A Study of the Use of Ionic Foot Baths in Lyme, Co-infections, and Co-morbidities

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INTRODUCTION

The sheer number of individuals struggling with chronic health conditions has presented an enormous challenge to healthcare providers. Many of these people have made their way into the clinics of integrative practitioners, who are trying to assist in their healing journey, utilizing the various tools of the functional medicine toolbox. Despite state-of-the-art interventions and therapeutics, many of those with chronic health challenges have failed to improve despite meticulous care while pursuing root cause evaluations and treatments.

Resonance Wellness Center, a private health center located in the Midwest, has evaluated and optimized the health of many of its members via therapeutics focused on chronic Lyme disease/co-infections. However, despite these efforts, some individuals have failed to improve. Center owner, Lisa Tiedt, and Medical Advisor, Dr. Michelle Perro, began a small study of their most challenging clients via the addition of the ionic foot bath, produced by A Major Difference, Inc., to their Lyme/co-infection protocols.

The ionic foot bath in this study releases toxicants from the body through the ionization of water. Both feet are placed in a warm water bath along with an array. Non-iodized sea salt is added, if indicated. The positive and negative ions created through the process of electrolysis through water mobilize the release of the charged toxicants through the feet into the water and with the body's detox pathways. The filtered current promotes further detoxification through the relaxation response.

There are few risks involved for individuals employing this device. It is not recommended for those with pacemakers or any other battery-operated or electrical implant, during pregnancy or nursing, organ transplant recipients, in individuals with a history of blood clots, and those on medication, the absence of which could cause mental or physical impairment.

Guidelines for improving the outcome from a foot bath detox include maintaining a well-hydrated state, avoidance if there are wounds or cuts on the feet, and creating a regimen appropriate to the individual user. Normally, two to three times a week for 30 minutes is initially recommended. As with any intervention, consultation with the client's medical providers is recommended. The authors of this study do not make any health claims prior to enrollment in this project.

Live Blood Analysis

Live blood analysis is an assessment tool where a drop of blood from an individual's finger is placed on a microscope slide and is viewed under a darkfield microscope at a magnification of up to 1,000 times. The image is displayed on a monitor and is visible to both the practitioner and client. Live blood analysis (LBA) can be extremely helpful in elucidating the status

TOP-LINE TRENDS AND LEARNINGS FROM AMD FOOT BATH STUDY

Foot bath study overview:

The document details an observational study on AMD foot bath detoxification effects, on participants that underwent ten 30-minute sessions over five weeks. The study highlights its impact on health conditions and metabolic waste clearance, a measure of toxicity mobilization.

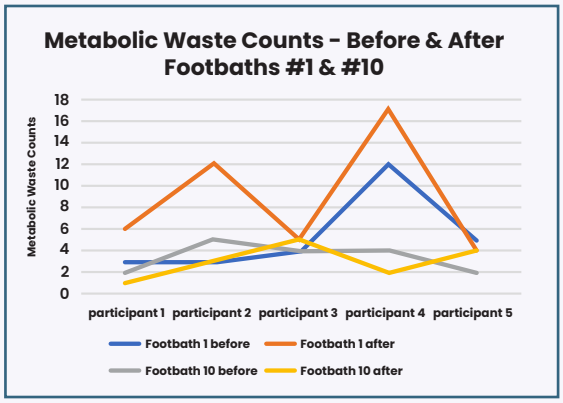
Foot bath study participants and diagnoses:

The study included five participants diagnosed with conditions such as Lyme disease, Bartonella, Babesia, mold toxicity, gut dysbiosis and/or Mast Cell Activation Syndrome (MCAS).

