland, that is able to secrete medicines. Electrons are anti-oxidants, and many people in our society are starving for electrons.

10. Currently our national health care is struggling with the overuse and addictive nature of opioids. How can EAM fit into the health care equation to help solve this crisis?

Dr. B. Pomeranz has shown extensively through clinical research that electro-acupuncture, using a low frequency for a minimum of 20 minutes triggers the pituitary to produce and secrete endogenous morphine (endorphin). This is a very powerful opioid. Opioid prescriptions are not a problem when a patient has pain, it is when a patient no longer has pain that the opioid becomes addictive. The EAM practitioner has the ability to trigger the nervous system to produce its own opioids, and these don't have any of the side effects that the prescription drugs do.

11. As a teacher do you offer programs to teach practitioners how to use EAM?

Yes, I do. I have a Facebook group named Electro-acupuncture Medicine, and a website for people to sign up to take my classes. The classes are approved for NCCAOM CEU/PDA credits. I currently offer a foundations course, an advanced course, and a course which will focus on TBI/Strokes, paralysis, and scalp electro is in the works. The website is www.electro-acupuncturemedicine.com

12. Practitioners and others interested in EAM can follow you on Facebook. How can they access this and participate?

Find the group named Electro-acupuncture Medicine on Facebook, and ask to join. Please FB message me if your Facebook page does not list that you are a licensed acupuncturist or acupuncture student.

13. Your schedule is very demanding with all of your work and study, but are you still working on an EAM book?

Absolutely. The book will be a clinical manual and is approximately 30% complete.

14. Is there anything you would like to add for our EJCAM readers that we have not covered?

We have a lot of different fields of science and art all converging in medicine. More and more doctors, and researchers are finding that everything we need to be healthy and thrive is already contained within our bodies. Acupuncturists are positioned at the forefront of this exciting time. Let's improve our health care system, and medicine with the compassion and benevolence that is talked about in the Huang Di Nei Jing, and other ancient Chinese Medical texts.

Thank you, Dr Steiner, for agreeing to do this interview and may you have continued success in your teaching, studying, and practicing."

Dr. Jeremy B. Steiner, DAOM, is a scientist, healer, acupuncturist, traditional medicine practitioner, teacher, clinical supervisor, and founder of Electro-Acupuncture Medicine (EAM). Licensed to practice acupuncture and traditional medicine in NJ and FL. He has successfully and safely given more than 60,000 treatments, of which a significant number were in the treatment of the most severe disorders such as paralysis, and non-responsive pain disorders.

Dr. Steiner graduated from The Eastern School of Acupuncture and Traditional Medicine (ESATM) with a degree in Acupuncture and a Certification in Chinese Herbology. He then continued his graduate studies at The Atlantic Institute of Oriental Medicine where he earned his Doctorate of Acupuncture and Oriental Medicine with a specialty in Traditional Chinese Medicine (TCM) internal medicine.

EAM is a form of health care that is rooted in traditional Oriental medical concepts and freely blends the usage of electricity to modulate the production and release of all-natural super powerful neuropeptides and neurotransmitters. Dr. Steiner's purpose is to maximize the human potential and innate ability to re-balance, restore, and enhance health. He is currently in the process of writing a clinical manual as well as certification programs in EAM. Dr Steiner can be reached through his website, appleacupuncturenj.com

Proposing research of modulating post-operative dental pain with acupressure on distal points after common emergency procedures

By Loutfy R, Gormley T, Ephros H

Abstract: This is a proposal to study the possible effects of using acupressure to reduce patient's post-operative pain after receiving common emergency dental procedures.

Key Words: acupressure, post-operative pain, dental, acupoints, root canal therapy, dental extractions, analgesics, opioids

Introduction: Acupuncture and acupressure can reduce pain, inflammation and swelling by stimulating various immune system activity which can reduce the dependence on pain relief medications.¹⁻²⁻³⁻⁴ Reducing pain with less dependence on analgesic medications especially opioids is an important issue.⁵ Post-operative acupressure can be completed within minutes following dental procedures that can cause post-operative pain.⁶

Objective: The objective of this study will be to determine the effectiveness of a short treatment of acupressure on distal acupoints on reducing post-operative pain subsequent to dental procedures of simple extractions, surgical extractions, and root canal therapy performed in a general dental clinic by resident dentists.

Variables: independent: simple extractions, multiple extractions, surgical extractions, pulpectomy; dependent: pain severity, pain duration.

Hypothesis: A short session of acupressure completed after dental procedures can reduce the severity and duration of post-operative dental pain.

Inclusion criteria: Adult patients in stable health reporting for emergency care at the 11 Getty Avenue, St Joseph's Dental Clinic and are treated by resident dentists for simple extractions, surgical extractions, or pulpectomies.

