Fungal Infections of the Skin

Fungal infections of the skin are very common and include athlete's foot, jock itch, ringworm, and yeast infections.

Athlete's Foot

Athlete's foot, also called tinea pedis, is a fungal infection of the foot. It causes peeling, redness, itching, burning, and sometimes blisters and sores.

Athlete's foot is a very common infection. The fungus grows best in a warm, moist environment such as shoes, socks, swimming pools, locker rooms, and the floors of public showers. It is most common in the summer and in warm, humid climates. It occurs more often in people who wear tight shoes and who use community baths and pools.

What Causes Athlete's Foot?

Athlete's foot is caused by a microscopic fungus that lives on dead tissue of the hair, toenails, and outer skin layers. There are at least four kinds of fungus that can cause athlete's foot. The most common of these fungi is trichophyton rubrum.

What Are the Symptoms of Athlete's Foot?
Signs and symptoms of athlete's foot vary from person to person. However, common symptoms include:

- Peeling, cracking, and scaling of the feet
- Redness, blisters, or softening and breaking down of the skin
- Itching, burning, or both

**Types of Athlete's Foot**

- **Inter-digital**: Also called toe web infection, this is the most common kind of athlete's foot. It usually occurs between the two smallest toes. This form of athlete's foot can cause itching, burning, and scaling and the infection can spread to the sole of the foot.
- **Moccasin**: A moccasin-type infection of athlete's foot can begin with a minor irritation, dryness, itching, or scaly skin. As it develops, the skin may thicken and crack. This infection can involve the entire sole of the foot and extend onto the sides of the foot.
- **Vesicular**: This is the least common kind of athlete's foot. The condition usually begins with a sudden outbreak of fluid-filled blisters under the skin. Most often, the blisters develop on the underside of the foot. However, they also can appear between the toes, on the heel, or on the top of the foot.

**Mycosis**

From Wikipedia, the free encyclopedia

"Mycoses" redirects here. For the journal, see Mycoses (journal).
A mycosis (plural: mycoses) is a fungal infection of animals, including humans. Mycoses are common and a variety of environmental and physiological conditions can contribute to the development of fungal diseases. Inhalation of fungal spores or localized colonization of the skin may initiate persistent infections; therefore, mycoses often start in the lungs or on the skin.

**Causes**

People are at risk of fungal infections when they are taking strong antibiotics for a long period of time because antibiotics kill not only damaging bacteria, but healthy bacteria as well. This alters the balance of microorganisms in the mouth, vagina, intestines and other places in the body, and results in an overgrowth of fungus.

Individual with weakened immune systems are also at risk of developing fungal infections. This is the case of people with HIV/AIDS, people under steroid treatments, and people taking chemotherapy. People with diabetes also tend to develop fungal infections. Very young and very old people, also, are groups at risk.

**Classification**

Mycoses are classified according to the tissue levels initially colonized.

**Superficial mycoses**

Superficial mycoses are limited to the outermost layers of the skin and hair.

An example of such a fungal infection is Tinea versicolor, a fungus infection that commonly affects the skin of young people, especially the chest, back, and upper arms and legs. Tinea versicolor is caused by a fungus that lives in the skin of some adults. It does not usually affect the face. This fungus produces spots that are either lighter than the skin or a reddish-brown. This fungus exists in two forms, one of them causing visible spots. Factors that can cause the fungus to become more visible include high humidity, as well as immune or hormone abnormalities. However, almost all people with this very common condition are healthy.

**Cutaneous mycoses**

Cutaneous mycoses extend deeper into the epidermis, and also include invasive hair and nail diseases. These diseases are restricted to the keratinized layers of the skin, hair, and nails. Unlike the superficial mycoses, host immune responses may be evoked resulting in pathologic changes expressed in the deeper layers of the skin. The organisms that cause these diseases are called dermatophytes. The resulting
diseases are often called ringworm (even though there is no worm involved) or tinea. Cutaneous mycoses are caused by *Microsporum*, *Trichophyton*, and *Epidermophyton* fungi, which together comprise 41 species.

One common disease is the athlete's foot which most commonly affects children before puberty. It is divided in three categories: chronic interdigital athlete's foot, chronic scaly athlete's foot, and acute vesicular athlete's foot.

**Subcutaneous mycoses**

Subcutaneous mycoses involve the dermis, subcutaneous tissues, muscle and fascia. These infections are chronic and can be initiated by piercing trauma to the skin which allows the fungi to enter. These infections are difficult to treat and may require surgical interventions such as debridement.

**Systemic mycoses due to primary pathogens**

Systemic mycoses due to primary pathogens originate primarily in the lungs and may spread to many organ systems. Organisms that cause systemic mycoses are inherently virulent. In general primary pathogens that cause systemic mycoses are dimorphic.

**Systemic mycoses due to opportunistic pathogens**

Systemic mycoses due to opportunistic pathogens are infections of patients with immune deficiencies who would otherwise not be infected. Examples of immunocompromised conditions include AIDS, alteration of normal flora by antibiotics, immunosuppressive therapy, and metastatic cancer. Examples of opportunistic mycoses include Candidiasis, Cryptococcosis and Aspergillosis.

**Treatment**

Antifungal drugs are used to treat mycoses. Depending on the nature of the infection, a topical or systemic agent may be used. Photochemotherapy or photopheresis is a technique used at medical centers for the treatment of mycosis fungoides.

An example of antifungal is fluconazole, or Diflucan, which is the basis of many over-the-counter antifungal treatments. Another example is amphotericin B (the A form being toxic) which is more potent. It is used in the treatment of the most severe fungal infections that show resistance to other forms of treatment and it is administered intravenously.

Drugs to treat skin infections are Tolnaftate (Tinactin), an over the counter topical; Ketoconazole, especially used to treat tinea versicolor and other dermatophytes; Itraconazole; Terbinafine (Lamisil); Echinocandins (caspofungin); Griseofulvin, commonly used for infections involving the scalp and nails.

Yeast infections in the vagina, caused by *candida albicans*, can be treated with medicated suppositories such as tioconazole and pessaries whereas skin yeast infections are treated with medicated ointments.

**Prevention**
Keeping the skin clean and dry, as well as maintaining good hygiene, will help larger topical mycoses. Because fungal infections are contagious, it is important to wash after touching other people or animals. Sports clothing should also be washed after use.

References[]

1. [^1]: "Dorlands Medical Dictionary: mycosis".

External links[]

- [Guide to Fungal Infections](#) - Patient-oriented, educational website written by dermatologists.
- [Doctor Fungus](#) - An educational website sponsored through unrestricted educational grants by numerous pharmaceutical companies
HIDDEN
CAUSES OF
Chronic Yeast Infections

- Feminine Hygiene Products
  (feminine products containing dioxin)
- Processed Foods—White Hi Glycemic Sugar
- Birth Control Pills
- Anti-Biotics Use + Abuse
- Synthetic Underwear
  (cotton is best to let the area breathe)
- Wet Bathing Suit Bottoms
  (DON’T leave them on after swimming)

Candida Feeds on
Corn + Sugar

Learn more at
IMUNE
The Subtle Balance of Nature's microorganisms, each can kill the other.

Bacteria

Virus  Fungus

Over use of Anti-Biotics have upset the balance of Nature, so more virus+fungus
Yeast Infections

What is a vaginal yeast infection?

A vaginal yeast infection is a common fungal infection caused by overgrowth of Candida, naturally occurring yeast. Yeast are normally found in a woman’s vagina in small numbers, but sometimes they can multiply and change the normal balance of bacterial growth. When the fungi begin to grow in excess, they may develop into candidiasis. These are the most likely fungi to cause yeast infections as well as infections in other moist areas of the body, such as the mouth (thrush), skin folds, and beneath the fingernails.

What are the risk factors for getting a yeast infection?

- Pregnancy
- Birth control pills
- Menstruation
- Recent or current use of antibiotics and certain other prescription medications
- Unprotected sexual activity
- Mismanaged diabetes
- A weakened immune system
- Often we don’t find the cause

What are the symptoms of yeast infections?

Women may experience:

- Vaginal itching
- Burning while urinating
- Pain during intercourse
- Swollen or red vulva
- Thick, white discharge resembling cottage cheese

Men with an infection may develop balanitis, an inflammation of the head of the penis, and may experience:

- Painful swelling on the tip of the penis
- Itching
- Red dots on the tip of the penis
- Dry peeling skin
- Burning during urination

Is a yeast infection a sexually transmitted infection (STI)?

A yeast infection (or candidiasis) is not considered a sexually transmitted infection. In fact, they are a very common and normal part of women’s lives. An estimated three in four women will have a yeast infection in their lifetime, and many of these women will have recurring infections. In rare cases, a yeast infection can be spread through vaginal intercourse among partners who have unprotected sex, but the risk is low. Like any other vaginal
infection, they should be treated immediately, and if you are sexually active and your partner is having symptoms, he or she should also seek treatment. In any case, sex should only resume once symptoms disappear.

Women commonly misdiagnose themselves with yeast infections when they need to be treated for other conditions. Recurring yeast infections can sometimes be a sign of an STI or some other condition that requires treatment, such as a bacterial infection. If you or your partner frequently experience some of the symptoms, it’s advisable to get tested to rule out STIs.

What if I experience any of the symptoms?

If you think you may have a yeast infection, but have never had one before, it is a good idea to see a health-care professional the first time to be diagnosed correctly before trying an over-the-counter treatment. It’s important to establish that they are truly yeast infections. Some women have a different vaginal discharge just before their period, and if it is itchy or irritating, it may be perceived as a yeast infection. There are many other things that can cause the same symptoms, and yeast creams may not fix the symptoms or can make them worse.

If the yeast species is resistant to the treatment used, the infections can recur, or never go away. In this case, your doctor can look for yeast under the microscope to confirm the diagnosis and can culture the yeast with a vaginal swab if the organism is resistant to treatment. Women who have confirmed recurrences of yeast infection in the week before menstruation can often get relief by taking a single tablet of a prescription medication each month about the time the infections have been recurring. Recurrent candidiasis (yeast infections) affects 5-8% of pre-menopausal women.

If you have a yeast infection, you and your partner should both abstain from sexual activity until the infection has been treated, or else you risk further irritating the vagina or re-infecting each other.

How are yeast infections treated?

Most yeast infections can be treated with over-the-counter antifungal (local) medications, but it’s recommended you consult a health care professional before trying anything, especially if you are pregnant. Talk to a health-care practitioner about all the prescription and non-prescription drugs you are taking before you start any treatment. Burning of the genital area and rash after application is a common side effect of the treatment.

Once the yeast infection is confirmed, it is usually easily treated by over-the-counter treatments or prescription medications. Over-the-counter treatments are easily available and usually less expensive, such as tablets or suppositories that are inserted into the vagina, or ointments and creams ( clotrimazole) that can be applied directly to the infected area for one to seven days. Prescriptions are typically taken in pill form and usually cure the infection faster, although they have more side effects like nausea and vomiting and are more expensive.

Some women do get cyclic yeast infections based on hormonal changes in the vagina. In this case, your options would include:

- Continue to treat the yeast infection each month
- Get the yeast infection pill (fluconazole) from your doctor and take it each month in the week before your period to prevent a yeast infection
- A yeast-free diet is also a treatment method for recurring yeast infections.

How do I prevent another infection?

A well-balanced diet with plenty of fibre can be the best preventative medicine. Wear loose dry clothing and avoid wearing wet clothing for extended periods of time.

Women can also take hygienic precautions to decrease the likelihood of developing an infection:

- Keep your genitals clean and dry, and rinse well after using soap.
- Avoid vaginal douching after sex.
- Never put anything in your vagina after it has been in your anus. After using the washroom, wipe from front to back.
Avoid vaginal deodorants and perfume products such as soaps that can irritate the vagina.

Wear underwear made of cotton instead of synthetic fabrics.

**Human Mycoses**

Fungi cause a wide variety of diseases in humans, and the areas we discuss are listed below. You may also want to refer to the Infectious Disease Society of America-Mycoses Study Group (IDSA-MSG) Practice Guidelines for treating invasive mycoses. These cover aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, cryptococcosis, histoplasmosis, and sporotrichosis and are available at the IDSA website. Finally, please be sure to refer to our legal disclaimer.

*(Site development note: our discussions are currently relatively superficial for all the infections except candidiasis.)*

- Aspergillosis
- Blastomycosis
- Candidiasis
- Coccidioidomycosis
- Cryptococcosis
- Histoplasmosis
- Paracoccidiomycosis
- Sporotrichosis
- Zygomycosis

**Miscellaneous Syndromes**

These diseases are a little harder to classify as some of them are caused by one of several different fungi. Thus, even though they have a fungal-sounding name (e.g., *Tinea barbae*), you can't always expect to find a corresponding fungus named *Tinea barbosa*!

**Chromoblastomycosis**
**Eye Infections**
**Lobomycosis**
**Mycetoma**
**Nail, Hair, and Skin disease**

- Onychomycosis (*Tinea unguium*)
- Piedra
- Pityriasis versicolor
- *Tinea barbae*
- *Tinea capitis*
- *Tinea corporis*
- *Tinea cruris*
- *Tinea favosa*
- *Tinea nigra*
- *Tinea pedis*

**Otomycosis**
**Phaeohyphomycosis**
**Rhinosporidiosis**
There are four common fungi causing allergies in humans: Cladosporium, Penicillium, Aspergillus and Alternaria. Alternaria alternata is an important cause of mould allergies in humans. It fruits in abundance over the surface of dying grasses and cereals. It is particularly common on corn leaves in the late fall when the straw-coloured leaves turn black with spores (conidia). Spores are dislodged during harvesting of the crop and are produced in such abundance (billions) that they form a dark cloud above the combine. Spores can affect sensitized individuals for many miles downwind. Alternaria is also found from time to time growing in damp spots on walls in homes, particularly in basements but it is not common.
Life cycle of *Coccidioides posadasii*

**Saprobic** (in soil)
- Dispersal by wind and other disruptions
- Arthrospore formation
- Septate vegetative mycelium

**Parasitic** (in organism)
- Arthro- or endospore growth and spherule differentiation
- Spherule septation
- Spherule segmentation

Mycospores in the blood

Fungus can cause infection in lungs, skin, heart, and central nervous system
Title:

Infection Reaction Testing and Immune Stimulation

Part of the Following:

Large Scale Study of the Safety and Efficacy of the SCIO Device

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This study was performed in the field by practicing Biofeedback technicians. Data was collected and the study supervised by the Ethics International Institutional Review Board of Romania. The Data analysis and study presentation is done By the The Centro Ricerche, University of Venice + Padova, Italy

Abstract:

This study demonstrates the safety and effective qualities of the SCIO device used in a large scale study. A large scale study of over 97,000 patients with over 275,000 patient visits reported their diseases. Many of them reported this disease. And the results of their therapy is reported in this study.

There were 43,023 patients with reported infections. Infections ranging from virus to worms, bacteria to fungus, and rickettsia to pion. This study chronicles their SCIO treatment in general terms.

Introduction:

Overview:

This Large scale research was designed to produce a extensive study of people with a wide variety of diseases to see who gets or feels better while using the SCIO for stress reduction and patient monitoring. The SCIO is an evoked potential Universal Electro-Physiological Medical apparatus that gauges how a individual reacts to miscellaneous homeopathic substances. The device is registered in Europe, America, Canada, S Africa, Australia, S. America, Mexico and elsewhere. The traditional software is fully registered. Some additional functions where determined by the manufacturer to be worthy of evaluation. Thus a study was necessary to determine safety and efficacy. (As a result of these studies these additional functions are now registered within the EC)

An European ethics committee was officially registered and governmental permission attained to do the insignificant risk study. Qualified registered and or licensed Biofeedback therapists where enlisted to perform the study. Therapists were enrolled from all over the world including N. America, Europe, Africa, Australia, Asia, and S. America. They were trained in the aspects of the study and how to attain informed consent and transmit the results to the ethics committee or IRB (Institutional Review Board).

2,569 therapists enlisted in the study. There were 98,760 patients. 69% had more than one visit. 43% had over two visits. There were over 275,000 patient visits recorded. The therapists were trained and supervised by medical staff. They were to perform the SCIO therapy and analysis. They were to report any medical suspected or confirmed diagnosis. Therapists personnel are not to diagnose outside of the realm of their scope of practice. Then the therapist is to inquire on any reported changes during the meeting and on follow-up any measured variations. It must be pointed out that the Therapists were free to do any additional therapies they wish such as homeopathy, nutrition, exercise, etc. Therapists were told to not recommend synthetic drugs. Thus the evaluation was not reduced to just the device but to the total effect of seeing a SCIO therapist.

Part 1. The emphasis was on substantiating safety followed by efficacy of the SCIO.

Part 2. Proving the efficacy of the SCIO on diseases (emphasis on degenerative disease)

Part 3. Proving the efficacy of the SCIO on the avant garde therapies of Complementary Med

Part 4. QQC standardization
Methods and Materials:

SCIO Device:

The SCIO is an evoked potential Universal Electro-Physiological Medical device that measures how a person reacts to items. It is designed to measure reactions for allergy, homeopathy, nutrition, sarcodes, nosodes, vitamins, minerals, enzymes and many more items. Biofeedback is used for pre-diagnostic work and or therapy.

The QXCI software will allow the unconscious of the patient to guide to repair electrical and vibrational aberrations in your body. For complete functional details and pictures, see appendix.

Subspace Software:

The QXCI software is designed for electro-physiological connection to the patient to allow reactivity testing and rectification of subtle abnormalities of the body electric. If a patient is not available a subspace or distance healing link has been designed for subspace therapeutics. Many reports of the success of the subspace have been reported and thus the effectiveness and the safety of the subspace link is part of this test. Many companies have tried to copy the subspace of Prof. Nelson and their counterfeit attempts have ended in failure.

SOC Index:

The SCIO interview opens with a behavioral medicine interview. This is called the SOC Index. Named after the work of Samuel Hahneman the father of homeopathy, he said that the body heals itself with it’s innate knowledge. But the patient can suppress or obstruct the healing process with some behavior. Hahneman said that the worst way to interfere with the healing natural process was allopathy or synthetic drugs. Theses upset the natural healing process by unnatural intervention and regulation disturbance. Other ways to Suppress or Obstruct the Cure are smoking, mercury amalgams, stress, lack of water, exercise and many others. This behavioral survey then gives an index of SOC.

The scores relate to the risk of Suppression and Obstruction to the natural Cure. The higher the scores the more the Suppression and or Obstruction. The scores of 100 or lower are ideal. A copy of the SOC index questions appear in the appendix.

Study Technicians:

The study technicians were educated and supervised by medical officers. The study technicians were to execute the SCIO therapy and analysis. All were trained to the standards of the International Medical University of Natural Education. Therapists from all over the world including N. America, Europe, Africa, Australia, Asia, S. America and elsewhere were enlisted to perform the study according to the Helsinki study ethics regulations.

They were to chronicle any medical suspected or confirmed diagnosis. Therapists personnel are not to diagnose outside of the realm of their scope of practice. Then the study technician is to inquire on any disclosed observations during the test and on follow-ups report any measured changes.