Foot bath study findings on detoxification:

- **The study observed a significant increase in plasma levels of metabolic waste, ranging from 25% to 300%, following a single 30-minute foot bath detoxification session. This finding suggests enhanced mobilization and clearance of toxins.**

- **After the completion of 10 foot bath sessions over 5 weeks, participants showed a remarkable reduction in metabolic waste, ranging from 33% to 383%. The types and amounts of toxins eliminated were closely aligned with each participant's specific health conditions, underscoring the personalized effectiveness of the AMD foot bath detoxification process.**



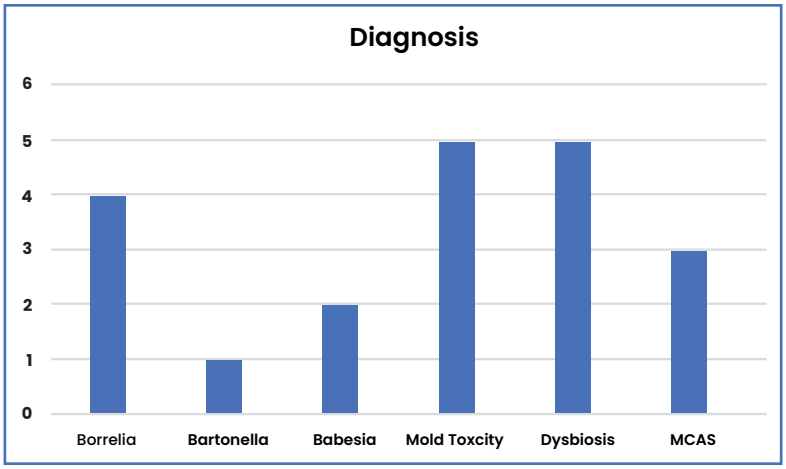
INTRODUCTION (CONT)

of blood, showing many and diverse aspects of one's state of health: including pathogens, toxicity, and overall biologic health. Our live blood interpretations are based on the work of Dr. Günter Enderlein, Ekkehard S. Scheller ND, Patrick Beaumont ND, and Gaston Naessens.

The methods employed in our analyses included LBA based on the work of Dr. Günter Enderlein. Dr. Enderlein was a towering figure in the fields of bacteriology and immunology, whose pioneering research has left an indelible mark on modern medical science. Born in Leipzig, Germany, in 1872, Enderlein dedicated his career to exploring the complex interactions between microorganisms and human health, a pursuit that would lead to groundbreaking discoveries and innovative therapeutic approaches with homeopathy and isopathic treatments.

Enderlein's meticulous studies revealed concepts in microbiology divergent from typical teachings with different implications for health and disease. His work demonstrated that his findings were influenced by the body's internal environment, or "terrain," a concept that underscored the importance of holistic health. His work laid the foundation for modern approaches to integrative and holistic medicine, emphasizing the importance of maintaining a balanced internal environment to promote health and prevent disease.[1]

An outline has been formulated with a study overview, the study participants and diagnoses, foot bath study findings via detoxification analysis, blood factors, and symptoms and tolerance. A special case of the healing of a recalcitrant foot verrucae is included.



TOP-LINE TRENDS AND LEARNINGS FROM AMD FOOT BATH STUDY (CONT)

Foot bath study findings on blood factors:

The study also observed improvements in constitutional blood factors, such as reduced red blood cell (RBC) coagulation, as well as the mitigation of extracellular inflammation which enhances the circulatory health and well-being of participants.

Foot bath study findings on symptoms and tolerance:

Participants reported improvements in various symptoms, such as sleep quality, energy levels, brain fog, muscle cramping, and joint pain after ten foot baths. Moreover, the study showed that adding a foot bath regimen increased the tolerance of Mast Cell Activation Syndrome (MCAS) participants to antimicrobials and frequency therapies that targeted tick-borne infections.

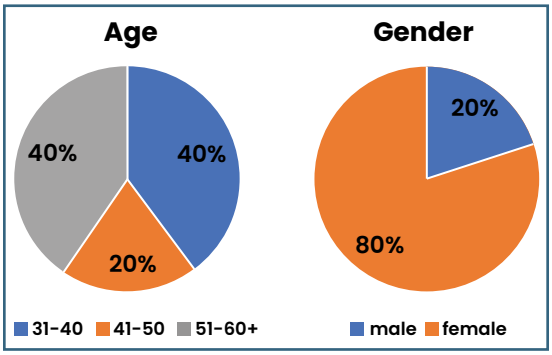
- **Participants with MCAS initially experienced an exacerbation of MCAS/histamine reactions, such as pruritus, face twitching, and/or tinnitus during initial foot baths, which subsequently resolved after three to five foot baths.**

Foot bath study case study on wart treatment:

The study included a case study of a participant with a recalcitrant wart. By adding foot bath detoxification alongside DMSO (dimethyl sulfoxide) salve, the biofilm around the wart was opened, exposing its depth and tissue buildup, which eventually led to the wart's recession. This demonstrates the potential for combining foot bath detox support with topical treatments for enhanced therapeutic outcomes.