Exclusion criteria: pregnant females (Stimulation on certain study acupressure points can cause undesirable uterine contractions.⁷). Pressure should not be exerted over areas with burns, infection, contagious diseases of the skin or active cancer.⁶ Patients seeking opioids by admission or matching NJ opioid screening list.⁸

Sampling procedure: Patients passing exclusion criteria can be interviewed for admission to study. Patients that wish to participate in the study will be randomly selected for treatment or control groups based on the day of arrival for treatment. Patients arriving on Thursday will be assigned to the control group and patients arriving on Friday will be assigned to the treatment group. Treatment group will have acupressure and participate in post-operative pain scale grading. Control group will have no acupressure and participate in post-operative pain scale grading. Both treatment and control groups will have dental procedures completed by resident dentists supervised by attending licensed dental faculty members. Resident and attending dentists will have previous training in acupressure by a licensed acupuncturist. Adequate sample size to assess statistical significance according to biostatistician.

Interventions: use of opioids, use of antibiotics, referral to medical physician or oral surgeon, failure to comply, delayed healing

Ethical issues: patient dependence on analgesics, adequate pain relief

Procedure: Patients in the treatment group will be treated with acupuncture within 10 minutes of completion of dental procedures. Patients will receive 30 seconds of digital acupuncture on bilateral acupoints Neiting (Stomach 44), Hegu (Large intestine 4), and Taichong (Liver 3) applied by the treating resident dentist.⁷⁻⁹ Interested patients will be advised to press the points at home to assist in pain reduction. Patients in the control group will receive no acupuncture.

Pain intensity will be measured by patients using the Visual Analog Scale, VAS, ranging from 0 (no pain) to 10, (maximum pain).¹⁰⁻¹¹ After being accepted for the study patients will measure their VAS. VAS measurements will be done before treatment and after treatment when the effect of local anesthesia has reduced. The VAS will also be measured when patients wake up the morning after treatment. The quantity and type of pain relieving medication taken up to waking will also be recorded. Patients are to be asked if they used any pain-relieving medication during the period from immediate post-op until waking in the morning. Patients will also be asked if they were comfortable post-op with no medication, with medication, or if their medication was insufficient for adequate pain relief. Patients reporting pain on the first post-operative day will be contacted the next day and asked the same questions. Interventions will also be recorded.

Guidelines and certifications: All study dental procedures will follow the latest guidelines adopted by the World Health Organization adopted by the FDI General Assembly October, 2002 in Vienna, Austria and revised September, 2008 in Stockholm, Sweden.¹² All participants will have "Human Subjects Training Certification" according to current NIH requirements.¹³ St Joseph's University Medical Center Research Department oversees all human research according to established Institutional Research Board standards.¹⁴

Research setting: 11 Getty Avenue, Paterson, New Jersey, St Joseph's University Medical Center Dental Clinic.¹⁵

Study instruments: visual analog pain scale.

Collection of data: dental assistants or dental residents call patients who provide pain scale data and analgesics use as noted on the Patient Record Form, Figure 1. Medical record numbers and patient initials will be used on data collection forms though actual patient names will be used during treatment and phone calling. To assist in eliminating bias, the treating doctor will not call patients for collection of data but will be involved in necessary post-operative dental care. See Figure 2, Patient Data Collection Form.

Data analysis: Statistical analysis of accumulated study data will be conducted by the St Joseph's University Medical Center Research Department according to current research analysis standards. Significance of 95% will be used as the yardstick to prove the hypothesis. Missing, unused or spurious data will be stored but will not be a part of study analysis.

Monitoring, supervision, and quality control: Once patients have been diagnosed by dental residents, the diagnosis will be reviewed and treatment planning options will be discussed before presenting them to the patient. After the patient has chosen the type of care from the options proposed, the patient will be given information about the research study. Patients will be in no way coerced to participate and if the patient agrees to participate, they will meet the attending dentist to review the details and ask any

questions before final acceptance as a study patient. The patient will be given a copy of the research study record form and the form and its contents will be explained. If they understand the form then they will be asked to estimate their VAS according to the VAS scale on the research study record. This will be recorded on the form.

Treatment will then commence in the usual way and the patient will be reminded to complete the form and expect a call between 10AM and noon the following two days.

Residents will receive training in performing acupressure and will be supervised by a licensed acupuncturist during all acupressure patient treatments.

Dental assisting staff members who make calls to collect patient data will be trained by participating study doctors. Completed patient record sheets will be handed to the Dental Clinic Manager immediately after data has been recorded. All patient information will be handled securely according to strict HIPAA standards.

Overview of tasks to be performed:

1. Completion of study proposal
2. Acceptance and review by study participants
3. Submittal for publication
4. Training of all participants
5. Begin admitting patients and data collection
6. Completion of data collection
7. Data summary and inclusion for analysis
8. Submittal of data for analysis
9. Review of data analysis
10. Promulgation of research paper pre-publication
11. Submittal for publication
12. Total timeline is one year from start to finish

Significance of the study: The current climate of reducing medication for pain would be the direct effect of this study. The stakeholders will gain valuable skills in better addressing post-operative pain management.