To test the device as subspace against the placebo effect, two of the 2,500+ therapists were given placebo SCIO devices that were totally outwardly the same but were not functional. These two blind therapists were then assigned 35 patients each (only 63 showed). This was to assess the double blind factor of the placebo effect as compared to the device. Thus the studied groups were

A. placebo group, B. subspace group, and C. attached harness group.

Cross placebo group manipulation was used to further evaluate the effect.

Important Questions: these are the key questions of the study

1. Define Diseases or Patient Concerns
2. Percentage of Improvement in Symptoms
3. Percentage of Improvement in Feeling Better
4. Percentage of Improvement Measured
5. Percentage of Improvement in Stress Reduction
6. Percentage of Improvement in SOC Behavior
7. What Measured+How (relevant measures to the patient’s health situation)
8. If Patient worsened please describe in detail involving SOC

After the patient visit was complete the data was e-mailed to the Ethics Committee or IRB for storage and then analysis. This maneuver minimized the risk of data loss or tampering. Case studies were reported separately in the disease analysis.

Results:

Before we review the direct disease improvement profiles, we need to review the overall results. The first most basic of question in the results is the basic feedback of the generic patient conditions.

1. Percentage of Improvement in Symptoms
2. Percentage of Improvement in Feeling Better
3. Percentage of Improvement Measured
4. Percentage of Improvement in Stress Reduction
5. Percentage of Improvement in SOC Behavior

The SOC index gives us great insight to this study. Each disease has a different cut off where the ability of the SCIO to help was compromised. In this infection group the SCIO cutoff was 90. This was particularly low for this type of study.

The below reported statistics are not reflective of this cut off, but rather reflect the entire statistics

The Large scale study had over 98,000 patients and 275,000 patient visits we have direct evidence of the safety and efficacy. A placebo group was used for the large scale test to help validate the results.

INFECTION UNSPECIFIED

This disease group number was 43,023. There were 93,890 patient visits

Subspace Treatment 24,516 patients, 18,507 SCIO Harness Patients

OVERALL ASSESSMENT

A. Subspace Treatment 25,516 patients

There were 238 cases were patients reported a negative Improvement.

None of these cases reported any major difficulty.

There were

439 cases reporting negative improvement of Symptoms, .0173% of Subgroup

69 cases reporting negative improvement in feeling better, .0001% of Subgroup
32 cases reporting negative improvement in stress reduction .0001% of Subgroup

23%--- Percentage of Improvement in Symptoms

40%--- Percentage of Improvement in Feeling Better

21%--- Percentage of Improvement Measured

34%-- Percentage of Improvement in Stress Reduction

19%-----Percentage of Improvement in SOC Behavior

5,431 patients reported measured infections. There was a 32% measured improvement over a one month period.

B. SCIO Harness Treatment 18,507 patients

There were 50 cases of patients who reported a negative Improvement.

None of these cases reported any major difficulty.

There were

531 cases reporting negative improvement of Symptoms, .0028% of Subgroup

12 cases reporting negative improvement in feeling better, .0001% of Subgroup

13 cases reporting negative improvement in stress reduction .0001% of Subgroup

43%--- Percentage of Improvement in Symptoms

43%--- Percentage of Improvement in Feeling Better

32%--- Percentage of Improvement Measured

68%-- Percentage of Improvement in Stress Reduction

23%----- Percentage of Improvement in SOC Behavior

7,800 patients reported measured infections. There was a 56% measured improvement over a one month period.

CASE STUDY REPORT CONDENSATION:

“I purchased the devise 2 years ago after a LONG journey with Lyme disease. I use it on my self and feel it is an extremely important tool that assists me in balancing my stressors and helps me prevent "recurring/relapses" that are often part of the "picture" of Lyme disease.

My brother was then diagnoses with Barrett's esophagus ( he had severe digestive troubles for many years) and developed severe arthritis. He rarely goes to physicians. He is retired military and was finally persuaded to go to the VA hospital. Fortunately he was well treated ( physically and emotionally) and returned home.

He then came to see me and experienced EPFX. He is quite "skeptical" of my holistic health focus but agreed none the less ( he has been impressed in the improvement in my health during the past 2 years). He was amazed. . . . . . He said he couldn't not remember the last time he felt "this good". and returned home to "rave" about it to his wife.

A year later he was "scoped" to monitor the Barett's esophagus, and was told there was no sign of it. In addition to EPFX, he made dietary changes and utilized nutritional supplements. The EPFX helped him see the
value in addressing all aspects of health, mind, body, spirit and emotion that I doubt he would have otherwise even considered.

I have VERY strong feelings about being an American and having FREEDOM of choice. My brother served in the Army for 23 years and "fought" for this right. WE MUST include the EPFX and holistic health as our right to choose the health care that is in alignment with each individual's belief system.

Thanks you, Dr. Nelson, for all you do and have done to provide this "state of the art" devise and wisdom to us.

Mississippi, U.S.A."

“A 42 year old female presented to me for lower back pain release, she had had physio but found it too painful to continue, everywhere the physio touched caused her tremendous pain and she could not continue. I saw her for 5 sessions of stress reduction and it became apparent during our sessions that she had been emotionally abused and abandoned by her mother at an early age. My client then decided to go onto antidepressants during our early sessions and by the 5th sessions she was off the medication, mainly pain free apart from some occasional sciatic pain, could now continue with her Pilates which she had to discontinue due to pain. The client had been referred to me by her physio who contacted me to inform me of the incredible changes in the client’s pain and emotional state.

A 4 year old boy was admitted to my local hospital with meningitis following chicken pox, he was confused, disorientated and had not slept for 2 days. The parents asked me to do a subspace session on him once the diagnosis was confirmed and within 10 minutes of the subspace session commencing the child fell asleep, the first time for 2 days, remained asleep for most of that day and night, woke up the following morning, temperature was down, he was orientated and discharged later that day.

City unknown”

“My first experience of having a Quantum session was quite amazing.

I had not said anything to the technician that my eye sight was cloudy when I would look in the distance. I had been telling myself that I should go to the eye doctor and see what he would have to say about it. But that wasn’t even a concern that day of my session, and I never mentioned it, or even thought of mentioning it to her.

Anyway the next morning my eye sight was clear and has been since. This is about 4 years ago. I researched this and found that this was one type of a cataract. And because of this, I researched the device and had one session a month for 6 months before buying a device for myself.

I also had eye floaters and they are gone too.

I have fibromyalgia. It has been 4 years that I have had my device. When I over do muscles with cleaning windows, painting and etc. it would take me about a week to work out the pain using my hot tub and then applying essential oils at bed time.

Now I don't feel any stress caused by pain the next day when I use the hot tub, oils and do a session on myself before going to bed.

I had colon cancer 8 years ago followed with 6 months of chemo. I had awful chemo brain fog. My head felt awful and my concentration was really bad. I gained 35 pounds in 35 weeks. My joints were so painful that I would cry. I was dizzy and I couldn't stand the humid weather. I tried a couple drugs but they made me feel worse. I then found coral calcium and took a mega dose of it for 6 weeks and in 3 weeks my sore joints were all gone and my weight gain quit as soon as I started the coral calcium. I started on a mega dose of oxygen drops and my dizziness went away in about one month, and my body felt much better from my fibromyalgia. This was because the oxygen drops helped with the lack of oxygen to my brain (my dizziness) and with fibromyalgia, which I have read is one cause of lack of oxygen to the tissues.

But my concentration and memory was still very bad when I got my device. I was scared!
When I started working on my stress in the NLP panel the rectification numbers were way down in the teens and single numbers, and they went up and down, up and down, in that area for several sessions before going higher and higher. I also had many stressed areas of the brain. It took me 10 months to clear the stress. Each month I think back at the month before how I felt, and I knew I am making improvements each month, with all my stress. I often wondered if the brain would of been the place my cancer would of returned if it weren't for all my natural health.

I also take a lot of whole food supplements. I still take my oxygen drops every day. I take only 1/4 of a sleeping pill which I got hooked on them when I had chemo. But I'm down to just 1/4 of one.

I have not doctored with any health problems for 4 years.

I have had some nerve problems in my arm when I would drive in the car and my arm would rest on the door handle arm rest area to long. When I get it, I do a session and the pain is gone the next morning. It is longer and longer between times when I get it now.

Years ago I would get neuritis (Pain)in my head when we would go snowboarding and I would have to go in and get a shot for it. Last winter I got it just from going without my head being covered in the cold (Minnesota winters). Well I did stress management for it and in 3 days it was all gone.

I would get a bad sinus infection every winter and would sometime have to take a couple rounds of antibiotics. I have not been to the doctor with that problem for several years. I also use essential oils for it. Since I got my device, my nose does not run all the time like it used too.

My husband had a sty that would come and go quite often ,several times a year. When addressing that stress with a stress management session, it was gone the next morning, and its been over a year, and it has not returned.

A friend of mine put her back out lifting on a client of hers. She had been to the Chiropractor twice and Massage therapist twice. She then come to me on a Sunday afternoon. She was experiencing a lot of stress due to pain. She could hardly walk up my steps and it was very painful for her to sit and stand up again.

The next morning she was pain free with just a sore spot - to the touch- in one area of her behind.

City unknown”

“"It has been some years ago, when during the X-mas holidays a friend of mine called, excused herself and asked me if I -though we had holiday - would treat a friend of hers, who went through a couple of days in the ambulance room of the hospital due to intense pain and immobility in her lower and upper back. She could not sleep and move anymore because of pain and distortion. Nothing had helped, she had gotten all kind of injections. I agreed that I would help immediately. The client, a woman of 28 years, hardly could walk up to the 1. floor, where I live. She climbed up with a stick, her back bent deep down. I must admit when I saw her my heart pounded. She had 2 people to help her to half sit half lie so that I could put the strings on. I went through the whole spinal program, spinal fluid, scanned the bacteria and virus and send homeopathics related to the spine and pain, she also had a very bad stomach infection. After an hour she more and more relaxed, lying straight on her back and when I asked her to slowly roll over her side to get up and stand, I was hit by astonishment and joy of everybody involved. The patient stretched herself in full length, amazement on her face and with a big sigh she said this is the first time since 10 days that I feel painless and I can stand up straight.

City Unknown, Germany”

“In 2003, the mother of an 8 yr old boy presented with warts on hands, trunk and feet along w/frequent diarrhea and skin problems. She had taken him to two doctors who were unable to stop the warts from growing. The scan revealed the papilloma virus.

1. After zapping virus for some time and activating the point probe to present to the mother wart, the family was given nutritional education, diet changes were recommended and he parasite cleanse herbs and an
immune booster. Four weeks later, they returned very elated that the warts were disappearing, diarrhea had disappeared and he was feeling better. Four weeks later, the warts were virtually gone and he was a healthy child. The Mom proceeded to tell her D. O. about the success and the D.O. then referred other clients to me.

Tulsa, U.S.A.”

“A retired 66 year old male presented with sores on the tips of his toes. He ate well and exercised and was in great health otherwise. He'd had prostate cancer years earlier. He played golf and the sores on his feet interfered with his enjoyment. The EPFX device has cleared up the sores on the tips of his toes + an additional point probe treatment to a sore knuckle, allowed the finger to expel a huge pus pocket to completely clear the irritation with the knuckle.

Tulsa, U.S.A.”

“My four year daughter developed an urinary tract infection and would scream while urinating. I scanned her with the EPFX and urinary tract infection had a high reaction on the scan. I “zapped” that item and after the EPFX session my daughter urinated without pain.

I had a severe sore throat. The EPFX scan showed strep as a high reaction. I “zapped” that item and in the morning my sore throat pain was gone.

My six month old daughter would not sleep one night and was screaming. I had no idea what was wrong. I scanned her with just the head harness and ran the recommended programs. She stopped crying and fell asleep.

Twice I have been out of town with my EPFX and my daughter has become ill. After scanning her remotely, her condition has improved each time.

My daughter started vomiting repeatedly one night. After I repeatedly “zapped” the pathogens with the highest reaction, the vomiting ceased.

City Unknown”

“1>The first two months my eye disease (I hope to spell it correctly)
Mylacular Degeneration is totaly gone (I wasn’t ever working on it).
2>I have lost fifty pounds this year and I didn’t even diet. IN fact I had a horrible diet since I was traveling so much. I still have fifty or so to go. I am told by several people that the EPFX has got my metabolism normal so the weight is coming off. What ever I am happy
3> My ten year old grandson is ten and his entire life he has bad lungs.
by Sept / Oct every year of his life he has pneumonia but not this year.

City Unknown”

"I started with Acne, thyroid, candida, herpes and exhaustion. After a couple of treatments long distance I noticed more energy, no candida and less herpes breakouts. I love it. It has really helped my overall health." - (Pasadena, CA)

“One middle-aged female client came to see me to relieve some of the stress related to physical discomfort/pain/muscle weakness/stiffness she was experiencing in her sacrum, right knee, and right foot. She was combining chiropractic, physical therapy/exercise, and stress relief to increase her quality of life. After three sessions, here are some words of testimony she provided:
"Between all that I’ve been doing for this (quantum biofeedback, chiropractic, and exercise), I managed to go dancing with my husband last Tuesday and was pain-free for the entire dance 40-minute dance session. I recognize I have a ways to go in getting all muscles engaged, balanced, and toned and I’m very encouraged. Thank you for the part biofeedback is playing in this!"

Another middle-aged female client had been diagnosed by her medical doctor as having an acute infection in surgical incisions on both her feet. She came to me for a session to relieve the stress associated with the pain of the infection. Here are her words of testimony:

"Thank you for the quantum biofeedback work. The infection is almost completely out of my system. My feet feel tremendously better than they did last week. My podiatrist assisted my healing by creating new orthotics to fit my newly shaped feet. These have taken my pain level down by 50%. The other pain I have is caused by the over-extended nerves, which I inflamed by my off-balance walking. Nerves tend to take more time to settle down. Between your quantum biofeedback and that which my doctor is doing, I am feeling so much better. Thank you!!!!"

I also did three sessions for a 12 year-old feline to relieve stress associated with an old fracture in her tail. After the sessions, her tail no longer contained the kink associated with the fracture and she tolerated petting along her back and hindquarters, which she was intolerant of previously, due perhaps to the stress and pain of the old injury.

Idaho, U.S.A."

"The EPFX device has saved my life and given my children the opportunity to live with a healthy mom. I purchased my device in March of 2007, and attended training in Springfield, MO in July of 2007. While there, I participated in the healing opportunities that were available to the participants. It was determined that my chronic fatigue and pain were due to Lymes, which had most likely entered into my spinal cord and cerebral-spinal fluid. Most likely I had had Lymes and when I received the lumbar puncture for the deliverance of interthecal morphine during labor, and the Lymes followed the blood into the spinal cord.

After I had my daughter in 2001, I was never quite the same. I had “meningitis” type symptoms - crushing fatigue, stiffness in my spinal cord, and pain upon movement and bending. I couldn’t think as clearly as before. My eyes were extremely photo-sensitive and being in large spaces or with large crowds was overwhelming to the point I had to limit my lifestyle. (Prior to this, I had been a Flight Attendant and worked in large multi-national corporations with no problems - this was new.) The fatigue was life-altering. I had about 4 “good” hours per day in which I could function - not enough for a mother of an infant! I was terrified to try allopathic medicine as I was concerned that I would receive the label of “depressed” without any attention given to my physical state of being. I was currently using my knowledge in Oriental Medicine to turn my situation around, but I couldn’t get to the root of the problem.

After my sessions in Springfield, I returned home and continued to balance myself on the EPFX as well as take the homeopathic formulae that could best help me. What happened seems miraculous, although the explanation is clear. At first, I felt “worse” - as my body stopped working in “status quo” mode, making the best of a bad situation and trying to maintain homeostasis, but instead kicked in and started fighting off the Lymes, Ameobas, and various fungi and bacteria – I really felt the truth of my health state. After 6 weeks, I started to feel better! Now, nine months later, I am thrilled to report that I can rise in the morning with my children, no aches or pains, care for them, care for our home, AND run my business! I have been given my life back!!

City Unknown"

“We have overcome several sufferings, such as pain and stuffiness in the sinus area.

My three-year-old granddaughter was diagnosed with pneumonia, he ER doctor gave a prescription and agreed that biofeedback and therapeutic grade essential oils would probably do the trick as well and his scrip. He was right.

City Unknown"
On May 5, 2006, my daughter ten aged 38 suffered an accident which impacted her face. After two CAT scans, and several other investigative procedures, it was decided that she had broken the part of the bone just above the intra orbital groove, under her left eye. She suffered from double vision, violent headaches, her sinuses were also affected with an infection and she also had mandibular problems, some of her teeth being a little loose.

As it was an injury sustained at work, she was taken on by the Workers compensation Board and was assigned several doctors including her own GP, a GP from the WCB, an eye specialist and an orthodontist.

As the infection was not subsiding, in August, she was put on a course of daily intravenous antibiotics – and for this she had to attend the hospital daily. ON her return from the hospital she felt almost worse than before she went. She was very tired and prevented from doing any kind of lifting, going up and down the stairs, standing for any period of time. Her life was being put on hold.

BY September, it was decided that she should be operated on, come what may and that a metal plate would be inserted to replace the missing bone. But, as an emergency procedure, that operation would take place at the earliest in May 2007 – that is a full year after her accident. She was also told she would have to grin and bear it until then. This is when she called on a friend of hers, a Doctor of Chinese Medicine who is also an EPFX practitioner. The upshot of it all is:

1) He first saw her at the end of September – and dealt with her obvious stress.

2) She had two more sessions with the EPFX, one at the end of October and another one in the third week of November

3) Finally, she had her last one with this doctor in the second week of December.

The same doctor each time explained to me what he was doing and he taught me how to use the EPFX so that I could keep providing my daughter with the support she needed. I purchased an EPFX, which I received in March 2007. Until then he kept on providing my daughter with subspace sessions and under his guidance at first, then on my own once I had received the proper instruction, I carried on.

The end result is that my daughter was back at work on the first week of January 2007 with restricted duties - but when she was finally discharged from all “medical care” at the end of February, the last investigation she received showed the bone had regenerated on its own and that she would not after all need an operation. Her vision was back to normal, the headaches had disappeared and her lower jaw bone had clamped back properly around her teeth.

Vancouver, Canada

For years of unanswered questions as to my urinary tract infections. My clueless doctor threw every antibiotic at me that he could think of and then some! With absolutely no success. Then, I found the EPFX (what a GOD send). This illness was not just contained to my urinary tract (bladder, kidneys and urethra) but it also created these life crippling muscle CRAMPS (Charlie Horses) in my back. It took the EPFX approximately 3 minutes to find the stressors and several sessions and life changes (recommended by the system) to free me of what I thought would be a life long condition. I say this because, my grandmother(gone now) and my mom (86 years old now) both have suffered from this and being the guinea pigs to multiple doctors for many many years. My grandmother dead living with this condition, but now I am at peace knowing that my mother and myself no longer have to suffer!