Demographics:

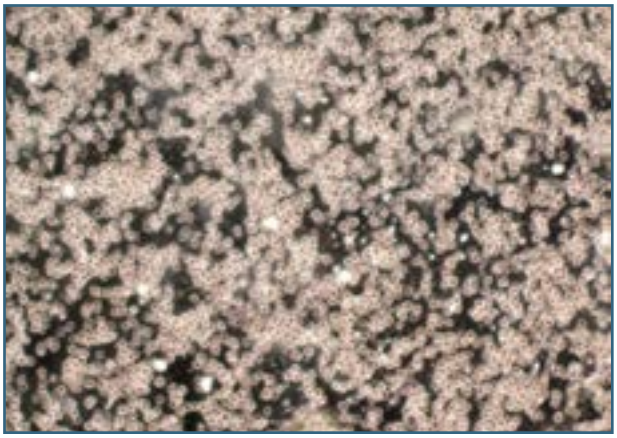
- **72 year old male, Steve - mold toxicity, gut dysbiosis**
- **38 year old female, Hailey - MCAS, mold toxicity, Lyme, Bartonella, gut dysbiosis**
- **39 year old female, Sarah - mold toxicity, gut dysbiosis, Lyme**
- **58 year old female, Jan - MCAS, mold toxicity, gut dysbiosis, Lyme, Babesia**
- **49 year old female, Jen - MCAS, mold toxicity, gut dysbiosis, Lyme, Bartonella**



BEFORE/AFTER EXAMPLE - FIRST 30-MINUTE FOOT BATH — PARTICIPANT #3

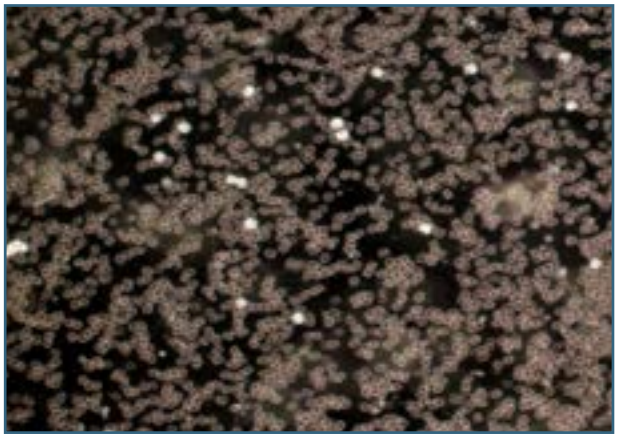
Reduced Red Blood Cell (RBC) coagulation, rouleaux and fibrin.

BEFORE:



Live blood in darkfield at 10X

AFTER:



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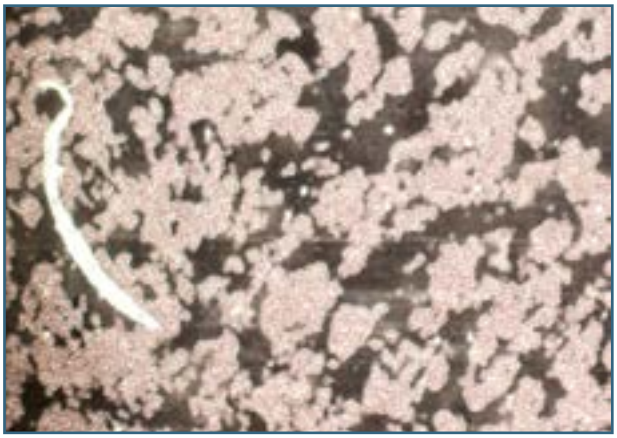
BEFORE/AFTER EXAMPLE - #1 & #10 30-MINUTE FOOT BATHS — PARTICIPANT #2

Reduced RBC coagulation, rouleaux, fibrin and Fibro Thallus.