Dissemination of the study results: Study results will be submitted for simultaneous publication in peer reviewed dental and acupuncture journals.

Budget: A proposal budget will be funded with two parts. Treatment and data collection will be covered by including these activities within the normal resident and staff dental department budget. Data analysis will be financially supported by St Joseph's University Medical Center research funding.

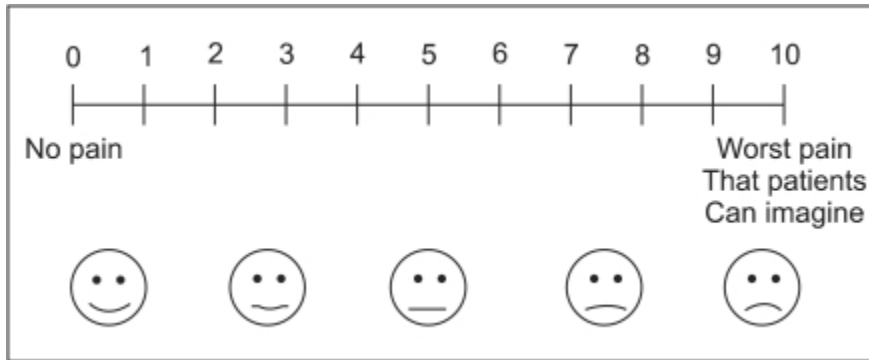
Patient Record Form, Figure 1

Dear Dental Patient, _____ Date _____

Thank you for participating in our research to measure pain and the use of pain relieving medication. Please look at the picture and pick a number that shows how much pain you have just before your dental treatment started. Then pick a number for your pain before bedtime, morning pain, next night bedtime pain, and then following morning pain.

Day of treatment: Pain before treatment _____ Pain before bedtime _____

Day after treatment: Pain next morning _____ Pain next bedtime _____



Please tell us if you needed any pain medication after your dental treatment. Each time you take pain medication write the number of pills of each type you took and the time and date. Common pain medications are: Acetaminophen (Tylenol) 325 milligrams, Ibuprofen (Motrin, Advil) 200 milligrams, Aspirin (Bayer) 325 milligrams, Opioid medicine (Codeine) 5 milligrams, or other pain medications.

If you did not use medicine after your treatment, please check here _____, or fill out the form below.

Date	Time	Type of Medicine	Milligrams per pill	Number of pills

Thank you for your help. Someone from the St Joseph’s Dental Clinic will call to collect this information, or you can drop it off at 11 Getty St Joseph’s Dental. If you have any questions. Please call the dental clinic at 973-754-2000.

Patient Data Collection Form, Figure 2

Patient Name _____ Medical Record Number _____

Date Started _____ Procedure _____

VAS Start _____

VAS Bedtime _____

Vas Morning _____

VAS Bedtime _____

VAS Morning _____

Meds Yes _____ No _____

Med Use Table

Date Started	Time of Use	Type of Medication Taken	Number of Milligrams Per Tablet or Pill	Number Taken

Medication _____ Total Milligrams _____

Interventions _____

Complications _____

Completed Study _____

Name of Record Taker _____

Date of Record _____ Telephone _____ Delivered _____

Record Checked By _____ Control _____ Treatment _____

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The authors receive no financial benefit related to this article.

For any of our EJCAM readers who have not read about or have not seen Dr John McDougall speaking or writing about medicine, disease, and nutrition, here is an opportunity to read an article that he wrote for his newsletter in May, 2017. This article deals with the very important topic of whether legumes (beans) are either good or bad to eat. Dr McDougall has very graciously allowed EJCAM to reprint this article and we can thank him by visiting his website for further information: www.drmcdougall.com.

Lectins: Plants' Self-Defense System Circuitously Kills People

By Dr John McDougall

Plants have evolved to synthesize a variety of toxic substances to cope with their environment abundant with predators (insects, animals, etc.) and microbes (bacteria, viruses, fungi, parasites, etc.) and, thereby, fight an ongoing battle for survival. Lectins are a class of these natural disease-fighters consisting of proteins. Ubiquitously found in the plant kingdom these precisely synthesized proteins (lectins) combine with specific sugars (such as those on the surface red blood cells). (The word "lectin" is derived from Latin—"Legree," which means to pick or select.)

The first such carbohydrate-binding proteins, lectins, were found in 1888 in the seeds of the castor bean. Lectins have gained the most attention since their discovery as a result of their ability to bind to and agglutinate (clump together) red blood cells and have been used for blood typing (ABO classification and others); hence the lectins are also commonly called "hemagglutinins."

Common dietary staples, such as cereal grains, legumes, and fruits have relatively high concentrations of a variety of different lectins. Although all foods contain some lectins, only about 30% of the foods we eat have potentially troublesome amounts. Legumes (including beans, soybeans and peanuts) and grains (wheat is commonly singled out) have the greatest content, followed by dairy, seafood, and plants in the nightshade family (such as potatoes).