City Unknown

I am a 50+ year old female diagnosed with Lyme in 2003. Since June 2006 using the SCIO I have kept the stressors of this disease in check and have not had to revert back to using antibiotics to keep this illness at bay. I love having a healthy, drug free life and find several alternative health means to keep me healthy, the SCIO biofeedback device being one of these. Without the use of the biofeedback I believe I would still be going from my bed to the couch and the couch back to the bed. It is instrumental in my health regime and will continue to be so.
“I had been diagnosed with a severe bladder infection and told to take antibiotic for 2 weeks then come back and do a second round of antibiotics to make sure that the infection was gone. I called a fellow practitioner to please do a session for me for the bladder infection. She did the session and I felt better. She did a session for me every 3 days for 2 weeks, 4 in total. I went back to my doctor and she said that the infection was gone and said that she would make sure to give me the same antibiotic in the future because it worked so well. I told her that I did not take the antibiotic, that I had a biofeedback practitioner do sessions for me, on her EPFX/SCIO biofeedback device, to get rid of the infection, as I don’t want to take medicine unless I really have no other alternative. She said, well great, as long as it worked.

“Age 27, female, infected sweat glands in arm pits and groin for past 3 years. Initial session was July 19/06. After two weekly sessions, she reported on Aug 3/06 40% less swelling and pain. After 2 more sessions, on Aug 16/06, she reported 70% improvement.

“A 22 year old female, with a reoccurring eye infection was unable to wear her contact lenses and was told by her optometrist and ophthalmologist that she would have to give up wearing her contact lenses. During a three month period, she made approximately 7 visits to her optometrist who conferred with his partner optometrist, and then she went to an ophthalmologist. She had been given antibiotics, which somewhat cleared the infection for a few days, but it continued to reoccur. They were unable to help her and advised she was allergic to wearing any type of contact lense. I used multiple eye therapies from the QXCI and looked for reactive pathogens in the main matrix. After each session she would improve and after the fourth session there was no reoccurrence and she has been clear and wearing her contact lenses for four months.

Discussion:

The results show significant improvement in symptoms and feeling better. Items measured included bacterial culture, throat swabs, anti-body test, etc. The Collective results show a dramatic benefit to the SCIO therapist visit.

The effects of infection and injury on the body require a complete discussion.

Inflammatory conditions and major tissue injury are frequently associated with a wide range of systemic responses which embrace vascular, metabolic, endocrine, neurological and immunological functions. Those occurring soon after the onset of infection or injury are called the acute phase response. The acute phase response has the outstanding characteristic of being a generalised host reaction irrespective of the localised or systemic nature of the initiating disease, and several components of the response are remarkably constant despite the considerable variety of pathological processes that induce it. This uniformity of reaction points to the involvement of relatively few mediators in the overall 'orchestration' of the acute phase response. The major mediator coordinating the response is interleukin_1, aided and abetted by tumour necrosis factor (TNFa). Thus the mononuclear phagocyte system, which serves as the major source of these cytokines, plays a pivotal role.

Mononuclear cells are stimulated to produce IL_1 and TNFa by:

1. Bacterial endotoxin _ lipopolysaccharide (LPS), especially when complexed with LPS_binding protein.
3. Intact micro_organisms following phagocytosis.
4. Other cytokines produced by activated lymphocytes and macrophages.

Interleukin_1 and TNFa have a multiplicity of biological activities at the following sites:

1. Hypothalamus _ fever
2. Bone marrow _ neutrophilia
3. Neutrophils _ activation
4. B_lymphocytes _ antibody production
5. T_lymphocytes _ IL_2 production
6. Liver _ acute phase proteins
7. Fibroblasts _ proliferation and collagen synthesis
8. Muscle _ protein catabolism with amino_acid release

**COMPONENTS OF THE ACUTE PHASE RESPONSE**

**A. Fever**

Body temperature is controlled partly by reflexes initiated by the thermosensory nerve endings in the skin, but principally by a central control mechanism in the hypothalamus. The central mechanism can be likened to a thermostat, and this thermosensory centre (shown in animals to be in the anterior hypothalamus) responds to variations in the temperature of blood flowing through it. Signals from the thermosensory centre influence the activity of other hypothalamic centres which regulate the physiological processes responsible for heat production and heat loss, thus controlling the core temperature. In fever the thermostat is set high and a rise in temperature is achieved by increasing heat production and inhibiting heat loss by:

1. Cutaneous vasoconstriction:
   (i) Coldness and pallor of the skin at the onset of fever
   (ii) Contraction of the erector pili muscles ('gooseflesh') maintains an insulating layer of air next to the skin
2. Higher metabolic activity particularly in skeletal muscles and in the liver
3. Shivering _ associated with increased catabolic activity and heat production in skeletal muscles.

Fever is accompanied by general malaise and anorexia. If the temperature rises to 41.6 0C (107 0F) there is a danger of direct thermal injury to various tissues, and particularly to cerebral neurones. However, a potentially beneficial effect of hyperthermia is augmentation of the immune response by T_helper cells. The high setting of the thermosensory centre in fever is brought about by interleukin_1. The effect of interleukin_1 on thermoregulation is mediated by Prostaglandins, in particular by PGE2. This mechanism underlies the value of drugs like aspirin, an inhibitor of prostaglandin synthesis, in reducing fever.

**B. Neutrophil leucocytosis**
Normally the neutrophil count is between 2.5_7.5 x10^9/litre. In infections this rises to 10_20 x 10^9/litre_ particularly with pyogenic bacteria.

Lesser degrees of neutrophil leucocytosis occur in:

(i) Pregnancy
(ii) Strenuous exercise
(iii) Severe mental stress
(iv) Injection of glucocorticoids or adrenaline
(v) Following necrosis of tissue, e.g. myocardial infarction

Leucocytosis may develop within a few hours of the onset of a bacterial infection and is of diagnostic value. This early rise is due partly to release of many polymorphs which normally lie marginated in the venules of the lungs and elsewhere, and partly due to release of immature polymorphs lying in the sinusoids of the red marrow. The leucocytosis is maintained, however, by an increased rate of formation in the marrow. As polymorphs have a life span of about 12 hours, death and loss of polymorphs in exudation, for example in a suppurating infection requires a large output requiring hyperplasia of the myeloid or granulocyte series in the bone marrow.

Interleukin_1 has a central role in neutrophil leucocytosis. It promotes:

(i) Release of neutrophils from their marginated state
(ii) Increases granulopoiesis

Actions on neutrophils themselves include:

(i) Release of granules
Lactoferrin_Iron_chelation
Lysozyme_Antibacterial properties
(ii) Increases oxidative activity
(iii) Increased hexose mono_phosphate shunt activity

C. Acute phase and stress proteins

In febrile conditions or following injections of endotoxin or interleukin_1 there is a dramatic increase in the synthesis of intracellular stress (heat shock) proteins and some proteins by the liver. These latter proteins enter the circulation and can be detected within a few hours of the onset of fever which is why they are labelled acute phase proteins.

1. Acute phase proteins These include:

(i) C_reactive protein
(ii) Fibrinogen
(iii) Haptoglobin
(iv) Ceruloplasmin
(v) Amyloid A and P proteins

Interleukin_1 promotes protein catabolism in skeletal muscle and a
flux of amino acids into the liver where protein synthesis is substantially increased. There is evidence of
independent regulation of each of the acute_phase proteins. Some of these proteins, for example haptoglobin
(an (x2 globulin capable of binding free haemoglobin) and fibrinogen are normally present in substantial levels
in plasma but increase 2 or 3 fold after interleukin_1 injection. Others which normally occur at low levels, e.g.
C_reactive protein, increase several hundred fold. Likewise some appear rapidly, but others require several
days to reach maximum levels. C_reactive protein is capable of binding in a non-immunological way to
'foreign' antigens and activating the classical complement pathway. It thus acts as an opsonin and prepares
material for phagocytosis.

2. Stress proteins

Stress (or heat shock, HSP) proteins are present in all living systems and are among the most highly conserved
in nature. Their intracellular production is induced by rises in temperature and synthesis commences rapidly
(within 5_15 minutes) after the onset of 'heat shock'. Other stimuli which induce the synthesis of stress
proteins include:
(i) Cytotoxic agents
(ii) Free radicals, e.g. in reperfusion injury
(iii) Cellular poisons, like alcohol and heavy metals
(iv) Certain viral infections

Stress proteins together with ubiquitin are involved in the transport and degradation of proteins denatured by
cell injury so that, for example, proteins 'tagged' with ubiquitin can undergo proteolysis and be recycled into
the cell's economy, while HSPs and other chaperones regulate the assembly and disassembly of proteins and
provide a means of shuttling polypeptides between molecular structures.

D. Nutritional responses

Following major infection or injury the body goes into substantial negative nitrogen balance, part of which
meets the increased caloric needs of fever. Accelerated muscle protein degradation leads to myalgia and
reduced physical performance. Interleukin_1 acts directly on skeletal muscle to promote protein catabolism,
an effect mediated by an accumulation in the muscle of PGE2 which ultimately activates proteolysis in the
lysosomes. This brings about amino_acid release from muscle which helps to satisfy the increased energy
requirements via gluconeogenesis, but also contributes to the synthesis of proteins in proliferating
immunological cells and the synthesis of acute phase reactants released from the liver.

Changes in trace metals

The serum levels of iron and zinc are depressed in the acute phase of bacterial infection. There is evidence that
the decrease in serum iron is probably important in protecting the host against various bacteria as a reduction
in iron suppresses the growth rate of various micro_organisms. Iron appears to be sequestered by the binding
substance lactoferrin, and lactoferrin/iron complexes are deposited in the tissues. Interleukin_1 has been
shown to activate lactoferrin release from neutrophils. There is also an increase in serum copper levels in keeping with the increase in the coppertransport protein ceruloplasmin. Copper is involved in enzyme and transport mechanisms but its role in fever is unknown.

E. Vascular responses and shock

Selective arterial constriction increases peripheral resistance and tends to compensate for diminished cardiac output. The main vessels involved are those of the skin and splanchnic circulation, whilst blood flow to the heart, brain and skeletal muscle is maintained at normal levels. When vasoconstriction fails to maintain normal blood pressure the clinical picture of shock develops. Underperfusion of tissues leads to accumulation of acid metabolites and vessels may cease to respond to normal constrictor stimuli. Progressive and irreversible arteriolar dilatation occurs and blood is 'sequestrated' in the greatly enlarged capillary reservoir. Intractable hypotension results and this constitutes a lethal condition sometimes termed 'irreversible shock'.

Main types and causes of shock

1. Hypovolaemic
   (i) Haemorrhage
   (ii) Loss of plasma, e.g. burns
   (iii) Loss of fluid and electrolytes, e.g. severe diarrhoea

2. Cardiogenic
   (i) Myocardial infarction
   (ii) Major pulmonary embolism
   (iii) Following cardiac surgery
   (iv) Myocarditis and other causes of acute cardiac failure

3. 'Septic'
   (i) Endotoxic, mediated by bacterial lipopolysaccharide e.g. endotoxin
      A from Pseudomonas aeruginosa
   (ii) Exotoxic, e.g. exotoxin from Staphylococcus aureus (toxic shock syndrome)

4. 'Vascular'
   (i) Anaphylactic
   (ii) Neurogenic, e.g. spinal injuries

Pathogenesis

1. Hypovolaemia _ a fall in cardiac output resulting from reduced blood volume
2. Cardiogenic _ a fall in output resulting from inadequate heart function ('pump failure')
3. Septic shock
(i) Release of TNFa and IL_1 in high concentration

(ii) Induction of nitric oxide synthetase in endothelial and vascular smooth muscle cells leads to a build up of nitric oxide (NO) which is responsible for sustained vasodilation and hypotension

(iii) Activation of complement with release of anaphylatoxins C3a/C5a

(iv) Activation of neutrophils leads to endothelial damage resulting in capillary leakage

(v) Activation of Factor XII initiates coagulation and bradykinin formation. The former may lead to disseminated intravascular coagulation

4. Vascular mechanisms

(i) Pooling of blood in

a. Large peripheral vessels due to loss of vasomotor tone

b. Capillaries resulting from persistent venular constriction

(ii) Increased vascular permeability

(iii) Slowing of blood flow resulting from 'sludging' of red cells

Disseminated intravascular coagulation (DIC)

This is a condition in which the activation of coagulation factors leads to deposition of platelet/fibrin thrombi in small vessels throughout the body. The consumption of coagulation factors and activation of fibrinolysis frequently leads to life-threatening haemorrhage.

F Metabolic reactions

Features of the early metabolic reaction are: 1. Hyperglycaemia 2. Fall in body temperature 3. Decreased oxygen consumption 4. Alteration of intracellular oxidative mechanisms

5. Loss of albumin from plasma due to transcapillary escape

Irreversible shock

Features include:

1. Reduced oxygen consumption

2. Diminished heat production

3. Increasing hypoxia

4. Metabolic acidosis

5. Hypotension

6. Hypoglycaemia
G. Hormonal reactions

Increased production of:

1. Catecholamines which
   (i) Increase cardiac output
   (ii) Constrict arterioles
   (iii) Increase gluconeogenesis

2. Corticosteroids which bring about
   (i) Retention of Na+
   (ii) Excretion of K+
   (iii) Catabolism of proteins

3. Aldosterone
   Potassium deficiency

4. ADH
   Water retention

PATHOLOGICAL LESIONS IN SHOCK

1. Kidneys
   (i) Acute tubular necrosis
   (ii) Glomerular microthrombosis
   (iii) Acute cortical necrosis (rare)

2. Lungs _'shock lung' or adult respiratory distress syndrome Features
   (i) Congestion and intraseptal oedema
   (ii) Microthrombi
   (iii) Hyaline membrane formation
   (iv) Atelectasis
   (v) Interstitial pneumonia

3. Liver
   (i) Centrilobular ischaemic necrosis
   (ii) Fatty change

4. Adrenals
   (i) Lipid depletion (compact cell change) in cortex
   (ii) Focal necrosis of cortical cells
   (iii) Massive haemorrhage (Waterhouse-Friderichsen syndrome)

5. Heart
(i) Subendocardial haemorrhage
(ii) Contraction bands within myocytes

6. Gastrointestinal tract

(i) Acute ulceration of the stomach and duodenum (Curling's ulcers)
(ii) Haemorrhagic gastroenteropathy

Focal or more extensive haemorrhage into the stomach or intestinal mucosa associated with local superficial ulceration, probably resulting from hypoxia

7. Brain

Anoxic or hypoxic encephalopathy (see p. 338)

8. Pituitary

Necrosis following hypovolaemia (most commonly due to postpartum haemorrhage) giving rise to:

(i) Acute insufficiency _ Sheehan's syndrome
(ii) Chronic insufficiency _ Simmond's disease

LATE REACTIONS TO INJURY AND INFLAMMATION

A. Metabolic reactions

Catabolic phase

1. Rise in oxygen consumption
2. Rise in body temperature
3. Catabolism of protein increased
4. Increased mobilisation of fatty acids
5. Increased gluconeogenesis from amino acids derived from muscle

Anabolic phase

1. Positive nitrogen balance restored
2. Electrolyte equilibrium regained

B. Haematological reactions

1. Increased formation of platelets
2. Increased fibrinogen production
3. Decreased plasminogen
4. Anaemia

5. Lymphopenia

C. Hormonal reactions

Increased production of

1. Insulin which stimulates glucose uptake, and glycogen, fat and protein synthesis
2. Growth hormone _ possibly involved in the mobilisation of adipose tissue
3. Thyroxine

D. Immunological reactions

1. Reactive changes in lymphoid tissues, e.g. hyperplasia in lymph nodes, splenomegaly
2. Production of IgM antibodies directed at various components of the injured tissues

E. Amyloidosis

Although the synthesis of amyloid precursor proteins is part of the acute phase response to inflammation, when inflammation is prolonged the sustained increase in the serum concentrations of these proteins leads to the appearance of fibrillar material (amyloid) in many different tissues. However, amyloid is not a specific protein. It can be composed of one or more proteins or glycoproteins all having a characteristic b _pleated fibrillar appearance on electron microscopy. Thus, amyloid complicating long _standing inflammation is made up of amyloid A (AA) and P (AP) proteins derived from partial degradation by macrophages of SAA and SAP proteins. Another major form of amyloid is composed of AL protein which is derived from immunoglobulin light chains, mainly of lambda type. In addition, a heterogeneous collection of amyloid types (some of which have not been characterised) are found in certain herary or familial conditions and as localized deposits.

Diseases associated with amyloid deposition

1. AA/AP amyloid
   (i) Chronic infections (of long standing)
      a. Tuberculosis
      b. Bronchiectasis
      c. Osteomyelitis
      d. Pyelonephritis
      e. Leprosy
      f. Syphilis
   (ii) Chronic inflammatory disorders
      a. Rheumatoid disease
      b. Crohn's disease
c. Systemic lupus erythematosus
d. Pustular psoriasis

(iii) Malignant states
a. Hodgkin’s disease
b. Carcinomas of bladder, kidney, stomach, bronchus, ovary

2. AL amyloid
   (i) Multiple myeloma
   (ii) Waldenström’s macroglobulinaemia
   (iii) Solitary plasmacytoma (localised)

3. Hereditary/familial types
   (i) Amyloid polyneuropathy
   (ii) Amyloid cardiomyopathy
   (iii) Amyloidosis associated with Mediterranean fever
   (iv) Familial amyloid nephropathy, urticaria, and deafness
   (v) Familial cutaneous amyloid

4. Localised amyloid deposition
   (i) Senility
      a. Heart
      b. Brain also in Alzheimer’s disease
      c. Islets of Langerhans
      d. Seminal vesicles
         (ii) Endocrine tumours
            a. Medullary carcinoma of the thyroid (AMCT)
            b. Pituitary adenoma
            c. Islet cell tumours of the pancreas
               (iii) Non-endocrine tumours
                  a. Nasopharyngeal carcinoma
                  b. Basal cell carcinoma
                  (iv) In the islets of Langerhans in diabetes mellitus
                  (v) Tumour-like deposits in:
                     a. Larynx, trachea, bronchi, and lung
b. Genito-urinary tract

c. Eye

d. Tongue

e. Heart

f. Skin

Pathogenesis

It is believed that amyloids are produced by partial degradation of precursor proteins. Degradation of AA protein takes place either in endothelial cells or in fixed macrophages of the RES, particularly in sinusoid lining cells, and this may explain the tendency for amyloid to be deposited in relation to vascular basement membranes. The abnormal, or incomplete, degradation of the precursor proteins may be under the influence of a further protein synthesised by the liver which has been termed amyloid enhancing factor (AEF).

AL amyloid is thought to arise by partial degradation of immunoglobulin light chains produced in excess by abnormal populations of plasma cells.