BEFORE:



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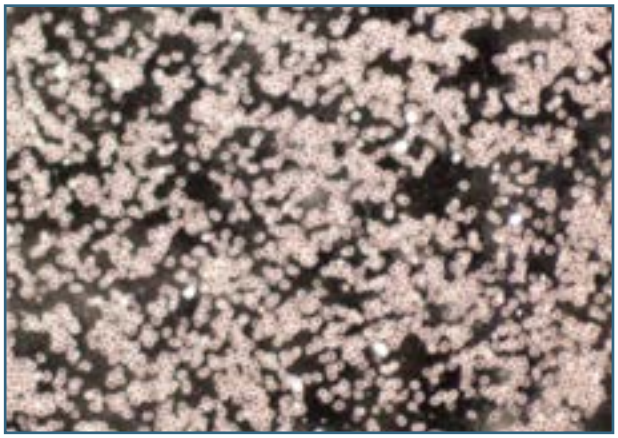

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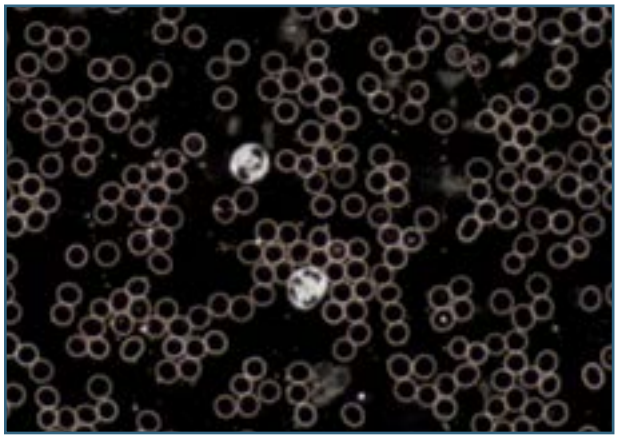
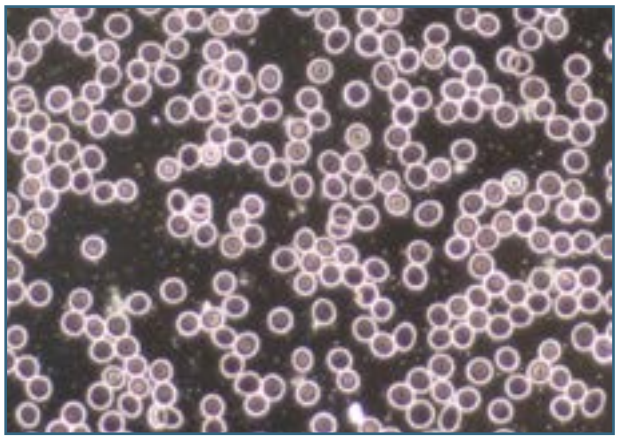


Live blood in darkfield at 40X

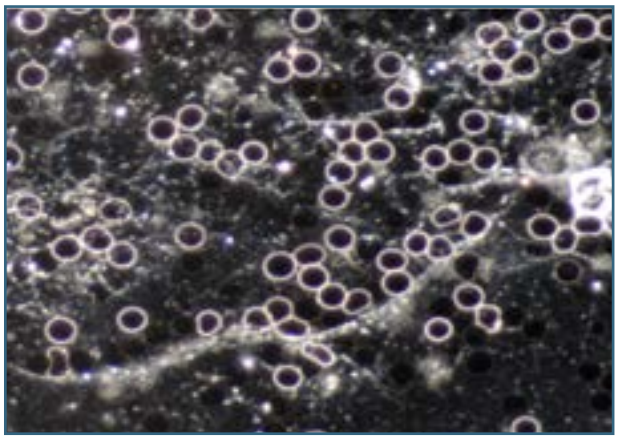
Biofilm and heavy metals excreted into extracellular matrix after nine foot baths.

BEFORE:



Live blood in darkfield at 40X

AFTER:



Live blood in darkfield at 40X

Darkfield Analysis Definitions

The following darkfield live blood analysis definitions are based on the work of the scientist mentioned previously[1, 2, 3]. Note that these concepts are not part of traditional medical teaching.

Symplasts are metabolic waste and toxic burden (i.e. "trash bags") in the plasma. Symplasts can cause hardening of the blood vessels and inhibit blood flow. Colors suggest different expressions of system or substance toxicity.