The toxicity of lectins to people (and other animals) can vary greatly, ranging from merely anti-nutritional properties (such as producing excess bowel gas) to lethal effects. An important example of a highly toxic lectin is the phytohemagglutinin (PHA). It is found in the highest concentrations in uncooked red kidney beans and white kidney beans (also known as cannellini), and it is also found in lower quantities in green beans, broad beans (fava beans), and other common beans. Especially when consumed raw, all beans can uncomfortably affect the digestive tract, commonly with an overabundance of gas; however, vomiting, cramping, and diarrhea are experienced; fortunately, rarely requiring hospitalization.

A Little Truth Turns into Deadly Lies

The exaggeration of the frequency and severity of adverse reactions to lectins has caused these foods (grains, beans, and most other plant foods) to be deemed the major dietary issues underlying most chronic human illnesses. As expected, this has brought about the popularity of a variety of "low-lectin diet plans." Translated into the foods on your plate, lowering lectins according to these plans means, avoiding wheat, rice, corn, potatoes, all beans; and to instead to obtaining daily calories from the two

major categories of food poisons: animals and vegetable oils. The ultimate outcome of asking people to seek health by "lectin-avoidance" soon means overweight and obesity; and not long afterwards, diabetes; heart attacks; arthritis; cancer of the breast, colon, and prostate; and much more pain and suffering.

Thus, this pathway of abstaining from lectin-containing foods (grains, beans, and potatoes) circuitously kills people, by recommending for them to instead eat the only remaining foods: animals and vegetable oils. The basic fallacy has so far resulted in at least two best-selling, "low-carb-leaning" diet books: Dr. Gundry's *Diet Evolution: Turn Off the Genes That Are Killing You—and Your Waistline—and Drop the Weight for Good*, and *Eat Right for Your Type: The Individualized Blood Type Diet Solution* (based on how different ABO blood types react differently with the various specific protein lectins in commonly consumed foods).

This distracting nutritional nonsense also contributes to the real possibility of total species extinction for Planet Earth; Similar to how misinformation widely spread by two popular theories: 1) the gluten- and 2) GMO-containing-foods are our greatest threats to health. The "anti-lectin" diet joins the gluten- and the GMO- dogma to distract billions of people from recognizing the true sources of chronic epidemic human diseases and rapid destruction of Planet Earth: the livestock industries.

Lectins in Plants Are Very Healthful

While the various kinds of lectins cause different negative reactions (mostly minor in consequence), there are also health-promoting effects from these proteins that can decrease the incidence of epidemic deadly diseases. Live human population research and within the laboratory setting investigations demonstrate that lectins have protective effects against viruses and other microorganisms, and are potent modulators of immune responses, cell growth, and healing, and can cause cancer regression.

High Lectin-containing Starches Promote a Healthy Life

* A recent review (2012) of 45 prospective cohort studies and 21 randomized-controlled trials (RCT) compared people who rarely or never consume whole grains with those reporting an average consumption of three to five servings per day and found by comprehensive meta-analysis that those consuming the grains had a 26% reduction in the risk of type-2 diabetes and a 21% reduction in the risk of heart disease (independent of known CVD risk factors). Furthermore, there is an inverse relationship between whole grain intake and weight gain. Examples of whole grains included whole wheat, dark bread, oats, brown rice, rye, barley, and bulgur.

* Whole Grains—Summary of American Society for Nutrition 2010 Satellite Symposium concluded, "There is consistent epidemiological evidence that whole grain foods substantially lower the risk of chronic diseases such as CHD, diabetes, and cancer, and also play a role in body weight management and digestive health."

* The Journal of Cereal Science in 2014 reported their review on the health effects of dietary lectins: "... as consumed in cooked, baked, or extruded foods do not support negative health effects in humans. In contrast, consumption of WGA (wheat germ agglutinin) containing foods, such as cereals and whole-grain products, has been shown to be associated with significantly reduced risks of type 2 diabetes, cardiovascular disease, some types of cancer, as well as a more favorable long-term weight management... Despite numerous speculative assumptions that wheat germ lectins cause intestinal

damage and disease, there is at present neither evidence that this is the case nor reason to recommend the healthy population to abstain from whole-grain food products."

The same review concluded, "Hitherto, the consumption of most whole-grain foods prepared for human consumption (cooked, baked, extruded) has been associated with numerous health benefits. It is therefore recognized and advised to consume breakfast cereals and a variety of whole-grain foods. Although this advice is contradicted by some health professionals based on their lectin contents, it can be concluded from the current available scientific evidence that there are no data to generalize this negative opinion to consumption of whole grain products."