Detection of amyloid

1. Of historical interest, iodine and dilute sulphuric acid produce blue coloration similar to that obtained with starch (Latin_amylum)

2. Congo_red and Sirius_red stain amyloid orange/red and when viewed under polarised light gives apple_green birefringence

3. Thioflavine_T staining gives rise to yellow fluorescence in ultraviolet light

4. Amyloid has a characteristic ultrastructural appearance being composed of parallel arrays of fibres 7 to 10 nm diameter

5. Potassium permanganate staining reveals different structural forms

Organ involvement in amyloidosis

1. Kidney

Amyloid is deposited in:

(i) Glomeruli (mesangium and basement membrane)

(ii) Tubular basement membranes

(iii) Blood vessel walls

Results in:

(i) Nephrotic syndrome

(ii) Renal vein thrombosis

(iii) Haematuria

(iv) Nephrogenic diabetes insipidus

2. Spleen Deposited in:

(i) Malpighian bodies (sago spleen)
(ii) Diffusely in the walls of sinusoids

Results in:

No significant disturbance of function

3. Liver
Deposited in:

(i) The space of Disse between the sinusoid lining cells and the hepatocytes
(ii) Blood vessel walls

Results in:

(i) Pressure atrophy of hepatocytes. In extreme cases this may lead to liver failure
(ii) Portal hypertension if involvement of the central veins leads to outflow obstruction

4. Heart
Deposited in:

(i) Subendocardial zone
(ii) Interstitial connective tissue

Results in:

(i) Cardiomegaly and cardiac failure
(ii) Disturbances of rhythm

5. Adrenal glands
Deposited in the zona glomerulosa and then advances throughout the cortex

Results in Addison's disease (rarely)

6. Gastrointestinal tract
Deposited in:

(i) The vicinity of epithelial basement membranes
(ii) Walls of small blood vessels
(iii) As plaques in the submucosa

Results in:

(i) Macroglossia
(ii) Dysphagia (oesophageal rigidity)
(iii) Malabsorption syndrome
(iv) Diarrhoea
(v) Protein losing enteropathy
(vi) Pseudo-obstruction

(vii) Ulceration of plaques

7. Skin

Forms:

(i) Lichen amyloidosis

(ii) Localised nodular amyloidosis

Calcification

Calcification other than that normally occurring in the teeth and skeletal system (heterotopic calcification) is seen in the following circumstances:

1. Associated with advancing age Deposits are found in:

   (i) Pineal gland

   (ii) Tracheal and laryngeal cartilages

   (iii) Costal cartilages

   (iv) Dura mater

2. In dead or degenerate tissue (dystrophic calcification) Examples

   (i) In old tuberculous lesions

   (ii) In scars

   (iii) In dead parasites

   (iv) In degenerate tumours, especially uterine leiomyomata (fibroids)

   (v) In atheromatous plaques

1. In association with increased levels of calcium (or occasionally with increased phosphate) in the blood and tissues, usually derived from the skeleton but also involving increased absorption from the intestine and decreased loss through the kidneys. Such calcification occurs in previously normal tissues and is referred to as metastatic.

   It is found in:

   (i) Hyperparathyroidism

Primary, due to:

a. Adenoma

b. Hyperplasia

c. Carcinoma (very rarely)

Secondary, due to:

a. Chronic renal failure

b. Renal tubular acidosis
c. Malabsorption states
d. Pregnancy and lactation

(ii) Carcinomatosis with or without skeletal involvement, especially with bronchial and breast cancer.

(iii) Myelomatosi

(iv) Vitamin D sensitivity, as in sarcoidosis and infantile hypercalcaemia

(v) Excessive administration of vitamin D

(vi) Paget’s disease of bone (when immobilised)

(vii) Hypophosphatasia

(viii) Milk_alkali syndrome

(ix) Hypoparathyroidism (deposits in the basal ganglia)

Sites of metastatic calcification

(i) Kidneys, producing nephrocalcinosis which may lead to renal failure

(ii) Stomach

(iii) Lungs, on the elastic fibres of the alveolar septa

(iv) Blood vessels

(v) Cornea

4. In calculi (stones)

Many calculi include calcium salts among their constituents.

Calculi are found in:

(i) Urinary tract

a. calcium phosphate

b. calcium oxalate

c. calcium carbonate

(ii) Biliary system

a. calcium bilirubinate

(iii) Salivary glands

(iv) Pancreas

(v) Prostate

5. In neoplasia

Microscopic laminated calcified bodies _ calcospherites are found in association with:

a. Adenocarcinoma of the ovary
b. Papillary carcinoma of the thyroid

c. Meningioma (psammoma bodies)

d. Benign and malignant breast lesions

e. Oligodendrogioma

--- BIBLIOGRAPHY ---

**BOOKS**


**ARTICLES AND STUDIES**


8. International Medical Journal of the Science of Homeopathy,, IMUNE PRESS
A Balanced Immune System

Internal Threat

Autoimmune problem
(type 1 diabetes, rheumatoid arthritis, psoriasis, multiple sclerosis, lupus, inflammatory bowel disease)

External Threat

Allergic Reaction
(hay fever, eczema, asthma, sinusitis)

Immune Over-reaction

BALANCED IMMUNE SYSTEM = OPTIMAL EFFECTIVENESS

Immune Under-reaction

Cancer
(hepatitis, HIV, shingles, TB)

Infection
(viruses, bacteria, fungi and parasites)

Initial response  Protective Immunity  Memory

Antibody and effector T cells

First exposure  Inapparent reinfection  Mild or inapparent reinfection

Weeks  Years
Do You Have Candida?
- Sugar Cravings
- Gas & Bloating
- Nail Fungus
- Yeast Infections
- Skin Rashes
- Irritability
- Crazy Ideas
- Paranoia
- Antibiotic Use

How to Get Rid of Candida
- Stop Sugar Use
- Corn, Anti-Biotics
- Reduce Stress
- Use Pau D'Arco
- Grapefruit Seed
- Oregano oil and IMMUNE Stim

Pau D'Arco treat fungal infections and ensure relief from the infection
NEW TECHNIQUES OF HOMEOPATHIC TREATMENT OF FUNGAL INFECTIONS

ABSTRACT

In this study there are two major investigative reports that we explain. One is a forty-five-patient study of female yeast problems, in which a complex homeopathic treatment was proven to be effective. We first present a twenty-patient study of various effects on overall fungus population. The overall fungus was measured through culture analysis of patients’ hair, urine, sputum, and other physiological samples. Three treatment groups were organized: that of a candida-only diet, that of a homeopathic singular of Candida albicans only, and that of a complex homeopathic for full-range treatment of fungal disorders. In the study we show the dramatic superiority of the complex homeopathic, how it worked on a wide variety of fungal disorders, and how the Candida albicans homeopathic only worked on Candida albicans. The diet proved to have little or no effect.

The study reviews the process of the immune system’s defense against fungal intrusion and fungal overgrowth. Also, there is the proposed mechanism for the homeopathic action, in that it appears to be stimulatory of the immune system.
UNIVERSITY OF VESZPREM
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candidate of agricultural sciences

THE EFFECT OF LIGHT AND LOW FREQUENCY MAGNETIC FIELDS ON MICROSCOPIC FUNGI

THESIS OF DOCTORAL (PhD) DISSERTATION

By:
Dr. PÁL NAGY

KESZTHELY
2003
Yellow toenails Symptoms

What are Yellow toenails? / Yellow toenails Definition:-

Yellow toenails are usually a sign of trouble to come. Although harmless bacterial colonization can cause a color change in nails (usually green), and there is a rare condition called yellow nail syndrome, by far the most common cause of yellowish or brownish discoloration in the toenails is fungus infection. A zinc deficiency or liver disease can contribute to the problem but usually make the color whitish.

Yellow toenails Symptoms Signs:-

Black discolored toenails, crumbling or split toenails, Flaky and thick nails, Pit marks on the nails, A collection of debris under the nail, which can cause a foul odor

Yellow toenails Causes Risk Factors:-

Fungi inhabit dark, warm and moist types of environments including stockings, shoes and socks. These fungi are opportunists that infect an unprotective area of the toenail.

Person-to-person contact is a manner by which many people become infected with onychomycosis.

Activities such as jumping, running, playing tennis and banging our feet can cause a break in the nail or fracture, which allows the fungi a great opportunity to infect the area.

Yellow toenails Prevention Natural Home Treatments Remedies Cures:
Tight fitting sweaty shoes further compound risks of getting toenail fungus. Public pool areas and showers are also a common place where you can get infected. Another more common method of getting toenail fungus is by cutting your toenails too short.

Fungus can be treated medically, but oral medications – prescribed by your doctor – can have bad side effects and can destroy your liver. These terrible toxic drugs can even become fatal.

Submerge the toe into strong store bought vinegar 15% acid or stronger for 20 minutes or as long as you can, at least 10 minutes is needed. The acetic acid will penetrate to the nerve and destroy the fungus at the root in the nerve. This will hurt like the dickens. The pain is the nerve getting cleansed by the acid. But when the fungus is killed at the root it will be clean, but could get re-infected from your shoes if you do not spray them with an anti-fungal spray.

Natural oils like tea tree oil, clove oil and lemongrass oils are effective because they can soften the nail and get under the toenail where the fungus lives. All of these have anti-fungal and anti-microbial properties to help kill the fungus and get rid of yellow toenails.

**Health Tips Facts – Hypoglycemia Definition Symptoms Causes Home Herbal Treatments Remedies**

**Hypoglycemia Definition / what is Hypoglycemia? :-**

The technical term for **low blood sugar** is hypoglycemia. Most people who develop it do so **because of diabetes** and the medications taken for it.

**Hypoglycemia Symptoms Signs:-**

Intense and **unexplained headaches**.

Unsteady, dizzy and unbalanced feelings.

Tremors without any known reason.

Frequent hunger, especially soon after eating.
Clumsiness due to the lack of muscle control.

Forgetfulness and mental confusion.

Increased nervousness and anxiety level also increases a lot.

**Hypoglycemia Causes Risk Factors:**

Missing meals, other medical conditions and other medications can all cause it. Certain **types of cancer** can cause low blood sugar. Some of those include **mesothelioma** and **fibro sarcoma**. These cancers can produce factors similar to insulin. Some **congenital birth defects**, failure of the kidneys or liver and adrenal insufficiency are other possible reason.

**Hypoglycemia Home Herbal Natural Treatments Remedies Cure Prevention:**

Oral medication or drugs taken intravenously may be required for persons who are feeling **hypoglycemic**. This could be a symptom of a more serious disease.

The following Vitamins can assist in the prevention of attacks from hypoglycemia, they are magnesium, vitamin B, C, and E, and zinc.

The technique used here mainly helps the individual by diminishing stress, which is another potential cause of hypoglycemia. Practitioners of **reflexology, Oriental bodywork, massage**, and **Craniofacial Therapy** can help regulate the relevant body systems.

When combined with small, light snacks several times a day, herbal teas made from burdock, dandelion, or licorice can help **stabilize blood sugar levels**.

**Ginseng** is a famous blood sugar regulator; daily dosages vary from 6 grams of the powdered herb to 10 grams taken in decoction form.

**Reishi** is another herb that is beneficial in maintaining the normal level of glucose or sugar in our blood stream.
Specialized organs and tissues of the immune system

- Adenoids
- Tonsils
- Thymus
- Lymph Nodes
- Spleen
- Peyer's Patches
- Small Intestine
- Large Intestine
- Appendix
- Bone Marrow
- Tissue Lymphatics
What is Ringworm? / Ringworm Definition:-

Ringworm is basically a form of a skin infection which is caused by a fungus that affects the skin, nails, scalp or foot. These infections also lead to redness and severe itchiness in the affected area. Not only humans get it, even pet animals such as dogs and cats are often prone to it.

Ringworm Symptoms Signs:-

The symptoms of ringworm include baldness in the scalp, thicker and brittle nails, ring shaped red areas in the body. In the foot, ringworm manifests itself as scaling or cracking of the skin between the toes. Doctors detect ringworm using a variety of techniques such as Wood's light, fungal culture, microscopic examination and even biopsy.
Ringworm Causes Risk Factors:

Most common causes of ringworm among humans is through direct contact with other humans—sharing combs or clothing or by touching the infected area. It is also transmitted through infected pets or other animals. Children, especially, due to their proximity with pets, are prone to the disease. Wearing caps or socks for long periods give the fungi an opportunity to spread, which is why ringworms usually occur in feet, toes, thighs and scalp.

Ringworm Prevention Home Herbal Natural Treatments Cures Remedies:

Take precautions such as keeping skin clean and dry since fungi thrive quickly in unclean and moist conditions. The homoeopathic medicines are organic in nature and pesticide free. They are becoming quite popular due to the fact that they do not lead to any sort of side effects. You can use some over the counter ringworm curing creams. Most of the anti fungal creams should work, but Lamisil anti fungal cream is the most popular and it should cure your ringworm fast. I recommend using Lamisil and a miconazole anti-fungal product each use a slightly different anti-fungal which helps kill a more wide spectrum of fungus. Use garlic oil and tea tree oil in between the two topical anti-fungals.

Another effective antifungal agent for external use is Selsun Blue (a pharmaceutical shampoo), product that is most effective in combination with Lamisil gel or miconazole.
Quinine

1. Quinine has been used as an effective relief for leg cramps for many years. However, the U.S. Food and Drug Administration does not approve its use for that purpose. Quinine is approved by the FDA only for the treatment of malaria.

For many years, over the counter pills such as Legatrin, containing quinine sulfate, were marketed for relief of leg cramps. In 1994 the FDA ordered these pills removed from drug store and supermarket shelves because quinine was not approved for such treatment. Despite the ban, doctors continued to prescribe quinine for leg cramps until 2006 when the FDA cracked down, approving one brand of quinine only for treatment of malaria.

A homeopathic remedy called Leg Cramps with Quinine, produced by Hyland's, is now available without a prescription in drug stores and in some health product catalogs and health food stores. The pills contain quinine (cinchona officinalis) and are regulated by the Homeopathic Pharmacopoeia of the United States.

Homeopathic remedies are small, diluted quantities of substances that are used to stimulate the body's own healing process.
Tonic Water

2. A quick remedy for nighttime leg and foot cramps is a glass of tonic water, also called quinine water. It is the beverage used in gin and tonic or vodka and tonic drinks and is available in any supermarket. Anyone who is subject to frequent leg cramps might wish to keep a bottle in the refrigerator. Tonic water is more easily accessible, and possibly quicker and safer, than pills.

The amount of quinine in the beverage is not large enough to be dangerous. It is the last ingredient listed on a bottle of diet quinine water, following carbonated water, citric acid, sodium benzoate and sodium saccharin, which means the amount of quinine is smaller than any of those ingredients. A dose of 25 mg of zinc and 50 mg of magnesium will help.

Side Effects

3. Because it is not approved by the FDA as a treatment for leg cramps, quinine should be used with caution. Side effects could include headache, nausea, ringing in the ears, rash and dizziness.

The Remedy

1. Drink four to eight ounces of tonic water an hour before bedtime. Four ounces contain 15 milligrams of quinine, a very low dose. If you want to relieve the bitter taste, add some fruit juice cranberry is my favorite.
Drink Water

2. Drink plenty of water. This helps the body avoid dehydration through strenuous physical activity or exercise. Dehydration is a common cause of muscle cramping, as is a lack of potassium, sodium, zinc or magnesium.

Side Effects

3. Watch for side effects. The FDA cites abnormal heart rhythms, blood hemorrhaging, and other symptoms of an adverse reaction to quinine. You may also feel some nausea, vision blurring and headaches. Discontinue the use of quinine in any form if this occurs.

Relief of Leg Cramps

4. If a leg cramp occurs, stretch the muscle by flexing your foot toward your head. Or get out of bed, stand and put pressure on your heel. Massage the muscle and apply heat if the pain persists.

Stretching

5. Do a stretch routine each night before bed. Press your foot against a wall to extend your calf muscles. While in bed, lay on your stomach and extend your foot over the end of the bed, flexing it to work the calf muscles. Avoid sleeping under heavy or tight covers.

Over the Counter

6. If tonic water does not relieve your leg cramps, try over-the-counter home remedies that contain quinine and other ingredients. Some doctors also suggest taking Vitamin E or a daily multivitamin that contains essential minerals, including potassium.

Quinine powder is found in Peruvian trees and used in very small amounts to manufacture quinine water, also known as tonic water. Tonic water is sometimes used to relieve leg cramps because the quinine is said to relax leg muscles.

Significance

1. Quinine water contains less than 20 mg of quinine, a far lower concentration than the therapeutic dose of 200 to 350 mg indicated to treat malaria. This concentration is considered harmless. However, if ingested in the amounts used to treat malaria, serious side effects can occur.

Side Effect: Skin Rashes

2. Though side effects from quinine water are unusual, people who are sensitive to quinine should avoid it, according to Peoplespharmacy.com. Side effects of quinine include itching of the skin and rashes.

Side Effects: Bleeding
3. A serious side effect of quinine is a blood dyscrasia or abnormality called thrombocytopenia. Thrombocytopenia is a decreased number of the platelets responsible for blood clotting. This can cause significant bruising and bleeding.

**Side Effect: Cardiac**

4. Cardiac side effects of quinine include chest pain, irregular heartbeat, rapid heart rate and faintness.

**Side Effect : Allergic Reaction**

5. A serious side effect of quinine is severe allergic reaction. Although rare, quinine can cause swelling of the mouth, face and throat, respiratory distress and seizure.

People with the flu are advised to get plenty of rest, drink plenty of liquids, avoid using alcohol and tobacco and, if necessary, take medications such as paracetamol (acetaminophen) to relieve the fever and muscle aches associated with the flu. Children and teenagers with flu symptoms (particularly fever) should avoid taking aspirin during an influenza infection (especially influenza type B), because doing so can lead to Reye's syndrome, a rare but potentially fatal disease of the liver. Since influenza is caused by a virus, antibiotics have no effect on the infection; unless prescribed for secondary infections such as bacterial pneumonia. Antiviral medication can be effective, but some strains of influenza can show resistance to the standard antiviral drugs. Fluro-quinones have been shown to have anti-viral and immune stimulation effects. The common source is Tonic water.
Quinine sulfate is an antimalarial drug derived from the bark of the cinchona tree, which grows in Ecuador and Peru. Because of numerous severe side effects, the U.S. Food and Drug Administration in 2007 banned nearly all prescription-strength quinine products, and reiterated that quinine is only to be prescribed for one use—treating malaria. The crackdown caused uproar among people who had been using quinine to treat other problems.

The Problem

1. After accumulating 665 reports of severe adverse reactions to quinine between 1969 and 2006, including nearly 100 deaths, the FDA issued heavy restrictions on the drug’s usage. Quinine can cause abnormal blood clotting, unusual bleeding and irregular heart rhythms, and has been linked to permanent blindness and hearing loss. Quinine can also cause delirium, fever, hallucinations, seizures and many other negative effects. Lawsuits are regularly filed over the problems people have experienced from taking
Quinine can still be found in over-the-counter products in very low strengths that do not cause side effects, and it is also included in tiny amounts in tonic water.

**Malaria**

2. Quinine kills the malaria parasite that is transmitted by mosquitoes and infects red blood cells. The hazards associated with quinine are considered acceptable in treating certain cases of malaria in combination with antibiotics, because malaria has high rates of permanent injury and death. Physicians usually prescribe quinine for malaria when other medications do not work.

**Leg Cramps**

3. As of 2007, the only prescription-strength quinine drug still approved in the U.S. is Qualaquin, which is produced by Mutual Pharmaceutical Company. Physicians previously had been prescribing quinine sulfate for the so-called "off-label use" to
prevent and treat leg cramps resulting from vascular disease, as doctors commonly do in the United Kingdom and other countries. The FDA has stated that over 99 percent of prescriptions for quinine were for off-label conditions. It is not illegal for physicians to prescribe drugs for off-label usage, but many are reluctant to do so, particularly when the FDA issues strong statements about adverse medication effects.

**Varicose Veins**

4. Another vascular disorder that quinine is effective at treating is varicose veins. These are swollen, twisted veins in the lower legs that bulge near the surface of the skin, causing pain and tired legs. One remedy for this problem is sclerotherapy, where the physician injects a chemical, such as quinine, into the varicose veins, a chemical that scars these veins so they can no longer fill with blood. Blood then returns to the heart through other veins, and the person's body eventually absorbs these non-functional varicose veins.