A. **Protoplast:** A type of symplast which is a bacterial or fungal cell with a plasma membrane, but no rigid wall, sometimes referred to as a cell wall deficient variant. They have gray-black centers with a white outline that appears to have bubbles on the parameter. Bright crystals within the protoplast are Actinomyces, likely produced in the bowel (i.e. "bacterial hotel").

B. **Mold symplast:** They have gray-black centers, with bright crystals in the center and irregularly shaped white outlines. Metabolic waste suggests fungal (e.g. Aspergillus) toxicity.

C. **Fibro Thallus:** A bright, thick, thread-like structure which commonly bends/folds on itself. Their presence indicates a terrain that is out of balance and a likely circulatory hindrance. The length of the strand indicates a longer circulation time. Individual pieces indicate it is getting broken up and excreted.

Red Blood Cell (RBC) and Other Plasma Conditions:

D. **Coagulation:** RBCs "stick" together. This is a circulatory hindrance and the circulation of oxygen, carbon dioxide, nutrients, and wastes is diminished because of a lack of available surface area on the cell.

E. **Rouleaux:** RBCs resemble a stack for rolled coins. This causes an obstacle to circulation and the oxygen and carbon dioxide carrying ability is greatly diminished because of a lack of available surface area on the cell.

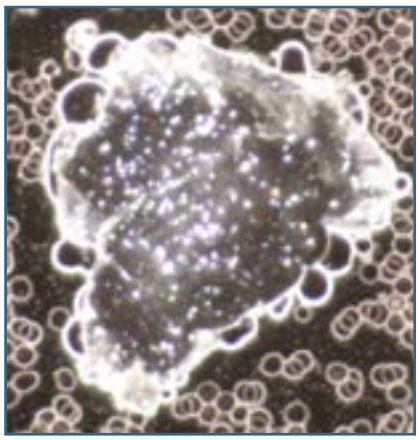
F. **Fibrin:** Filament-like sticks that appear in the plasma and can cluster around a local area of tissue damage and impair circulation. Their presence is suggestive of inflammation, which may also be related to elevated liver enzymes, inflammation, and joint problems.

G. **Biofilm:** A biofilm is a group of tiny living organisms, like bacteria, that stick to a surface, such as a rock, a medical device, or your teeth. These microorganisms produce a slimy, protective layer around themselves made mostly of sugars and other substances (matrix of polysaccharides).

This layer helps them stay attached to the surface and protects them from threats like antibiotics and the immune system. Biofilms can form in many places, from natural environments like rivers and lakes to human-made settings like water pipes and hospital equipment, where they can be difficult to remove and can cause infections.

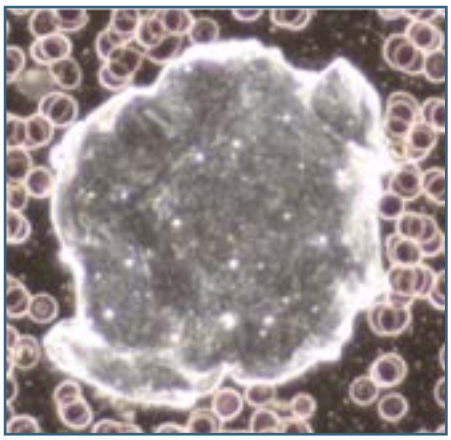
Symplasts

A. Protoplast



Live blood in darkfield at 40X

B. Fungal Symplast



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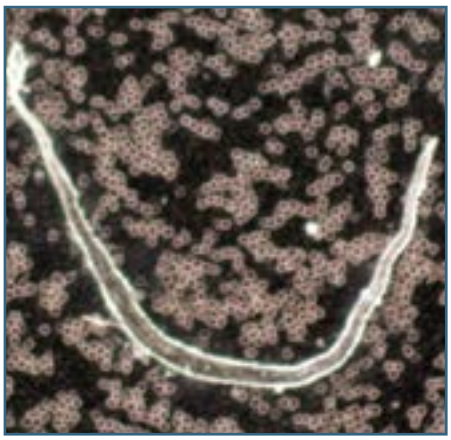
C. Fibro thallus