* Lectins have also drawn a lot of attention because of their possible anti-tumor activities. The anti-tumor activities of different plant lectins has been shown for several cancer cell cultures, such as, human hepatocarcinoma cells, human bladder cancer cells, human melanoma cells, and rat pancreatic cells. It has also been suggested that some lectins induce apoptosis (death) and/or autophagy (eating and destroying) of cancer cells.

* Based on the existing evidence, there are four consensus authoritative statements from national organizations, namely the U.S. FDA, the U.K. Joint Health Claims Initiative, and the Sweden and Danish Dietary Recommendations that link consumption of whole grains with improved heart health. For example, U.K. products composed of whole grains can claim, "People with a healthy heart tend to eat more whole grain foods as part of a healthy lifestyle." In Sweden, products with at least 50% whole grains can state, "A healthy lifestyle and a balanced diet rich in whole-grain products reduce the risk of heart disease."

Note: Lectins are not gluten proteins and should not be confused with them. Gluten intolerance is uncommon (fewer than one in a hundred people) but very important for those who have celiac disease.

Lectins Are Health-promoting, Not Health-harming

The healthfulness of plants, especially grains and beans, must be considered when planning a starch-based diet. But at the same time, the risk of adverse side effects, even as common as little as extra bowel gas (flatus), must be minimized for enhancing the popularity and consumption of these important food groups. Research shows that by cooking (at temperatures above 176 F or 80 C), soaking (for 12 hours in water), sprouting, and/or fermenting foods that are high in lectins can easily reduce their lectin content to negligible amounts. My August 2002 McDougall Newsletter will teach you plenty about taming bad cramps and reducing socially unpopular gas.

Bad Farts? Meat Stinks!

(From the August 2002 McDougall Newsletter)

By about the fourth day of each McDougall Live-in Program participants have become close friends. As they loosen up with each other they begin to discuss one noticeable side effect of my diet. They make jokes, like, "When we walk, we talk," or "Have you heard a good McBugle lately?" I must admit that one unavoidable change that comes with the diet I recommend is the production of more bowel gas – but that's not all bad as you will learn when you read this article.

Intestinal gas, called flatus, when released from the lower bowel can be a social problem. On the average gas is passed 10 to 20 times a day, and the volume averages 3 ounces (90 ml) of gas per passage

on the usual American diet (range from 17 to 375 ml).¹ The average daily volume of flatus is 705 ml (24 ounces) (range of 476 to 1491 ml). At the very lower limit of gas production, a liquid diet devoid of all complex sugars has been found to produce an average of 1.5 flatus passages in 24 hours with a total output of 214 ml/24 hours.² (Yes! Research dollars actually are spent to study this.) You can safely assume the upper levels in frequency and volume for anyone on the McDougall Program.

Unfortunately, some people avoid a healthy plant-based diet because they have discovered that all that fiber found in plant-foods and especially beans, causes more gas, even though they realize these same foods relieve constipation and irritable bowel syndrome, and help prevent heart disease and cancer. This is just another example of how our decisions about the way others perceive us often are more important than decisions for our health.

I submit two lines of defense for my Program: First, when human beings were designed, millions of years ago, we lived outdoors, with few confining walls – so bowel gas was unnoticeably dispersed into thin air. Second, bowel gasses produced from a plant-based diet are much less malodorous than are those from a diet rich in animal products.

The Business of Flatology:

Flatus, more commonly known as farts, and delicately referred to as "passing wind or gas," is a source of discomfort and embarrassment for many people, particularly women.³ Flatulence is the condition of the bowels being overdistended with gas. Flatology is the scientific study of flatus. In order to study flatus, dedicated men and women have tubes placed in their rectums, attached to impermeable plastic bags, which they wear all day long to collect the gas. The judges who personally evaluate the odor of the gases with their noses must be especially admired for their dedication to the science of flatology (I'm serious).

Two Main Gas Sources:

1) Swallowed air. Aerophagia is the swallowing of air and is usually followed by eructations (burping). For some people the amount of gas swallowed can cause flatulence. Swallowed air can be determined to be the source of the excess bowel gas by finding a large amount of nitrogen in the flatus sample. About 80% of air is nitrogen. Determining that the excess bowel gas is due to swallowed air, rather than a problem with the bowel itself, can save an expensive and uncomfortable series of tests for the patient.

2) Bowel Produced Gas. The major source of gas in the bowel for almost everyone is the normal metabolic activity of colonic bacteria on our partially digested foodstuffs. Carbohydrates that have not been absorbed by the processes of normal digestion with enzymes in the small intestine are commonly known as dietary fiber. These undigested fibers move into the large intestine (colon) where bacteria break them down by the process known as fermentation into a gaseous mixture consisting primarily of: nitrogen (N₂), oxygen (O₂), carbon dioxide (CO₂), hydrogen (H₂) and methane (CH₄). These gases are all odorless and colorless. There are also small amounts of odoriferous sulfur-containing substances produced, like hydrogen sulfide, methanethiol, and dimethyl sulfide.