**Babesiosis**

Quinine also can cure a rare malaria-like parasitic disease called babesiosis, which is spread by ticks. Symptoms of babesiosis range from mild flu-like problems to a life-threatening condition.

**Remember to minimize exposure to parasites**

1. Avoid exposure by not going barefoot, use light sandals, wash foods well, eat at reliable clean restaurants not street markets, reduce contact with mosquitoes, and all blood suckers as best you can, reduce stress while eating and for one hour after
2. **Obey the rules of the stomach so that the stomach acid can kill the parasites before they get to your luscious soft tissues or blood stream.**

   *Avoid all dextrose sugars. Use probiotics.*

<table>
<thead>
<tr>
<th>RULES OF THE STOMACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fluids alone (no more than 4oz. Of fluid with a meal, or for two hours after a meal)</td>
</tr>
<tr>
<td>2. No coffee at meals (wait for 1.5 to 2 hours after or 1 hour before eating)</td>
</tr>
<tr>
<td>3. No milk with meals (wait for 1.5 to 2 hours after or 1 hour before eating)</td>
</tr>
<tr>
<td>4. Fruits alone (wait for 1.5 to 2 hours after or 1 hour before eating)</td>
</tr>
<tr>
<td>5. Melons alone (wait for 1.5 to 2 hours after or 1 hour before eating)</td>
</tr>
<tr>
<td>6. Small meal is better</td>
</tr>
<tr>
<td>7. Slow meals</td>
</tr>
<tr>
<td>8. Eat for nutrition not for stimulation</td>
</tr>
<tr>
<td>9. Rest comfortably after eating for at least 35 to 45 min to maximize stomach function</td>
</tr>
</tbody>
</table>
The stomach is designed to separate out some bad items and reduce the foods with an acid bath to prepare the foods for electrical absorption in the small intestine. Eat too much, drink too much liquid, combine wrong foods, use ant-acids, and you hurt the stomach.

**Stomach Problems**

External and internal views of stomach

When the Stomach is not doing it’s job you get large undigested fats and proteins to build cells and all and every disease is now possible. You are what you eat and what you absorb.

Stomach rule violations

- Improper food selection
- Poor eating habits
- Digestive enzyme imbalance
- Infection
- Postural/thermal stress
- Stress of pylorus
- Tissue pathology

**Tests**

- Imaging
- HCl levels
- Endoscopy
- H. Pylori antibodies

**Manipulative Therapies**

- Barsony's Hiatal Hernia work
- Neurovascular Reflex Therapy
- Castor Oil Pack
- HH self help
- Other treatments

**Foods**

- Aloe
- Horseradish
- No iron-rich foods
- Cabbage juice
- Try avoiding dairy
- Minimize alcohol, coffee
- No pineapple or acidic foods

The Pylorus valve holds the Stomach contents in till the Ph reaches about 5.5 to 5.7 after the stomach has done it’s job.

**Products**

- A601 Enzymes, Inc.
- SF 734 Thome
- Digestive Enzymes
- HCl
- Gastric Stom. Proc.
- Gastromet Eco1. Form.
- Zolin Anirlogenics
- Rhizinate Intag. Therap.

**Reflux/Diaphragm**

- Peppermint
- Ginger tea
- Chamomile

**Other**

- HH self help
- Other treatments
3. **Spice is Nice**, these parasites hate strong spices, use on food not to excess. Ginger, mustard, cayenne, wormseed, wormwood, garlic, clove, black walnut, comfrey, green tea, tea tree oil.

4. **SCIO anti stress zap therapy**

---

**Fungal Pathogenesis**

Principles and Clinical Applications

Edited by Richard A. Calderone

Ronald A. Chishaw
5. Use teas of the anti-parasitical herbs listed regularly, use tonic water, and well filtered water.

6. Papaya and pineapple have enzymes that can weaken and destroy parasites, use the fresh juice often.

7. The skins of most fruits have anti-parasite effects, but the citrus have the most, grate up the skins of grapefruit, orange, lime, or use their oil. Use as teas or to put into drinks or food.

8. Mexico and other countries have good OTC remedies use for one week once a year.

9. Once a year you and your family should do a parasite cleanse week, use teas 3 x a day, juices 2 x day, extra ginger as a side dish. Use the Desire’ anti parasite soup once a day for three days.

Chop up three onions, 3 tomatoes, 10 cloves of garlic; Cloves; Wormwood; Black Walnut; Green Hulls Pumpkin Seed, some psyllium seed; Milk Thistle; Olive Leaf; Pau d’Arco; Gentian; Echinacea; Barberry; Garlic; Thyme, skins of citrus, simmer at low temp (41 C or 110 F) for 3 hours do not boil, blend in other veg for choice, side of fresh ginger.
**Health Benefits of Pau d’arco**

- Anti-inflammatory
- Inhibits Candida albicans
- Preventative during cold and flu season
- Effective blood purifier
- Stimulates production of red blood cells
- Antioxidant
- Powerful anti-fungal
- Anti-bacterial
- Anti-microbial
- Anti-tumor effect
- Analgesic effect
- Fights parasites
- Antineoplastic
- Effective against e. coli

**Pau d’Arco Tea**

- Pau D’Arco (10 grams)
- Cat’s Claw (3.5 grams)
- Goji Berries (20 grams)
- Chanca Piedra (3 grams)
- 1 raw vanilla bean

This makes 2 liters of healing tea and is extraordinary when chilled. Pau d’Arco is a great herbal base for all teas.

**WARNING**

People taking blood thinners should consult their healthcare provider. If pregnant or breast-feeding, consult your healthcare provider.

[www.OasisAdvancedWellness.com](http://www.OasisAdvancedWellness.com)

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**How to Recover From Candida Naturally**

"Well all we have to do is follow the candy and sugar holidays to sell our Flu shots and Drugs to the People. They will never believe that sugar weakens their immune systems. They believe what we tell them to believe."

Avoid White Dextrose Sugar
Good Sugar and Oil

Eat at least Five servings of fruits and Vegetables a day, use Vegetables as the Center of the Meal. Remember: do not eat foods boiled in oil, get good cold processed vegetable oils and thus good Fatty acids, not trans or cooked or animal oils. Eat only Levulose (fructose fruit sugars) not Dextrose (Cane, Corn, Potato, Grape sugar). Wellness is your Reward. Remember to chew your food, Fruits alone, Fluids alone, and Melons alone. Make Vegetable and Fruit juice part of your daily Wellness Healthy Regime.
The Desi-astrous Sign of STRESS ANXIETY

LACK OF CONCENTRATION
SLEEPLESSNESS
IRRITABLE
OVERREACTING
STOMACH PROBLEMS
ANTSY

FEAR
MUSCLE TENSION
FATIGUE
RACING HEART
HEADACHE

STRESS IS CAUSED BY THE DESIRE FOR THINGS TO BE DIFFERENT

RELAX
BREATHE FULLY
YOGA & EXERCISE
REDUCE DISTRACTION

SIMPLIFY
PLAN & ORGANIZE
REDUCE CLUTTER
SET LIMITS

IDENTIFY TRIGGERS
THOUGHTS
FEELINGS
FOOD

SHARE
THOUGHTS
FEELINGS
FEARS

NOURISH SPIRIT & INTELLECT
LIVE IN THE PRESENT
JOURNAL
IDENTIFY SPIRITUAL BELIEFS

AVOID
PROCRASTINATION
NEGATIVE THINKING
CATASTROPHIZING

Learn to ACCEPT the things you can’t change &
Change the things you can...

...and find the Wisdom to Know the Difference
Abstract:

In this study there are two major reports that we investigate. We first present a twenty-patient study of various effects on overall fungus population. The other is a forty-five-patient study of female yeast problems, in which a complex homeopathic treatment proved effective. The overall fungus was measured through culture analysis of patients’ hair, urine, sputum, and other physiological samples. Three treatment groups were organized: that of a candida-only diet, that of a homeopathic
singular of Candida albicans only, and that of a complex homeopathic for full-range treatment of fungal disorders. In the study we show the dramatic superiority of the complex homeopathic, how it worked on a wide variety of fungal disorders, and how the Candida albicans homeopathic only worked on Candida albicans. The diet proved to have little or no effect.

The study reviews the process of the immune system's defense against fungal intrusion and fungal overgrowth. Also, there is the proposed mechanism for the homeopathic action, in that it appears to be stimulatory of the immune system.

Key Words:
Candida, fungus, immune system, phagocytosis

Introduction:
There are many types of systemic fungal diseases, also known as systemic mycoses. The systemic mycosis is an opportunistic disease which occurs following a compromised immune system. The immune system must be deficient in order for the disease to completely take hold and proliferate.

Thus this can be the result of various types of immune suppressants. These include antibiotics, ionizing radiation (x-ray, etc.), corticosteroids and antimetabolites. These problems can occur in patients with azotemia, diabetes, branchial ectasis, emphysema, tuberculosis, lymphoma, leukemia, AIDS, candidiasis, burns, and other similar diseases.

Coccidioides is usually confined to the southwest area of the United States. Histoplasmosis occurs in the East and Midwest, especially in the Ohio and Mississippi River valleys. Blastomycoses is restricted to North America and Africa. Paracoccidioides, often referred to as South American blastomycoses, is usually found in the location for which it was named. As the world becomes increasingly smaller, these diseases are spreading into many different areas and can be found in many populations.

Symptoms are rarely intense, but can include fever, chills, night sweats, anorexia, weight loss, fatigue, malaise and depression [Books: 13].

To determine a diagnosis, we found it best to culture various body fluids and skin scrapings. The culture of fungi can be done from several specimens such as hair, skin, nails, plus urine, stool or sputum. Since opportunistic fungi can appear in certain conditions such as diabetes and suppression of immune mechanisms caused by corticosteroids, birth control pills, antibiotics or lympho-proliferative disorders, we must exclude these from our study. Bauer, Ackermann and Toro (1974) outline several procedures of differential diagnosis through culture. Antigen detection tests which isolate immunoglobulins can have false positive and false negative results. The body might have plenty of immunoglobulin because of a past exposure but little active pathogen now, hence a false positive; or the body could have much pathogen but lack the ability to produce antibodies, hence a false negative. Since only a culture of the body fluids can be totally conclusive, this investigator chose to use culture to evaluate the product effectiveness of antifungal homeopathics.

Methods:
Twenty patients with suspected candidiasis were evaluated by culturing body fluids. Cornmeal agar was used to isolate Candida albicans. Sabouraud's dextrose agar with cycloheximide was also used to identify other fungi. Germ tube formation differentiated between Candida albicans, Candida tropicalis and Candida stellatoidea. Urine testing was used to define cryptococcus, which is urease-positive in twenty-four hours. Nitrate (KNO₃) assimilation testing was used to determine Candida utilis, which is nitrate-positive versus Candida pseudotropicalis, which is nitrate-negative. Candida krusei and Candida parapsilosis were prepared in culture without cycloheximide. Geotrichum, Trichosporon, Torulopsis, Cryptococcus neoformans, Blastomycyes dermatitides and Coccidioides immitis were all determined by microscopic evaluation, temperature grown in and culture used. Trichophyton and Epidermophyton (tinea pedis, cruns, and capitis) onychomycosis were also assayed from skin or nail culture. Careful cultures of urine, feces, skin, nails, and sputum were evaluated on twenty patients. Five (5) controls used only dietary restrictions following Candida diet programs. Six (6) patients received a homeopathic of just Candida albicans. Nine (9) patients received a full spectrum homeopathic product of multiple fungi including all mentioned in this report and five (5) others, including chlamydia, as well as multiple
antifungal herbals. Cultures were performed prior to treatment and one month after treatment. Results are posted in Figs. 1- 4 and Tables 1 and 2.

Results:

The diet-only group showed few positive results. Some conditions were slightly aggravated (as determined by culture, not symptoms). The Candida-only homeopathic treated Candida albicans, rugosa, and stellatoidea with good results, but showed only minor results in the treatment of other fungi. In some cases fungal conditions were actually aggravated. The full-spectrum fungal homeopathic was successful in lowering all fungal populations except coccidioides (see tables).
Polysystemic Chronic Candidiasis (PCC) has become a health problem of extreme proportions challenging the population and health care practitioners. Candida’s prevalence has been said by some to be the largest iatrogenically-caused health threat our nation has ever known. Antibiotics, toxic agents, and even synthetic food preservatives contribute to the Candida problems. The classic medical technique has been to reduce symptoms as quickly as possible. Hence antibiotics were developed over the last one hundred years to replace slower techniques emphasizing rebuilding of the body's own immune system.

In microbiology there is a natural balance between fungus, virus, and bacteria. Fleming discovered how fungus could kill bacteria by interrupting the reproductive system. Bacteria were later found to have subtle ways of controlling fungi. Viruses can also control bacteria and fungi. A complete description of this process is described in The New Biology (Nelson, 1986). As antibiotic use grows more prevalent in the farming and medical fields, the natural balance is being upset, and viral and fungal conditions are increasing.

Thus the unnatural, largely synthetic antibiotics, when used in excess, have replaced one disorder with another. The Chinese, whose medical system dates back over two thousand years, have a simple statement regarding disease: “Disease is a violation of natural law.” From this aspect, use of a synthetic would be prohibited. Development of the natural body defense would be the more natural method. With this in mind, let us now review the natural methods of Candida defense.

The natural balance of the normal flora is maintained by the reticuloendothelial system. The white blood cells are main controllers of this microflora drama. This paper focuses on fungal defense. Let us now examine the white cell's system of fungal defense.

The events of phagocytosis, as outlined by Jones and Byrne (1980), are outlined in Figure 1.

1. Opsonins, Proteassis, Lectins, etc.
2. Particle Alteration
3. Particle Attachment -- Phagocyte Interaction
4. Particle Recognition Receptor Interaction
5. Ingestion by Phagocyte

Figure 1

Equilibrium is established among steps 1, 2, 3, and 4, but not between steps 4 and 5. This basic description outlines early steps in the white blood cells, particularly Monosystemacrophage system, mononuclear phagocytosis, and to a lesser extent, Polynuclear Phagocytosis.

Step 1 relies on opsonins to attach to an intruder such as systemic Candida, which then allows for the white cell to recognize the intruder and initiate phagocytosis (Blan, etc., Kabat, 1976; Stossel, 1973).

Using scatchard plotting for binding of Chlamydia to L cells (Moulder, 1969) has shown the relationship of concentration of reactants with rate of reaction. Research from many sources has led Jones and Byrne (1980) to develop a mathematical relationship between the interactions of invader and white cells.

\[
\frac{1}{V} \sim \frac{1}{[Km]} \sim \frac{1}{V_{max}} \sim S \sim \frac{1}{S}
\]

where \(V\) is the reaction product formed by phagocytosis, \(Km\) is an equilibrium constant having to do with the size of the intruder, \(V_{max}\) is the rate of reaction and \(S\) is the concentration of the intruder. As \(S\) is lowered, the rate of reaction \(V_{max}\) increases by the square. Homeopathy uses ever-decreasing doses to stimulate the body's own defense system to recover. Here we see how even lower and lower concentrations can stimulate faster reaction rates. Homeopathy, thus using fine dilutions of a compound which has been rendered inactive by the alcohol concentration of the carrier of the homeopathic, does not treat infections directly, but treats them by stimulating the immune system, which in turn can naturally cleanse the system as it is meant to do. *Opsoni-zation is crucial for clearance and intracellular destruction of virulent microbes which have surface properties that interfere with attachment and
recognition by phagocytosis," (like Candida) remark Jones and Byrne (1980). Candida toxins make the system more allergic, making this an even tougher problem.

Steps 2 and 3 are receptor-dependent, and thus dependent on a healthy immune system to make functioning white cells. The white cell's movement towards a pathogen depends on cell mobility after cell recognition. In our experiments we took blood from patients, and under the microscope evaluated the white cell movement towards bacteria and yeast. The same patient was then given our full spectrum bacterial homeopathic or a full spectrum fungal homeopathic. In each of the eleven cases measured, the white cells moved twenty-five percent faster towards bacteria or yeast depending on the homeopathic; phagocytosis was initiated and progressed twenty-five percent faster, as well.

The immune system needs healthy thymus, tonsils, appendix, bone marrow, lymphatic, and most important for fungus defense, a healthy spleen (Revici, 1951). Step 5 in Figure 1 shows the oxidative metabolism of phagocytic cells. This oxygen-consuming system is activated during phagocytosis (Roos and Balm, 1980).

Hydrogen peroxide (H$_2$O$_2$) and Myeloperoxidase (MPO) combine to make a powerful anti-intruder formula when released during phagocytosis. There are many other ways to kill bacteria in a phagosome, and MPO-deficient individuals do not suffer from bacterial infections (Roos and Balm, 1980). But Candida albicans can only be killed by MPO and H$_2$O$_2$ release. MPO-deficient individuals are chronic Candida patients (Lehre, 1970, 1972, 1975; Cohen and Cline, 1971; Klebanoff, 1970). Agents that block H$_2$O$_2$ or MPO, such as SOD, catalase, and other anti-oxidants, block Candida destruction and make our PCC patient worse. Agents that fortify the adrenals also deplete the immune system so that too much adrenal support ruins our chance of PCC recovery.

**The Vicious Cycle**

- **Infection**
- **Antibiotics**
- **Toxins**
- **Candida**
- **Wipe out friendly bacteria**
- **Weaken the immune system**
Some patients have herary or chronic enzyme dysfunction that makes MPO synthesis difficult. Here MPO needs to be supplemented orally with compounds such as Sero Spleen or Sero Lymph, which supply naturally-occurring amounts of MPO and tuftsin, which fortify lost splenic function. Tuftsin is an important protein in the leukokinon binding, which stimulates and keys phagocytosis (Nassar, 1980).

**CANDIDA LIMITS**

- Zinc Absorption
- Fatty Acid Absorption
- MPO Manufacture
- Oxygen Absorption
- B Vitamin Absorption

**CAUSES**

- Allergy to Opsonins
- Stress stimulates adrenal
- Confusion leading to more stress
- Compromise immune function

Thus Candida causes its own proliferation and blocks absorption of the nutrients needed to handle it naturally, becoming a nearly perfect systemic pathogen.

Homeopathic treatment for Candida, as outlined before, used weak dilutions of the inactive yeast. A 6x preparation has one part per million in an alcohol/water blend, with twenty percent alcohol. This antigenic preparation can cause the body to cleanse itself of the yeast culprit. These dilutions have been used world-wide for many such health problems (Coulter, 1980). The dangers are minimal, and include the possibility of Candida overkill. A cleanse that is too fast can further confuse and stress the patient. Full-spectrum homeopathics with many potencies of many types of fungus or yeasts have much less danger of overkill. Cleansing crisis reactions are reduced as the system adjusts more slowly. Stress contributes to Candida growth via suppression of the immune system (Selye). Further discussion of homeopathy and the Arndt-Schultz law will outline safe measures for detox. It must again be mentioned that the homeopathic attenuations of pathogens are used to treat poor immune function, not for direct anti-pathogenic use. They should be used by practitioners licensed to treat immune dysfunction.