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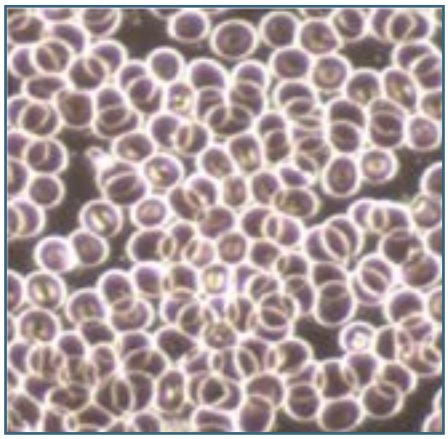
RBC and Plasma Conditions

D. RBC Coagulation

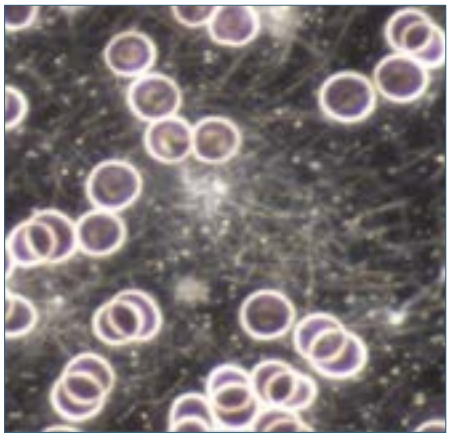


Live blood in darkfield at 40X

E. RBC Rouleaux

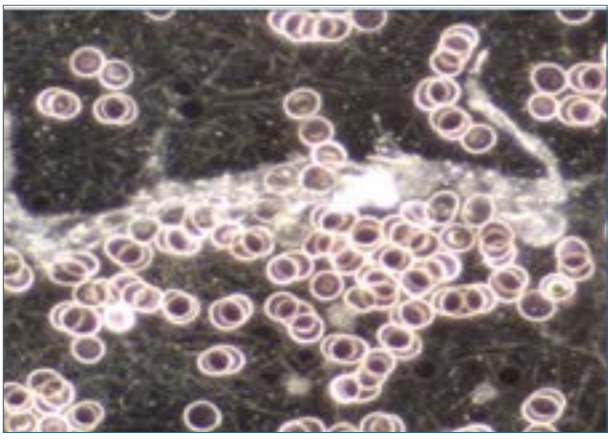
Live blood in darkfield at 40X

F. Fibrin in Plasma



Live blood in darkfield at 40X

G. Biofilm in Plasma



Live blood in darkfield at 40X

Chronic Wart

One month after starting the foot baths, and two weeks after starting DMSO salve (biofilm buster).

After 20 weeks of AMD Foot bath - 2 times a week

After 40 weeks of AMD Foot bath - 1 time to 1 time per month

Summary of Findings

Our findings demonstrate a significant improvement in the clinical status, and LBA profile of 4 of 5 of the enrolled clients in our study. After the conclusion of the study, those participants with significant improvements were then able to tolerate further therapeutics which were intolerable prior to the foot bath.

The one client who did not improve demonstrated a significant amount of heavy metal toxicity on her LBA. This finding signaled that this client might benefit from further testing and therapeutics focused on heavy metals/chelation. Thus, the foot bath intervention was able to help us define future directions for that individual.

Trends and Recommendations

Despite the small sample size of this study, the findings were not only extremely positive, LBA findings correlated highly with the subjective diminution of troubling symptoms reported by the clients. Consider the beneficial impact of an easy-to-administer/pain-free supportive intervention on our pediatric clients as well as very sensitive individuals. The study participants enjoyed the ease and the benefits of the foot bath being able to administer at home without complaints..

Based on her clinical experience, one of the authors of the study, Dr. Perro, has reported positive results in the use of the foot bath previously with children with autism (Autism Spectrum Disorder). The authors encourage future research using this beneficial tool for those dealing with PANS/PANDAS (Pediatric Acute-Onset Neuropsychiatric Syndrome and Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal Infections) as well.

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Disclosures

The authors did not receive any financial remuneration in performing the study. AMD supplied the foot baths which were returned upon completion of the project. All participants in the research project received full disclosure, details of the study, and de-identification prior to enrollment. There were no financial incentives provided. All enrollees enlisted completed the study.