The most common source of undigested carbohydrate in the American diet is lactose from dairy products, such as milk, skim milk, and yogurt (cheeses contain little lactose). The second leading gas-

producing foods are legumes (beans, peas, and lentils). Whether they are served as "beans with hot dogs," or in a "low-fat vegetarian chili," legumes all cause gas because they contain two relatively indigestible sugars, raffinose and stachyose, that end up in the large intestine.

All unrefined plant foods, including grains, fruits, and vegetables, contain undigestible fibers that end up being fermented in the large intestine by bowel bacteria into odorless gas. Refining grains into white flour and rice removes most of the indigestible carbohydrates (dietary fiber). White rice has been shown to be one complex carbohydrate that is nearly completely absorbed by the small intestine resulting in almost no indigestible carbohydrate for bacteria to turn into flatus.⁴

The Sulfur Stinks!

The offensive odors of flatus are caused by tiny amounts of sulfur-containing gases. Sulfur gases are detected by our noses in concentrations as low as 1 part in 100 million and are often described as smelling like "rotten eggs." This may or may not surprise you, but the flatus from women was found to have higher concentrations of hydrogen sulfide and greater odor intensity than from men.⁵ In a scientific experiment on flatus, odor was rated from 0 (no odor) to 8 (very offensive) by the highly trained noses of two separate judges. Women were rated with an average score of 5.45 and men an average of 3.95. However, men passed higher volumes of gas than did women (119 ml vs. 88 ml/passage). As a result the volume of sulfur gasses in each passage did not differ between men and women.

To make odor matters worse, a large portion of the sulfur that does not leave with the feces and flatus is absorbed through the intestinal walls, into the blood stream where it is excreted in the urine or into the breath and sweat as foul breath and body odor.⁶ Body odor, as the perfume industry knows well, is a primary source of communication between people, effecting our emotions, and causing feelings of physical attraction (or repulsion) and love.⁷

Animal Foods Produce Sulfur:

The main source of sulfur in the feces and intestinal gas is from animal foods, and more specifically, the sulfur-containing amino acids found in animal proteins. All proteins in nature are made from the same 20 amino acids arranged in different sequences – just as the 26 letters of the alphabet make up all the words in a dictionary. Methionine, cysteine, cystine, and taurine are the amino acids that contain sulfur in their structure.

Small amounts of sulfur also come from additives and vegetable foods. Inorganic sulfur, as sulfites, sulfur dioxide, bisulfate, or metabisulfite, is used routinely in the preservation of processed foods and beverages – like a common practice in salad bars. Most vegetable foods are low in sulfur, except for a few like garlic, broccoli and cauliflower.

The proof that animal products are the main source of these offensive gases comes from an experiment on five healthy men on 5 different diets for 10 days each.⁸ The meat intake ranged from 0 grams/day to 600 grams/day (20 ounces). On the vegetarian diet, 0.22 mmol/kg of fecal sulfur material (sulfides) was detected and on the meat diet, 3.38 mmol/kg was found. Therefore, more than 15 times more sulfur was produced with the meat diet, than with the no-meat diet.

Animal products are the main sources of the sulfur-containing amino acids.⁹ Compare the relative amounts of methionine in these foods (based on calories):

Beef provides 4 times more than pinto beans

Eggs have 4 times more than corn

Cheddar cheese has 5 times more than white potatoes

Chicken provides 7 times more than rice

Tuna provides 12 times more than sweet potatoes (Giving a whole new understanding of "fish farts.")

Sulfur is Also Toxic:

The foul odors of sulfur gases should be a clear message for the perpetrators that something is terribly wrong down below and deserves our immediate attention. These sulfur-containing gasses are extremely toxic to the tissues and they may play a role in a life-threatening inflammatory bowel disease, called ulcerative colitis.¹⁰⁻¹¹

Levels as low as 0.5 – 1.0 mmol/L have shown deleterious effects on the human colon.¹² Therefore, small amounts of beef (or the protein in any animal product) can produce levels of sulfur known to be toxic to the cells of your colon.

Gas Solutions:

For people following the McDougall Program, adjustment to the new high-fiber foods occurs in time, and the amount of gas produced diminishes in about 2 weeks. Much of this adjustment comes as a result of changes in kinds and numbers of bowel bacteria.¹³

Avoid Gassy Foods: Milk products are troublesome for most non-Caucasian people (Asians, Blacks, Hispanics, Indians, Eskimos, etc.) who can't digest lactose; about 20% of Caucasians also have this trouble. All legumes--beans, peas, lentils, etc. – bother all races of people indiscriminately. You do not need to consume beans on the McDougall diet – all the protein you need comes from the other less gassy starches and vegetables you may choose. Some individuals notice trouble with onions, bagels, pretzels, prunes, apricots, cabbage, carrots, celery, green peppers, broccoli, cauliflower, bananas, Brussels sprouts, and wheat germ. But this list of offenders depends on personalized sensitivities and, therefore, could incriminate almost any food.