**STUDY #2**

**Micronutrient Treatment of Immune System's Reaction To Candida**

In this study, we use homeopathically-prepared Candida albicans, administered to patients having a positive Candida culture from the vaginal area. This homeopathic compound is prepared by taking the Candida albicans fungus and diluting it in an alcohol and water solution. The Candida is diluted to less than one part per billion. Patients presenting with vaginal irritation were given cultures prepared from vagina swabs. Cultures were done with Ames Micro Stix for Candida detection. Patients testing positive for Candida were given the dilute solution of Candida to be administered orally at ten drops, three times a day. Patients also administered the homeopathic vaginally via douche: two tablespoons of homeopathic to one cup of distilled water. Patients were told to douche once a week. Follow-up cultures were taken every fourteen days. Results of the cultures are shown in Figure 4.

<table>
<thead>
<tr>
<th>Initial Culture</th>
<th>2 wks.</th>
<th>4 wks.</th>
<th>6 wks.</th>
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<td>Homeopathic</td>
<td></td>
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<td></td>
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<tr>
<td>(35 patients)</td>
<td>22 pos.</td>
<td>12 pos.</td>
<td>10 pos.</td>
<td>8 pos.</td>
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<tr>
<td></td>
<td>13 neg.</td>
<td>23 neg.</td>
<td>25 neg.</td>
<td>27 neg.</td>
</tr>
</tbody>
</table>
Ten patients in a control group were given no homeopathics. All subjects were women, ages sixteen to forty-nine. In the homeopathic group, none of the patients who had been cleared of the Candida had symptoms or tested culture-positive again. It appears that the homeopathic treatment for vaginal Candidiasis could be a safe and viable treatment.

Conclusions:

Full-range homeopathics appear to be effective in lowering fungal growth of multiple fungal pathogens. In addition to demonstrating that the complex homeopathic's ability to help patients deal with these infections, we show that the complex homeopathic has little if any side effects, in that it is a natural homeopathic that stimulates the immune system, rather than a synthetic pharmaceutical, which might have side effects to the kidney and liver, and also might cause immunosuppression.

The proposed action of this homeopathic appears to be the ability of the homeopathic to stimulate the white blood cell to focus in on the fungus involved, and to allow the white blood cell better mobility and motility factors in seeking and destroying the fungus. Thus it appears that since our homeopathic does not kill the fungus in the petri dish on its own, the action of the homeopathic is in its stimulating effect on the white blood cell. The proposed mechanism of this is its ability to increase the white blood cell's photon receptors so that it can seek and destroy fungi better by improving its ability to locate these fungi and phagocytize them [Studies: 2, Books: 1].

We have seen from our test that there is a possibility of developing a homeopathic treatment for systemic candidiasis that may be very productive. We also want to combine this with behavioral therapies that stop the immune suppression which might result from stress, constipation, antibiotics, toxic chemicals, corticosteroids, x-rays, ionizing radiation, and others. White processed sugar, corn and corn products seem to be a complicating factor in candidiasis diseases.

In our test we did not find a meaningful intervention through the Crook diet, but we did find that avoiding white processed sugar and corn was helpful in the candidiasis case.

**NEW TECHNIQUES OF HOMEOPATHIC TREATMENT OF FUNGAL INFECTIONS**

--- BIBLIOGRAPHY ---

**BOOKS**

<table>
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NATURAL HOMEOPATHIC TREATMENT OF OTITIS MEDIA IN CHILDREN

Abstract:
In a medical practice ninety-three children ages one to eighteen were chosen who had otitis media verified by tympanogram, conduction/bone hearing, and symptomatology. Patients were treated with a homeopathic program involving an herbal formula and other medical practices. It was shown that all ninety-three children responded to the program positively, and that otitis media could be controlled in
all cases. It should be pointed out that thirty of the children were scheduled for myringotomy. The surgery was canceled for all because of the success of the treatment modality.

Key Words:
Otitis media, mucous, Mucous Dissolver, Ear Drops, eustachian tube, mucolysis

Introduction:
Acute otitis media is an infection of the middle ear. It is most common in young children from three months to three years old [Books: 22]. However, it can present at any age. Microorganisms can migrate from the nasal pharynx to the middle ear over the surface of the eustachian tube, or they can be provoked in the lamina propria of the mucous membrane as a spreading cellulitis or thrombophlebitis. In the New Biology [Books: 21] there is information which tells us that the ear during the gestation period is the most sensitive part of the body to toxins [Books: 22]. It has the longest period of sensitivity of any organ, and also has extreme sensitivity to external, synthetic and environmental pollutants. With this in mind, we might have predicted the increase in otitis media cases that would be presenting from the increased amount of environmental toxins over the last several decades.

If there is an incomplete resolution of the acute otitis media, or if there is an obstruction of the eustachian tube, then a separately secretory otitis media can result as an effusion of the build up of mucous in the inner ear. This is very common in children.

The middle ear is normally ventilated three to four times a minute as the eustachian tube opens during swallowing. Oxygen is absorbed by the blood in the vessels in the middle ear mucous membrane. If the flow of the eustachian tube is impaired, a negative pressure can develop in the middle ear. This can result in the distention of the eardrum, which can then be measured on a tympanogram. This was one of the diagnostic criteria for determining situations in our study of otitis.

If the pressure on the eardrum continues, it can produce a break in the drum, and thus allow for secretion of the fluids contained behind it. If this results in a permanent perforation of the tympanic membrane (eardrum), then this is known as chronic otitis media.

If the infection spreads to the mastoid process and results in a coalescence of the mastoid ear cells, this is known as acute mastoiditis, or osteomyelitis of the mastoid bone [Books: 10]. This type of complication is rare, as most patients are able to obtain quality help before the chronic nature of this disease sets in.

The Merck Manual [Books: 13] states that bacterial type otitis media is the most common. E.Coli, staph, strep, hemophilus influenza group A, klebsiella bacterioids, and other types of organisms are the most prevalent in causing this type of disease.

Viral infections rarely occur in the externa otitis (external ear) because of the antiviral nature of earwax. However, viral infections can intrude into the surrounding tissues around the middle ear and create a disturbance. Most importantly it can create a blockage of the eustachian tube and prevent proper drainage.

Another type of infection is the fungal infection, which can affect the middle, external and inner ear. Fungal infections are often overlooked by most medical assistants due to the over-dependence of antibiotic treatment. But antibiotics are known to aggravate fungal conditions. If an antibiotic treatment for otitis media is unsuccessful over the first seven to ten days, then the practitioner should suspect viral and/or fungal involvement. Fungal involvement is found to be more of a problem by this practitioner than by those discussing this in other literature.

Otitis media is also termed “glue ear” because the fluid of the middle ear increases in viscosity, becoming glue-like. This results in a diminished hearing ability through the ear with no loss of bone conduction hearing.

The effect of the otitis is that by inhibiting the free flowing movement of the middle ear bones and the tympanic membrane, the conduction hearing is disturbed; that is, sounds that are travelling through the outer ear into the ear and then into the auditory nerve. Bone conduction, or hearing of sounds which are conducted through the bones of the face and skull pass directly to the auditory nerve. Thus bone conduction in the otitis media is usually not compromised.

In our study patients were chosen because of: #1 symptomatology, which included ear pain, ear itching (the child scratches the ears), fever, and compromised hearing. Symptomatology is what usually prompts the parent to bring the child in for an examination. #2: the tympanic membrane was studied through a tympanogram and/or analysis of the tympanic membrane to determine that there was distention or pressure applied to the back of the membrane causing it to distend into the externa canal. #3: the
patients in our study were chosen if they had bone conduction hearing in normal ranges and conductive hearing through the externa ear that should have been deficient by more than fifteen percent of the norm. Criteria #4 for participation in the study is lack of any other type of metabolic disturbance such as osteomyelitis of the ear, congenital ear deformities, the presence of tubes in the ears, and other organic deformities which would set a child off from the normal patient pursued in our study.

In evaluating the causes of otalgia (earache) we also made some pre-diagnostic decisions regarding participation in the study. First was the factor of cerumen impaction. This happens when the earwax is impacted in the ear, which creates not only pain but also a disturbance in hearing. If there was any impaction of the cerumen, we simply dealt with it in the office by using a warm oil known as the Ear Drops formula. This formula is a collection of various oils and herbs which slowly dissolve the impacted ear wax, and also herbal provide relief to the otalgia. This was often done to patients in the office, which took fifteen minutes of Ear Drops administration and then flushing with warm water. If the ear wax was not fully dealt with, then we recommended a once-a-day administration of this treatment by the parents so that they could relieve the impaction of the ear wax.

It wasn't until the membrane was fully visual that we could include patients in the study, as tympanic membrane distention was one of the required criteria. Other diseases that had to be investigated and dealt with were furunculosis (infected hair follicles in the outer ear), extradural abscess, menieres disease, any type of ear tumor, TMJ disorders, myringitis bullosa, and mastoiditis. Otitis externa, or earaches characterized by mild to moderate ear pain that occurs with tragus manipulation, or malignant otitis externa, cause ear pain that is aggravated by moving the auricle or tragus. The acute ceruse otitis media involves the ear infection leaking through the tympanic membrane, and may cause a feeling of fullness in the ear, hearing loss, a vague sensation of top-heaviness, severe, deep throbbing ear pains; and fevers that can reach 102° F. (98.9° C.) This pain will increase steadily over several hours or days, and can be aggravated by pressure on the mastoid antrum. Rupture releases drainage and relieves the pain. If there are signs of any ceruse or rupture of the membrane, patients cannot be included in the study [Books: 23].

Methods:
The patients in this study were of ages one to eighteen, and came into a medical practice presenting with ear aches, ear itching, or diminished hearing. The average patient in this study would have had a symptomatology developed in the range of one week to two months before his parents would bring him into the practice for treatment. The patients presented over the ten-year period from 1984 to 1994. There was no control or placebo group in this study, as we are merely reporting the data of results of the patients to the outlined program, to determine its overall success. But this is not done for comparative reasons. These patients were screened with a simple audiometer for external hearing loss and with a tuning fork for bone conduction. Ninety-three patients are reported in this study. All patients had otitis media symptoms.

Table #1
CRITERIA FOR PARTICIPATION:
1. Symptoms-- ear pain, itching, fever, diminished or impaired hearing
2. Visible and measurable distension of tympanic membrane
3. Bone conduction hearing normal, external conductive hearing diminished 15% or more
4. No tubes, no antibiotics
5. No major complicating pathology

The treatment for all patients was a mucous dissolving homeopathic formula of low-potency nettles (nature’s mucous dissolver) and horsetail grass silica (nature’s lancet) with iodine and alfalfa in the remedy for antihistamine effects (Mucous Dissolver). The parents of these children were taught to massage the ear for eustachian tube drainage. The eustachian tube angle of drainage increases with age, increasing the risk of otitis in children. The simple technique of ear massage was performed twice daily during the one month of the treatment.

Ear Massage Technique
This massage technique is to aid the inner ear and to help clear the eustachian tubes.
massage process should be done gently and firmly—not to the point of pain. If the child shows signs of pain, reduce pressure. The following three steps should be done once daily on both ears.

1. Using gentle finger pressure, draw a line from the back of the ear near the mastoid bone down the back of the jaw bone through the saliva gland just at the rear of the jaw bone. Do this forty times on both sides.

2. Gently push the flap of skin in front of the ear (tragus) back over the ear canal until it blocks. Release and repeat in a pumping action; this creates a suction in the ear. Pump about forty times.

3. Place the fleshy part of the palm (just below the thumb) over the ear and rotate the ear in all directions, gently working the cartilage all around. Use a pumping action to work the air out of the ear. Pump thirty to forty times.

This operation was to be used by the parent for the child on a daily basis, no more than once a day. Remember, however, that it should be done at the time when the child is in the most severe pain, as this procedure can diminish some of the pain.

Another problem with children who develop otitis media is pancreatic enzyme deficiency, which results from an over-burdened pancreas. Eating too much sugar causes a hyper-insulin release which can also have an inhibitory effect on the release of certain enzymes which help to break up mucous. So as part of our study we ask the parents to remove white processed sugar from their children’s diet, allowing them to have all the fruit or natural sugars they wanted. It has also been shown that milk is a mucous producer. Since otitis media is an excess-mucous disease, we ask parents to take their children off milk during the therapy. Yogurt and frozen yogurt were fine, but ice cream and milk had to be removed as part of our treatment modality.

If allergies were revealed during the course of testing such as wheat, yeast, or other factors, these were also removed. But there were no other official variables in the treatment protocol.

Table #2

**TREATMENT PROTOCOL:**
1. The homeopathic formula, given in two teaspoons per day
2. The ear massage technique applied daily
3. Removal of white processed sugar from the diet
4. Removal of milk and unfermented milk products from the diet

These criteria were used for each patient.

In the presence of known infections, BAC was used for bacterial infection, VIR for viral infections and FNG for fungal infections. All of these are complex homeopathics.

Other causes of otitis include the ear’s susceptibility to toxins in an ever-toxic world, poor pancreas enzyme production making the lymph more viscous, allergy reactions, infectious cases, or stress involvement. Since this was a professional medical practice, not a classic study, patients were treated by the medical staff for anything else that presented in the etiology survey.

Limitations in the audiometer and subjective analysis of ear pain made quantified results difficult. Since it is the purpose of this pilot study to provoke deeper inquiry, we simply used an otitis positive or negative diagnosis. The results were almost one hundred percent. In every single case, Otitis improved dramatically within one month of treatment. Thirty of the cases were scheduled for surgery, and in every case surgery was aborted by the medical staff because of patient improvement.

**Pre-Test Post-Test**

**Positive Otitis**
Media: 93 1  
Alpha = .0005 significance

**Negative Otitis**
Media: 0 92

**Results:**

The results of our study showed that the complex homeopathic could be used for otitis media treatment. We have also seen results of this formula in treating other mucous conditions such as sinusitis, asthma, boils, lymphatic drainage, intestinal mucous, and others.

Over the years of utilizing this ear massage technique in the medical practice, its success has been very apparent, as well as its ability to deal with these various concerns.

Of those reported in this study, only one child was not successfully treated with this program. At the end of the four-week therapy the otitis did not diminish, although it do not become worse. At that
point the parents opted for antibiotic therapy, and later scheduled a myringotomy. There was nothing particularly remarkable in this case, other than a possible psychological block that might have inhibited the effects of this program.

In the other ninety-two cases we saw dramatic results. Over the years of practice there have been many other cases that could not be included in this study, as the children had a history of tubes and/or were taking antibiotics. We have used this program several times with patients who still had the chronic problems after treatment, but we found that gradually they could stop the antibiotics and deal with their situations more naturally. The results of their data were not organized for publication in this study.

**Discussion:**

Recently in America an FDA recommendation for otitis media has been published which includes antibiotics as the first course of intervention. It must be pointed out that these antibiotics are not stimulatory to the system but are backed by an allopathic philosophy. They are designed to work directly upon an infected ear rather than stimulating the body's defense mechanisms. Thus by working directly on the infection and not stimulating the immune system we have a tendency to make a classic allopathic mistake: to build dependence on antibiotics to do the body's job. This is partially why antibiotics are known as immune suppressors; they suppress the body's ability to do its job, and they create an atrophy in the immune factors.

It should be pointed out that the allopathic therapy is successful on symptomatology, but not in the long term. It builds dependence. In our study we followed up with several of our patients in long-term utilization-- not enough to report actual clinical data, although many of the parents have remarked that they have more control over the onset of ear infections by reactivating the treatment protocol.

If parents want a true, natural choice of medicine, then this paper offers satisfactory proof that there is a successful alternative to the allopathic philosophy. The philosophy of putting tubes in the ears is analogous to cutting a hole in the bathroom floor when there is a leak. The homeopathic philosophy is to stimulate the leakage repair mechanism, as well as to deal with the cause of the disease at its basic organic level.

Since we live in a world undergoing increasing toxicity, we see more and more disturbances to the most sensitive parts of the body to these toxins, which in children includes the ear. As the adult grows older and the face lengthens, we see increasingly fewer disturbances involving ear drainage, as the eustachian tube is better able to drain. Other parts of the body take over the sensitivity to toxins. But in children the ear and the ear canal is extremely sensitive. The ear shares blood supply with the hypothalamus and other intricate areas of the internal brain that regulate metabolic activity. Thus we can see the extreme importance of dealing with earaches and ear pathology quickly, safely and naturally; we want to avoid over-disturbing one of the most highly sophisticated regulating areas known: the hypothalamic area of the brain.

The primary presenting concern in any pediatrician's office is ear involvement. The number-one surgery performed in America is the myringotomy.

Further analysis with better trained medical staff and more precise equipment for media versus internal diagnosis is needed. We cannot determine the precise and most valuable intervention among:

1. naturopathy treatment
2. mucous dissolver
3. ear massage
4. increased parental involvement
5. stress reduction
6. stopping sugar or milk intake.

However, a minimal-risk, natural treatment modality seems a safe and effective procedure.

It is important to note that there is good mucous in the body, and that the Mucous Dissolver should not be used for excessive periods (over ninety days). The patient is never sick due to deficiency in Mucous Dissolver. There is always some reason for needing this formula, which is the basic cause behind the otitis. We need to get to the cause.

It is speculated that sugar can burden the pancreas, and thus interfere with the child's ability to develop his own lymphatic enzymes that can help to break up some of the mucous. Thus sugar reduction must be a part of the program. Also, the Mucous Dissolver should not be used in place of sugar reduction.
If the Mucous Dissolver is over-used, the good mucous around the spine can be broken up, which will create problems. The Mucous Dissolver should be used for short-term intervention, and should not be used as preventive medicine.

**RESULTS**

<table>
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<tr>
<th>Age</th>
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<th>Distension of Membrane</th>
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<td>1</td>
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--- BIBLIOGRAPHY ---

BOOKS

ARTICLES AND STUDIES
You can find fungus everywhere in both indoor and outdoor environments, and half of these fungi can threaten our health. If you find yourself dealing with a fungal infection, many complementary and alternative health options exist for fungal infection treatment.

Atypical MYCOBACTERIUM are obligate saprotrophic aerobes that can be found in the environment in soil, water, vegetables, and even in domestic animals and dairy products. Entry into hosts is usually via the gastrointestinal tract, but also can be via the lungs.

The MAC causes fevers, diarrhea, malabsorption and anorexia, and can disseminate to the bone marrow. Therapy for MAI is typically resistant to standard mycobacterial therapies.

Medicine has little they can do except for very harsh drugs that can destroy the liver and the kidney while hurting a 1000 other functions. When I went to med school we called Amphotericin Amp “HO” Terrible because three uses and your liver is gone.

**Antibiotics will kill Susceptible + Good Bacteria Thus Resistant Bacteria and Aggressive MYCOBacterium and Fungus spread into the body and environment.**

**SINthetic AntiBiotics Destroy the Healthy Bowel Flora and this compromises B Vitamin absorption which leads to depression, dermatitis, dementia, and distorted thinking. Then the witless allopath prescribes another SINthetic for the mental abnormality and this will affect the liver leading to another drug, and another drug, and another drug, and another drug, and another drug.**

With the cost of bringing a drug to market at over 1.5 million dollars, When will we see the ludicrous folly.
MYCOBACTERIUM are half fungus (hence the MYCO) and half Bacteria. They feed with fungal mycelia and reproduce like bacteria. Many Rickettsia like Rocky Mountain Spotted Fever and Legioner’s disease are similar. They get into the lungs via breath and the Immune System must manage them. Over use of antibiotics and other SINthetic drugs contribute to this lung disease. Many Rickettsia are similar.

This article will show that we all have a multitude of fungi in our lungs.

**Fungi in Lungs May Hold Asthma Treatment Clues**

Wednesday 20 February 2013 - 12am PST

There was a time when we assumed the insides of our lungs were devoid of life, apart from our own cells helping us breathe. But now we learn that the lung is home to a wide range of organisms, including fungi. A new study finds that people with asthma have a different blend of fungi in their lungs compared to healthy people who do not have asthma, leading the researchers to suggest this could be a useful avenue for developing new treatments.

The team, from the School of Medicine at Cardiff University in the UK, reports the study, the first large one of its kind, in the 5 February online issue of *BMC Infectious Diseases*. Study leader, Hugo van Woerden from Cardiff University's Institute of Primary Care and Public Health, says in a statement: "Our analysis found that there are large numbers of fungi present in healthy human lungs. The study also demonstrates that asthma patients have a large number of fungi in their lungs and that the species of fungi are quite different to those present in the lungs of healthy individuals."

He and his colleagues suggest the hundreds of tiny fungal particles they found in the lungs of asthma patients could hold new clues for treating the respiratory illness. For their study, they examined the mucus or sputum of people with and without asthma, drawn from the same community.

They found a total of 136 different species of fungi across both groups, with 90 more common in the people with asthma and 46 more common in the healthy people without asthma.

"Of particular interest was the presence of *Malassezia pachydermatis*, which is known to be associated with atopic dermatitis", notes the team.
Desire’ Treatment protocol for Myco-Bacterium and Lung Fungus

1. Clean up your environment completely
2. Use a scented candle to carry treatment herbs to the lungs, best herbs citronella, teat tree oil, pau d’arco, oregano oil, garlic, neem, orange oil.
3. Replenish bowel flora
4. Increase immune system, reduce stress + toxicity,
5. Exercise to clean, detox and burn up the lung infection.
6. Avoid sugar, high glycemic foods, synthetic antibiotics,
7. Treat cough and all symptoms with natural products as much as can be done. Load up on natural herbs
8. SCIO Zap fungus, and treat immune deficiency
9. Safe inhalant of OTC antifungal skin sprays with Micafungin, bifonazol, Clotrimazole, Econazole etc Spray into a bag inhalant deep into lungs only once a week to kill fungal complications. Not more than 4 times a year. Be careful this is an extreme measure.
Mycobacterium leprae

- Slow growing, acid fast, rod shaped bacillus
- Discovered in 1873 by Armauer Hansen
- First bacterium to be shown to cause disease in humans
- No in-vitro cultivation
- Humans and armadillo are only known natural hosts

Mycobacterium tuberculosis—Characteristics

- Gram positive
- Obligate aerobe
- Non-spore-forming
- Non-mobile rod
- Mesophile
- 0.2 to 0.5 x 2-3 μm
- Slow generation time: 15-20 hours
- May contribute to virulence
- Lipid rich cell wall contains mycolic acid—50% of cell wall dry weight
- Responsible for many of this bacterium's characteristic properties
- Acid fast—retains acid dyes
- Confers resistance to detergents, antibiotics

Mycobacterium smegmatis colonies on agar medium (colony diameter c. 1.5-6 mm).

One of the colonies expresses a cloned β-galactosidase gene and converts XGal from the agar medium to an insoluble blue dye.

Sporulating colonies of Streptomycyes glaucescens (colony diameter c. 1-4 mm).

This strain produces streptomycin, which was the first antibiotic that was effective against Mycobacterium tuberculosis.
Over Use of Antibiotics has Made Fungal Infections accelerate

Antibiotics will kill Susceptible + Good Bacteria Thus Resistant Bacteria and Aggressive MYCOBacterium + other Fungus spread into the body + environment.

to the general population, in whom antibiotic-resistant infections and Fungus may develop

to fish, fruits, and vegetables sold as food

to other animals on the farm

to farm workers and food processors

via contaminated meat products

via animal waste to soil and water
ANTIBIOTIC DISRUPTION OF BOWEL FLORA

Antibiotics as a co-factor in AIDS

By: W. Nelson, LPCC, M.D.

ABSTRACT

The antibiotic revolution was touted as one of the best discoveries of modern medicine. There have been however, a derogatory side effects of these antibiotics. The environment has been effected as well as the patients. In this article we look at the disruption of the bowel flora by antibiotics. And theorize about how this disruption of the bowel flora, could be a contributing factor to the AIDS epidemic. The article also reviews the bowel flora in naturopathic terms for treatment and diagnosis.
Anti-Biotics Kill the Friendly Bacteria and the Unfriendly Bacteria not AntiBiotic Resistant, then Fungus Flourishes, Vitamin Absorption is Upset and All Disease has an Open Door

Friendly Bacteria
L. acidophilus, L. salivarius, L. casei, L. thermophilus, B. bifidum, B. longum, etc.

Unfriendly Bacteria
Pathogenic bacteria & fungi, such as Candida albicans, etc.
One scented candle in a room can kill clinging bacteria and fungus on the walls and in the air. Use this as a carrier for herbs. If you use Tea Tree oil, Oregano and Pau D’ Arco oil in the candle it can be carried into the lungs via the air to kill the Mycobacterium.
Eucalyptus, Peppermint, Wintergreen in a candle can increase the vaso-dilation of the lungs to carry the herbs deeper to kill fungus, treat cancer, and or remedy other lung diseases.
Exercise and Conditioning are the best ways to fight Asthma, you must calmly learn to Stuggle Slowly and Overcome the Asthma, Many World Class runners had Asthma as a Child and Learned to Run Through Asthma and Burn away the Lung Fungus
Atypical MYCOBACTERIUM are obligate saprotrophic aerobes that can be found in the environment in soil, water, vegetables, and even in domestic animals and dairy products. Entry into hosts is usually via the gastrointestinal tract, but also can be via the lungs.

The MAC causes fevers, diarrhea, malabsorption and anorexia, and can disseminate to the bone marrow. Therapy for MAI is typically resistant to standard mycobacterial therapies.

They are half fungus (hence the MYCO) and half Bacteria. They feed with fungal mycelia and reproduce like bacteria. They get into the lungs via breath and the Immune System must manage them. Over use of antibiotics and other SINthetic drugs contribute to this lung disease. This article will show that we all have a multitude of fungi in our lungs.

MAC bacteria are common in the environment and cause infection when inhaled or swallowed. Symptoms are reminiscent of tuberculosis (TB), and include fever, fatigue, and weight loss. Many patients will have anemia and neutropenia if bone marrow is involved. Pulmonary involvement is similar to TB, while diarrhea and abdominal pain are associated with gastrointestinal involvement. MAC bacteria should always be considered in a person with HIV infection presenting with diarrhea. Recently, M. avium has been found to deposit and grow in bathroom shower heads from which it may be easily aerosolized and inhaled.[2]

"Lady Windermere syndrome" describes infection in the lungs due to MAC.[5] It is named after a character in Oscar Wilde’s play Lady Windermere’s Fan.[6]

The various subspecies of M. avium are prevalent in different areas:

- M. a. avium (MAA) primarily affects birds, but has also been found in ruminant mammals, especially deer.
- M. a. paratuberculosis (MAP) causes paratuberculosis, or Johne’s Disease, and also is usually found in mammals.

MAI is most common in immunocompromised individuals, root canal patients, the over stressed undernourished, or the high SOC Index patients also including senior citizens and those suffering from HIV or cystic fibrosis; however, these diseases, particularly Lady Windermere syndrome, do not require the individual to be completely immunocompromised.
Adjuvant Cytokine Therapy to Treat Pulmonary Mycobacterium Avium Complex Infection

This study has been completed.

Sponsor:
National Institute of Allergy and Infectious Diseases (NIAID)

Information provided by:
National Institutes of Health Clinical Center (CC)

Mycobacterium avium complex (MAC) are ubiquitous organisms that cause isolated pulmonary disease in otherwise healthy patients with yet undefined susceptibilities. Patients typically present with a history of chronic cough, eventually progressing to hemoptysis, fever, and hypoxia. With half or more of all patients failing standard three-drug therapy, this is an insidious disease with a poor prognosis. Under the natural history protocol of nontuberculous mycobacterial infection (NTM; #01-I-00202), 46 patients with diagnosed pulmonary MAC disease are being studied. Numerous studies have suggested that a dysregulation in cytokine production may make these patients susceptible to mycobacterial infection. Cytokines are particularly important in the activation of macrophages, which help to clear mycobacterial infection. Interferon gamma 1b (Actimmune) and GM-CSF (Leukine) are two cytokine therapies that have been approved in the treatment of chronic granulomatous disease and post-transplantation hematopoietic reconstitution, respectively. A number of in vitro studies suggest that either or both of these therapies may help to clear MAC infection. Given the poor outcomes of therapy and the persistent, debilitating nature of the disease, new therapies are desperately needed, and many are being tried without benefit of scientific foundation. Currently, there are no prospective trials that show any effect of these drugs in the lung delivered subcutaneously. This protocol proposes to perform a pilot study to evaluate the effects, if any, of these macrophage stimulating cytokines in the context of ongoing pulmonary MAC infection.

Comment : Professor of Medicine Desire’ Dubounet, D. Sc. L.P.C.C.
This next article of the medical profession admitting the difficulty they have with Mycobacterium tells us how little they understand lifestyle, exercise, and naturopathy.

Why Can't We Cure Nontuberculous Mycobacterial Lung Disease (yet)?

Date: Friday, May 20, 2011

Speaker: Jakko van Ingen, Resident in Clinical Microbiology, Radboud University Nijmegen Medical Centre
The incidence of disease caused by nontuberculous mycobacteria (NTM) is increasing in most industrialized countries. Factors driving the epidemiology, as well as the most frequent disease manifestations, differ strongly by region. The Mycobacterium avium complex (MAC) bacteria are the predominant causative agents of NTM lung disease in terms of frequency, although other species, e.g. M. kansasii, M. szulgai and, in Europe, M. malmoense seem more pathogenic, as a higher percentage of isolates is related to true clinical disease.

The increase in incidence of NTM disease implies that more and more patients require treatment. Yet, nontuberculous mycobacteria are characterized by high levels of natural drug resistance, including resistance to compounds that make up the core of currently advocated regimens, i.e. macrolides and rifamycins. These levels of natural resistance differ by species and likely impact on the outcome of treatment. Recent pharmacokinetic studies have revealed relatively low serum concentrations of antimycobacterial drugs in patients with MAC disease, which further questions the efficacy of currently recommended regimens. New treatment regimens are needed and should preferably include agents to which no natural resistance exists.

This seminar will discuss possible new treatment regimens, based on recent in vitro and pharmacokinetic data and will explore hypotheses on the background of the differences in natural resistance to antimycobacterial drugs in different NTM species.

The mycobacterium is resistant to nearly all antibiotics and we have tried to eradicate it with no success, the only antibiotic it is sensitive to is Tigecycline and I was only able to tolerate that for about 6-8 weeks before I went into renal failure and lost most of my hearing. The regime consisted of Doxycycline, Clarithromycin, Tigicycline and Amikacin and it didn't touch the atypical, after that I was on long term IV and oral antibiotics for almost 2 years with no success.
1. Medscape Reference - Mycobacterium Avium-Intracellulare
   Author: Janak Koirala, MD, MPH, FACP, FIDSA;
   Chief Editor: Burke A Cunha, MD, Updated: Jan 12, 2011

2. Showerheads may harbor bacteria dangerous to some
   By RANDOLPH E. SCHMID, AP Science Writer

   "Surgical excision versus antibiotic treatment for nontuberculous mycobacterial cervicofacial
   64. doi:10.1086/512675. PMID 17366449.


5. Reich JM, Johnson RE (June 1992). "Mycobacterium avium
   complex pulmonary disease presenting as an isolated lingular
   or middle lobe pattern. The Lady Windermere
   syndrome". Chest 101 (6): 1605–

6. Wilde, Oscar (1940). The Importance of Being Earnest and

7. Subcommittee Of The Joint Tuberculosis Committee Of The
   British Thoracic Society, (March 2000). "Management of
   opportunist mycobacterial infections: Joint Tuberculosis
   Committee Guidelines 1999. Subcommittee of the Joint
   Tuberculosis Committee of the British Thoracic
   Society". Thorax 55 (3): 210–
   8. doi:10.1136/thorax.55.3.210. PMC 1745689. PMID 10679540
Why over use of Antibiotics has accelerated Fungal Disease

The Vicious Cycle

- Infection
- Antibiotics
  - Wipe out friendly bacteria
- Toxins
- Weaken the immune system
- Candida

I think I need antibiotics for my cold... *IT'S A VIRUS*

I've had fever, night sweats and nausea for over a week now.

I want to do a blood test to check for HIV.
Unnecessary Antibiotic Prescriptions

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<th>Infection type</th>
<th>Percentage unnecessary</th>
<th>Prescriptions per year (in millions)</th>
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<tr>
<td>Sore Throat</td>
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<tr>
<td>Sinusitus</td>
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Totals prescribed per year (in millions)

Counseling Points

Pharmacists can give patients the following suggestions to help prevent antibiotic-resistant infections:

- Talk with health care providers about antibiotic resistance and ask whether an antibiotic is likely to be beneficial for your condition.
- Ask what else can be done to help you feel better sooner.
- Do not take an antibiotic for a viral infection (e.g., cold, flu).
- Do not save antibiotics for the next time you get sick.
- Take an antibiotic exactly as prescribed.
- Do not take an antibiotic prescribed for someone else.

Source: Reference 21.
Antibiotics overuse can kill

Self-medicating may lead to deadly antimicrobial resistance, says Liow
The Benefits Of Probiotics

100 years of scientific studies have shown that probiotics have numerous benefits. In fact, recent studies have shown there are more than 100 distinct benefits of probiotics.

Many are surprised to learn that probiotics affect more than just digestion. But volumes of research have shown that every single body system is affected by the health of our probiotic colonies.

Be sure to take more probiotics so you stay healthy!
Treating Fungal Infections of the Skin and Lungs

You can find fungus everywhere in both indoor and outdoor environments, and half of these fungi can threaten our health. If you find yourself dealing with a fungal infection, many complementary and alternative health options exist for fungal infection treatment. These home remedies can kill off the yeast or bacteria causing the fungal infections while reducing symptoms of the infection in the skin, lungs, sinuses, eyes, and other organs.

Exposure to fungus, mold, and other allergens can cause out of control immune system reactions in your body, the symptoms of which can include pain, headache, fevers, mucus production in the sinuses and/or lungs, and may in some cases may lead to death. More common symptoms include a fungal rash on the skin or some mild respiratory distress. More serious fungal infections include fungal pneumonia, fungal sinusitis, aspergillosis, fungal meningitis, and systemic *candida albicans* infections.

Fungal Treatment Options in Alternative Medicine

Apple cider vinegar is a common skin fungus treatment and may be used for internal treatment as well. Also consider probiotics in the form of pills or regular yogurt consumption, which can help support your immune system. Pair that with eating a couple raw cloves of garlic each day. The sulfur and other compounds in garlic (including ajoene) have powerful antifungal properties, though these are more effective as a fungal infection treatment via topical application than for systemic use through ingestion.

Research conducted in 1996 indicated the following substances or essential oils had antifungal properties:

- **Oregano** – the most powerful anti-fungal of the essential oils, and possess significant activity against *Candida albicans*. The minimum inhibitory concentration against *C. albicans* has been found to be <0.1μg per ml. In contrast, **caprylic acid** (a mixture of calcium and magnesium salts, a natural anti-fungal fatty acid), is 0.5μg.
- **Pau D’ Arco** natural Nyastatin
- **Citronella oil** – obtained from the leaves and stems of different species of *Cymbopogon* (lemon grass)
- **Coconut oil** – medium-chain triglycerides in the oil have antifungal activities
Iodine  – Lugol's iodine
Lemon myrtle
Neem seed oil
Olive leaf
Orange oil
Palmarosa oil
Patchouli
Selenium – in dietary supplements or natural food sources, in particular Brazil nuts
Tea tree oil – ISO 4730 ("oil of melaleuca, terpinen-4-ol type")
Zinc – in dietary supplements or natural food sources, including pumpkin seeds and chickpeas
Horopito (*Pseudowintera colorata*) leaf contains the antifungal compound polygodial.[7]
Turnip
Chives
Radish
Garlic or Allicin – created from crushing garlic
Caprylic Acid
  - Astragalus is a good general immune-system booster. Get a standardized product and follow dosage on label or take two capsules twice a day. You can stay on it indefinitely.
  - Taking an acidophilus culture (it contains the *lactobacillus* bacteria that make milk sour) may help change the chemistry of your tissues, making them more resistant to the fungi. You can get acidophilus in health food stores, usually prepared in a milk or carrot juice base. I recommend products containing *lactobacillus GG*, such as Culturelle.

Researchers at Tel Aviv University’s Department of Plant Sciences published a study in 2009 indicating carnivorous plants, such as the Venus flytrap, contain compounds that may be useful in providing a new class of antifungal drugs for use in humans for fungal infections that are resistant to current drugs.[11][12][13]

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Fungal Lung Infections

PatientPlus articles are written by UK doctors and are based on research evidence, UK and European Guidelines. They are designed for health professionals to use, so you may find the language more technical than the condition leaflets.

See also the separate article on Systemic Mycoses.

Fungi may cause lung disease through direct infection of pulmonary tissue, through infection of pulmonary air spaces/lung cavities, or through their ability to trigger an immunological reaction when fungal material is inhaled. The latter mechanism is involved in cases of allergic bronchopulmonary aspergillosis, aspergillus-
induced asthma and extrinsic allergic alveolitis due to fungi (eg, maltworker's lung, farmer's lung). This article will concentrate on those diseases caused by direct fungal infection of the lung (fungal pneumonias).

With the exception of aspergillosis, these infections are usually not present to any significant degree in immunocompetent residents of the UK. They are more likely to affect those who have travelled abroad to areas where they are endemic, or arise as opportunistic infections in patients who are immunocompromised as a result of oncological treatment, due to immunomodulation following solid organ transplantation, or HIV infection. Pulmonary infection occurs after inhalation of spores/conidia, or by the reactivation of latent infection. Haematogenous dissemination of fungal infection leading to a systemic mycosis tends to occur chiefly in immunocompromised patients.\[1\]

**Endemic fungal pneumonia pathogens:**
- *Histoplasma capsulatum* causing histoplasmosis.
- *Coccidioides immitis* causing coccidioidomycosis.
- *Blastomyces dermatitidis* causing blastomycosis.
- *Paracoccidioides brasiliensis* causing paracoccidioidomycosis.

**Opportunistic fungal pneumonia pathogens:**
- *Candida* spp. causing candidiasis.
- *Aspergillus* spp. causing aspergillosis.
- *Mucor* spp. causing mucormycosis.
- *Cryptococcus neoformans* causing cryptococcosis.

### Epidemiology and distribution

In the UK the endemic fungi are exceedingly rare and occur only in returning travellers. The endemic fungi are distributed in the Americas in the valleys of the Mississippi and Ohio rivers (histoplasmosis and blastomycosis), the Southwestern United States and Northern Mexico (coccidioidomycosis) and Central and South America (paracoccidioidomycosis). In Africa histoplasmosis is found in the equatorial regions.