Become a Pure Vegetarian: With the elimination of all animal products the primary source of the offensive odors – the sulfur-containing amino acids – is removed.⁸ Within a few days you could change from "silent but deadly" to "still silent but lightly fragrant."

Thorough cooking: Almost everyone seems to have a method of "de-gassing" beans. Many cooks claim to have inherited the secret process from an authoritative grandmother. Thus, I've heard some say "add potatoes to beans during cooking," or "soak beans first, then discard the rinse water." Our personal experience has been these methods are of no benefit. Soaking helps, whether or not you discard the original rinse water, simply because soaking starts the breakdown of the carbohydrates and assists cooking. Thorough cooking helps by breaking down indigestible complex carbohydrates into simpler, more digestible forms. Even though cooking will break down many of the gas forming complex

carbohydrates found in grains and vegetables, the ones in legumes are heat stable and resistant to cooking.¹⁴ However, germination (sprouting) for 1 to 4 days results in utilization of the bulk of these legume sugars.¹⁵

Sprouting beans: One reliable way to "de-gas" legumes is to sprout them first. Cover beans with water for 12 hours, drain off water, lay damp paper towels on the bottom of a baking dish, spread out beans on the moist towels in a single layer, and then let them sprout for the next 12 hours. When you notice tiny white shoots (1/16") beginning to appear they are ready to cook. The tiny plant is utilizing the indigestible sugars for growth.¹⁵ Needless to say, beans will take less time to cook after sprouting.

Beano: A product on the market, Beano, in the form of liquid drops and tablets, contains enzymes that are capable of breaking down the indigestible sugars in beans, peas, and lentils. You add a couple of drops to the first bite of food and then you can eat the rest without the problem of bowel gas.¹⁶ (Or so the label says) We do not use the actual brand Beano because it is derived from fish. Choose other "vegan" products with the same enzymes (such as Vegan-zyme, a digestive enzyme brand with the active ingredient, alpha-galactosidase).

Activated Charcoal: Activated charcoal has been used to treat intestinal gas in India and Europe for many years, and has only recently been gaining acceptance in the United States. In the laboratory, activated charcoal was found to bind and deactivate sulfur gases. Unfortunately, this benefit was not found when human subjects were asked to take 0.5 grams of activated charcoal four times a day.¹⁷⁻¹⁸ This failure is probably because all of the active binding sites on the charcoal are filled with substances in the feces long before the charcoal reaches the large intestine where the sulfur gas is present.

Pepto-Bismol (Bismuth subsalicylate): Four tablespoons (524 mg) four times a day for 3-7 days produced a greater than 95% reduction in fecal hydrogen disulfide release.¹⁹ (Pepto-Bismol contains substances similar to aspirin which may cause problems in those who have warnings to stay away from aspirin.)

Avoid Medications: Acarbose for diabetes, and lactulose for constipation can cause flatus because they cause an increase in sugars in the large intestine. Many other medications are also known to cause flatulence and therefore any medication should be suspect if you notice a problem with excess bowel gas after starting a new medication.

Probiotics: A change in the kinds of bacteria in the large intestine – the intestinal microflora – can result in a reduction in flatus. In a controlled study, volunteers with irritable bowel syndrome (IBS), were fed a drink with *Lactobacillus plantarum* – a friendly form of bowel bacteria – for four weeks. Flatulence was rapidly and significantly reduced in the test group compared with the placebo group (number of days with abundant gas production was 6.5 before and 3.1 after the intervention for the test group vs. 7.4 before and 5.6 after for the placebo group).²⁰

Antibiotics: Nonabsorbable antibiotics (like Rifaximin) which kill the anaerobic gut bacteria can reduce the amount of flatus and improve symptoms in very gassy people as a last resort effort.²¹

My advice: Meat makes farts stink – become a pure vegetarian. Gas is natural – have you ever ridden a horse? Enjoy the gas. The horse seems to.

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Some web sites to expand your understanding of flatus:<http://www.heptune.com/farts.html>,
<http://users.utu.fi/s/snapir/fart/>

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EJCAM publishes conference summaries. However, in this case we were able to present an overview of this upcoming conference and a review will be presented in our next EJCAM volume.

A report of the upcoming 2018 International Acupuncture for Pain Forum and First Advanced Training Course in Acupuncture for Pain

By Karen Lin, LAc

Opioid addiction in the United States has reached epidemic proportions and is threatening not only public health but economic output and national security. Acupuncture as an alternative treatment for pain has been recommended more frequently. The forum course was designed for experienced acupuncturists (minimal 3 years license) to learn some of the latest acupuncture techniques for treating pain related to the pain opioid disease topic. This conference was sponsored by 16 organizations including New Jersey Association for Acupuncture and Oriental Medicine, NJAOM.

The forum will begin on Friday, June 29, 2018 and will continue into Sunday July 1, 2018. It will be held at The East LaGuardia Sheraton Hotel in Flushing New York. Attendees will hear presentations and see demonstrations by leading acupuncturists from China and the United States.

The schedule is listed below and the particulars to register for the forum are following below.

June 29, Friday morning 8:00am-12:00pm

1.Topic: Latest Developments in Acupuncture Techniques for Pain

Speaker: Dr. Fanrong Liang, Chengdu University of TCM

2.Topic: The Mechanisms and Clinical Strategies of Acupuncture for Pain

Speaker: Dr. Nenggui Xu Guangzhou University of CM

June 29, Friday Afternoon 1:00-4:30pm

3.Topic: Report on Big Data Clinical Trial on Acupuncture for Pain

Speaker: Dr. Jianqiao Fang, Zhejiang University of Chinese Medicine

4.Topic: Latest Developments in Scraping Therapy for Pain

Speaker: Dr. Qiang Wu 福建中医药大学 Fujian University of TCM

June 29, Evening Demonstration 5:00pm - 8:00pm

Dr. Sanhua Leng, Dr. Jing Liu Demonstration and Clinical Experience Exchange

June 30, Saturday Morning 8:00am- 12:00pm

Topic: What is Migraine and Does Acupuncture have a Role?

5. Topic: What is Migraine and Does Acupuncture have a Role?

Speaker: Dr. Mark Green, Mount Sinai School of Medicine

6. Topic: Opioid Crisis and Acupuncture's Role in Prevention

Speaker: Dr. Shengping Zou, NYU Langone Health

7. Topic: Recent Advances in Pain Management and Non-drug Approaches

Speaker: Dr. Cece Chen, NYU Langone Health

June 30, Saturday Afternoon 1:00pm -4:30pm

8. Topic: Mechanistic study of opioid addiction and Drug Developments for Addiction Treatment

Speaker: Dr. Jiabei Wang, University of Maryland

9. Topic: Clinical Trial Design for Pain Management Interventions

Speaker: Dr. Steven P. Cohen Johns Hopkins Medicine

June 30, Saturday Evening Forum Gala 6:00pm-10:00pm

10. Pain & Acupuncture Points by Prof. Bing Zhu. Chinese Academy of Chinese Medicine

11. Vickers Report on Acupuncture for Pain: Data from Multiple Trials by Emily Vertosick,
Memorial Sloan Kettering Cancer Center

July 1, Sunday Morning Forum 8:00am - 1:00pm

12. Dr. Jianqiao Fang: The Best Personal Experience with Acupuncture for Pain, Zhejiang University of Chinese Medicine

13. Dr. Neel Mehta: Pain Management in Hospital and Non-hospital Settings in USA, Weill Cornell Medicine

14. Dr. Jiabei Wang/Future research for opioids, University of Maryland

15. Dr. Fanrong Liang: The Best Personal Experience with Acupuncture for Pain, Chengdu University of TCM

16. Dr. Nenggui Xu: The Best Personal Experience with Acupuncture for Pain, Guangzhou University of CM

17. Dr. Yanmei Li/TCM Treatment for Migraine, Henan University of TCM

18. Dr. Jing Liu: Systemic treatment for pain with acupuncture: regulating body function and structure, Boston Center of Liu Jing Acupuncture

19. Dr. Ruanjin Zhao: Alleviate the Common Clinically Intractable Pain with TCM, H. Lee Moffitt Cancer Center & Research Institute

Sunday Afternoon Sessions 2:00pm-4:30pm

Room 1

Dr. Qiang Wu: Scrapping Therapy Demo, Fujiang University of TCM

Dr. Baoku Liu: Acupuncture for Soft Tissue Knot and Scar Reduction, ATC

Room 2

1, Dr. Ruanjin Zhao: Alleviate the Common Clinically Intractable Pain with TCM, H. Lee Moffitt Cancer Center & Research Institute

2. Dr. Decheng Chen: Kinetic Acupuncture for Soft Tissue Injuries, New York Center of Decheng Acupuncture

Room 3

Dr. Sanhua Leng: Dr. Leng's Special Acupuncture Method for Pain, ATCMS

Room 4

Dr. Jing Liu: Systemic treatment for pain with acupuncture: regulating body function and structure, Boston Center of Liu Jing Acupuncture

Dr. Jun Xu: Rehabilitation medicine and Acupuncture, ATCMS

The forum includes:

Two days of intensive courses and one day forum and demonstrations, plus Keynote Speech and Saturday evening gala dinner.

1. Designed for experienced acupuncturists (minimal 3 years license)
2. Limit to 50 attendees, first come first served
3. Date: June 29, 30, July 1 (Friday, Saturday and evening, Sunday)
4. Location: The East LaGuardia Sheraton Hotel in Flushing New York

5. CEU Credits: NCCAOM 30分
6. Registration Link: <http://atcms.org>