The opportunistic pathogens are ubiquitously distributed and may cause disease in those with immunosuppression. There are few figures for their incidence in the population at large in the UK. A recent review estimates that 15-18.3% of HIV-infected patients admitted to hospital will suffer a nosocomial pulmonary infection. Of these, a small but significant proportion (around 5-10%) will be due to opportunistic fungal pneumonias.\[2\]

### Risk factors
- Travel to an area where fungal pneumonia pathogens are endemic (see above).
- Regular exposure to bird, bat or rodent droppings in endemic areas.
- Any cause of [immunocompromise](#), for opportunistic infections.
- Endemic fungal infections seem to be more common in men than in women, as oestrogen is thought to exert an inhibitory effect on the growth cycle of fungi.\[1\]

### Presentation
**Symptoms**

- **Fever** - persistent fever in the immunocompromised should always raise the suspicion of opportunistic pulmonary or systemic fungal infection.
- **Cough** which is usually dry.
- **Chest discomfort** (dull and poorly localised or focal and pleuritic).
- **Progressive dyspnoea**, particularly on exertion.
- **Haemoptysis** is a relatively common symptom of invasive aspergillosis/mucormycosis.
- Endemic mycoses may cause **lymphadenopathy** and obstruction of large airways through pressure effects.
- Endemic mycoses have a predilection for causing symptoms of 'rheumatological' syndromes - eg, arthritis/arthralgia, **erythema multiforme**, **erythema nodosum**, **pericarditis**.
- Endemic mycoses may also cause symptoms by haematogenous dissemination to skin, brain/meninges, bone and joints and full-blown **septicaemia**.
- Infections with **Aspergillus** and **Candida** spp. and other opportunist fungi may cause symptoms of hypersensitivity reactions - eg, allergic asthma, allergic bronchopulmonary aspergillosis, extrinsic allergic alveolitis.
- Symptoms due to other sites of extrapulmonary involvement (particularly in the immunocompromised) - eg, meningoencephalitis/brain abscess, skin lesions, kidneys, liver, muscles, endophthalmitis, nasal passages and sinuses, systemic sepsis affecting blood and bone marrow.

**Signs**

- Fever.
- Tachycardia.
- Tachypnoea.
- Wheeze.
- Signs of focal pulmonary consolidation - eg, reduced expansion, dullness to percussion and bronchial breathing.
- Signs of bronchial obstruction if thoracic lymphadenopathy is significant.
- Signs of **pleural effusion**.
- Seek signs of extrapulmonary involvement - eg, skin lesions, signs of meningism, joint pain or swelling, retinal lesions on ophthalmoscopy.

**Differential diagnosis**

- Bacterial, atypical or viral **pneumonia**.
- **Aspiration pneumonia**.
- **Pneumocystis jirovecii** pneumonia.
- Eosinophilic pneumonia.
- Hypersensitivity reaction caused by fungal antigen - eg, **allergic asthma**, **allergic bronchopulmonary aspergillosis**, **extrinsic allergic alveolitis**.
- Chemical pneumonitides - eg, chemical worker's lung.
- Coal worker's **pneumoconiosis**.
- **Löffler's disease** (marked eosinophilia and benign, transient, migratory or recurrent pulmonary infiltrates with minimal constitutional upset).
- **Adult respiratory distress syndrome**.
- Causes of **pulmonary fibrosis**.
- **Tuberculosis** (TB).
- **Pulmonary oedema**.
- Helminthic infections.

**Investigations[3]**

The diagnosis of invasive pulmonary aspergillosis, histoplasmosis and blastomycosis, has improved with the use of easily performed antigen detection systems in serum and bronchoalveolar lavage fluid.
• FBC:
  • Raised WCC in immunocompetent patients.
  • Eosinophilia may predominate.
  • Progressive neutropenia or leukopenia in an unwell immunocompromised host suggests systemic candidiasis/aspergillosis.

• CXR:
  • May show patchy infiltration, nodules, consolidation, cavitation or pleural effusion.
  • Pronounced mediastinal lymphadenopathy - some endemic fungal pneumonias.
  • Miliary pattern pulmonary infiltration in extensive disease.

• Blood cultures (may require specific fungal culture bottles).
• Urine/sputum/invasive catheter cultures (potassium hydroxide staining can be used for sputum but may detect colonising rather than invasive species).

• CT/MRI scanning of thorax:
  • Early chest CT scan in immunocompromised patients suspected of having invasive fungal pneumonia can help identify and treat disease early, leading to an improved outcome.\\(^4\)\\
  • Halo sign: ground-glass opacity surrounding a pulmonary nodule or mass. Most commonly associated with invasive pulmonary aspergillosis.\\(^5\)\\
  • Reversed halo sign: focal rounded area of ground-glass opacity surrounded by a crescent or complete ring of consolidation. Most often associated with pulmonary mucormycosis.\\(^5\)\\

• Bronchoscopy - to obtain bronchoalveolar lavage/transbronchial biopsy specimens for fungal staining and culture.
• Transthoracic fine-needle biopsy - usually radiologically guided to biopsy nodules for staining/histology/culture.
• Open lung biopsy - used occasionally.
• Lumbar puncture in cases of suspected meningeal involvement.
• Bone marrow aspiration/biopsy in immunocompromised patients with suspected disseminated disease.
• Biopsy of any skin lesions.
• Joint aspiration if joint effusion.
• There are specific antigen-detection tests, PCR techniques and ELISA assays and serial serology available to detect specific pathogens - seek microbiological advice on the most appropriate test in the clinical context.

It is also important to think of why the patient might be immunosuppressed. There are other illnesses that may explain the reason for immunosuppression - eg, previously unknown TB, diabetes and HIV. Thus history, examination and investigations also need to be tailored to try to determine the cause of immunosuppression. TB should be particularly sought after as it is an important differential diagnosis.

Management\\(^1\)\\
• In immunocompromised patients, factors that are contributing to the illness, such as chemotherapy, steroids, indwelling venous catheters, etc. need to be addressed where possible.
• Immunocompromised patients may benefit from the use of colony-stimulating factors to boost immune cell production.
• The new azoles (eg, voriconazole) are most often used. Amphotericin is now less often used, and when used is often given as lipid formulation to decrease toxicity.\\(^3\)\\
• British National Formulary recommendations:\\(^6\)\\

  • Amphotericin or caspofungin are used for the empirical treatment of serious fungal infections.
  • Aspergillosis: voriconazole is the treatment of choice; liposomal amphotericin is an alternative first-line treatment when voriconazole cannot be used. Caspofungin, itraconazole or posaconazole can be used in patients who are refractory to, or intolerant of voriconazole and liposomal amphotericin. Itraconazole is also used for the treatment of chronic pulmonary aspergillosis.
• Invasive or disseminated candidiasis: an echinocandin (eg, anidulafungin, caspofungin and micafungin) can be used. Fluconazole is an alternative for clinically stable patients. Amphotericin is an alternative when an echinocandin or fluconazole cannot be used. In refractory cases, flucytosine can be used with intravenous amphotericin.
• Cryptococcosis is usually treated with amphotericin and flucytosine, followed by fluconazole for eight weeks or until cultures are negative.
• Histoplasmosis: itraconazole can be used for immunocompetent patients. Amphotericin is preferred for patients with fulminant or severe infections. Following successful treatment, itraconazole can be used for prophylaxis against relapse until immunity recovers.
• Cardiothoracic surgery may be needed to resect infiltrated/necrotic pulmonary tissue as an adjunct to antifungal therapy, or to treat some complications such as massive haemoptysis and pulmonary abscesses.

Complications

• Dissemination of fungal infection to other sites such as the brain, meninges, skin, liver, kidneys, adrenal glands, heart, eyes, spleen.
• Progressive respiratory failure.
• Systemic fungaemia and septic shock.
• Blood vessel invasion causing massive haemoptysis, pulmonary infarction, myocardial infarction, cerebral infarction/embolism.
• Associated rheumatological complex/pericarditis with endemic fungal pneumonias.
• Lung cavitation.
• Development of mycetoma in a lung cavity.
• Local pulmonary damage causing bronchopleural or tracheo-oesophageal fistulas, mediastinal fibrosis, calcification in pulmonary tree, chronic pulmonary symptoms.
• Immunological reaction to fungal antigens.
• Fungal endocarditis.

Prognosis

• This is highly variable in cases of opportunistic infection, depending on the cause and degree of immunocompromise, comorbidities and speed of recognition of pulmonary fungal infection.
• Overall mortality is relatively high (probably >50% in immunocompromised patients).
• Mortality for untreated disseminated histoplasmosis is ~80%, reduced to ~25% with treatment.\[1\]
• Aspergillosis and mucormycosis have mortality rates of 50-85% in transplant recipients, especially after bone marrow transplantation.\[1\]
• Coccidioidomycosis has a mortality rate as high as 70% in patients with AIDS.\[1\]

Prevention

• HIV patients are routinely treated with prophylactic antifungal drugs to try to avoid infection with opportunistic fungal pathogens, particularly Cryptococcus neoformans.
• Transplant patients may also benefit from prophylactic antifungal agents.\[2\]
• Fluconazole has shown some benefits as prophylaxis against invasive fungal infections in transplant patients.\[2\]
• Patients likely to have prolonged neutropenia should avoid activities that increase exposure to environmental fungal spores, such as gardening or working with potted plants and fresh flowers, cleaning, building work and handling uncooked vegetables.
Further reading & references

2. ^> Sheehan D., Hitchcock C, Sibley C. Current and Emerging Azole Antifungal Agents
3. ^Echinocandins for the treatment of systemic fungal infection | Canadian Antimicrobial Resistance Alliance (CARA)

- King JW et al; Cryptococcosis, Medscape, Oct 2012
Fungi In Lungs May Hold Asthma Treatment Clues

Wednesday 20 February 2013 - 12am PST

There was a time when we assumed the insides of our lungs were devoid of life, apart from our own cells helping us breathe. But now we learn that the lung is home to a wide range of organisms, including fungi. A new study finds that people with asthma have a different blend of fungi in their lungs compared to healthy people who do not have asthma, leading the researchers to suggest this could be a useful avenue for developing new treatments.

The team, from the School of Medicine at Cardiff University in the UK, reports the study, the first large one of its kind, in the 5 February online issue of *BMC Infectious Diseases*.

Study leader, Hugo van Woerden from Cardiff University's Institute of Primary Care and Public Health, says in a statement:

"Our analysis found that there are large numbers of fungi present in healthy human lungs. The study
also demonstrates that asthma patients have a large number of fungi in their lungs and that the species of fungi are quite different to those present in the lungs of healthy individuals."

He and his colleagues suggest the hundreds of tiny fungal particles they found in the lungs of asthma patients could hold new clues for treating the respiratory illness.

For their study, they examined the mucus or sputum of people with and without asthma, drawn from the same community.

They found a total of 136 different species of fungi across both groups, with 90 more common in the people with asthma and 46 more common in the healthy people without asthma.

"Of particular interest was the presence of Malassezia pachydermatis, which is known to be associated with atopic dermatitis", notes the team.

The main value of the study is that it establishes that the lungs are home to fungi, and that people with asthma may have a particular blend of fungal colonies, which could open up a new field of research, bringing together molecular techniques for identifying fungi and developing treatments, says van Woerden.

"In the future it is conceivable that individual patients may have their sputum tested for fungi and their treatment adjusted accordingly," he adds.

In November 2012, another group of researchers in Scotland reported that drying laundry indoors could pose health risks for people prone to asthma because the increased humidity encourages molds and dust mites.
Anti-Candida Protocol

Remedies that Directly Attack Candida (Mandatory)

I must stress here -- to avoid any confusion -- that not all of the attack remedies below need to be used. These are just options for you. Furthermore, if recommendations are needed for clarity's sake -- I have also personally found that using Ted's Alkalizing Remedies, Lugol's Iodine and Borax in combination to be very useful at curing candida problems. But if these nutrients are hard to get -- just use another combination from below of your own choice.

* Take Ted's Lime/Lemon baking soda water alkalizing remedy at least 2 times a day as recommended. I used mainly the ACV, lemon or lime as well as just the sodium bicarb with water alkalizing remedies which also act to kill candida. These alkalizing remedies create the worst possible environment for the candida while simultaneously creating a healthy body terrain. Also take the Baking Soda with water remedy on its own throughout the day and one hour before bed - this will help you get a good nights sleep. If you have problems with this remedy, then use Ted's Carbicarb remedy -- this is more balanced and incorporates potassium to balance any sodium issues. Potassium citrate can be taken to more directly aid intracellular alkalization. See this link for the alkalizing remedies:
  
  http://www.earthclinic.com/Remedies/alkalizing_formulas.html
  http://www.earthclinica.com/CURES/candida4.html#TEDS

* Supplementing with at least 50 mgs to 100 mgs of 5% Lugols Iodine per day - 8 to 16 drops a day (or as much as you can stand without problems) in split doses taken four times a day (not at mealtimes) in a glass of water. Iodine will also help to balance your hormones because it supports the thyroid and is also able to remove dangerous halogens like fluorine and bromine from your body. Lugol's Iodine also chelates heavy metals like aluminium, cadmium, lead and mercury from your body and this is very beneficial. LI also kills 90% -- 95% of all known pathogens -- including candida. You can also use Kelp as the iodine source -- but this does not really give sufficiently high amounts of iodine/iodide needed to kill the candida in my opinion.
* Drink 1/4 teaspoon of **Tetrasodium Borate or Borax** (1/8 tspn for women) in a litre of water throughout the day. Take this protocol for 5 days on then rest for 2 days. So, 5 days on, 2 days off with the Borax. Borax is the ultimate anti-fungal, also good for bones and helps to balance the hormones as well as chelates and removes fluoride from the body. Borax affects your male hormones or androgens in a viagra-like manner, which is why you must rest for 2 days -- to avoid gland over-stimulation.

* **Sodium Molybdate or Molybdenum.** Take at least 900 mcg Molybdenum a day. Sodium Molybdate kills candida and also removes the debilitating candida alcohol and aldehyde poisons from the body via the aldehyde dehydrogenase enzyme pathway (needs molybdenum) in the body -- this will help to remove symptoms like nausea, flu-like symptoms, aches and pains, brain fog and lethargy problems. Ted recommends supplementing between 10 mg and 25 mgs sodium molybdate a day taken for only two weeks to quickly kill off the candida -- but I've found Sodium Molybdate or Molybdenum difficult to purchase in amounts greater than 900 mcgs (the highest allowed RDA dosage).


* **Hydrogen peroxide** (food grade) I just use a capful of 3% HP in one litre of water a day when I need it. HP kills bacteria, viruses and fungi and it also helps greatly to clear and unblock the lymph glands. Sometimes I splash 3% HP all over my body, this kills everything bad topically as well as being absorbed quite well transdermally into my body by this method. Very potent against all forms of bacteria, viruses and fungus. **Do not use Lugol's Iodine together with Hydrogen Peroxide** in the daily protocol -- because they tend to neutralize and cancel each other out -- so just use one or the other in your protocol. See this link:


**Caveat:** Although Hydrogen Peroxide is highly useful -- it does have its downside. Some people get nausea, migraine headaches etc when they supplement HP. HP also inactivates or neutralizes and depletes antioxidants in the body because of its pro-oxidant effects. I always prefer to use lugol's iodine against candida because it
isn't as complicated to use as HP. But if lugol's iodine cannot be found or used -- use HP as recommended and increase anti-oxidant intake at the same time.

* **Methylene Blue (MB).** You can buy this at any aquatics or fish supply store. It is used to get rid of fungal and bacterial infections on fish. Also used throughout the last century as a successful anti-malarial. Taking MB on its own will turn your urine green and the whites of your eyes blue, but if you take at least 1000 mgs Vitamin C with the MB, these side-effects will not occur. Dosage: 4 - 6 drops of a 0.1% solution of MB in a full glass of water once or twice a day. Do not take MB after 3 or 4 o'clock in the afternoon - it gives you a lot of energy so you will not be able to sleep. MB is a deep acting anti-fungal that is able to penetrate the blood/brain and blood/bone barriers of the body. MB is also a marvellous mitochondrial super anti-oxidant for your brain -- gives you lots of energy. [http://www.earthclinic.com/Remedies/methylene-blue.html](http://www.earthclinic.com/Remedies/methylene-blue.html)

* **Pau D'Arco** (*Tabebuia impetiganosa*). This is a very effective herb against candida with a solid and useful reputation as an effective anti-fungal. This is best taken as a tea or capsule (1000 mgs twice a day).

**Body Detox (Mandatory)**

* Detox and get rid of heavy metals from your body. Due to diet and if you've taken medicinal drugs for any length of time your body will have an accumulation of heavy metals. To get rid of these problems just drink green tea 2 or 3 times a day and eat Cilantro 3 times a week in salads. You can also use Sodium Thiosulphate to get rid of heavy metals, arsenic, cyanide and chlorine. ST will get rid of heavy metals over time. Use 6-10 drops of 10% ST solution in a full glass of water daily. Heavy metals create an ideal acidic environment for candida as well as for nanobacteria.

* **Chlorella** - Also for detoxing heavy metals and for mineral support.

* Using Lugol's Iodine in the protocols is also the best way to detox fluoride and bromide from the body and will also help to remove heavy metals like aluminium, lead, mercury, cadmium and arsenic from the body.

**Additional Support with Vitamin and Mineral Supplements (Optional)**
* **Vitamin C** - Taken in the more alkaline form of Sodium Ascorbate -- at least 1000 mgs three times a day. Vit C is an anti-oxidant and also chelates heavy metals from the body as well.

* **Magnesium** - Taken as Mag Chloride, Mag Citrate or Mag Gluconate. Dosage: 250 mgs twice a day. Magnesium Oil(40% water 60% magnesium chloride) cab also be used transdermally. Magnesium is involved in over 300 major enzyme and coenzyme body processes and also gets rid of any staph or strep bacteria quite well. Magnesium Chloride is the best form of magnesium to take in my opinion.

* Take at least 2 tablespoons of **Virgin Coconut Oil**(VCO) per day with meals to help constipation and intestinal issues. VCO contains mainly medium chain saturated acids, very protective for the intestines, liver and blood. Contains lauric acid, caproic acid, capric acid, caprylic acid and myristic acid -- these act as anti-microbials helping to destroy the candida as well as protecting the intestines from any further external microbial invasion. I don't use vegetable oils anymore, I cook only with VCO now.

* **Zinc gluconate or zinc acetate** - Helps to support the immune system. 25mgs – 50mgs taken for one week, then take this dose once a week thereafter.

* **Natural Sea Salt** or **Fulvic/Humic Acid**. Both of these will act in the same way as absorption synergists as well as helping to create a healthy intestine and help to supply other important and much needed micro-minerals to your body.

* **Selenium** - 200 mcg twice a day at mealtimes. Selenium helps remove mercury and supports the liver and thyroid. There is no need to take this dose if you are also already taking the recommended liver support (which includes selenium).

* **Vitamin B3** - as niacin or niacinamide. Dosage: 500 mgs twice a day. Be aware of the "niacin flush" effect if you take the niacin form. Niacin is anti-candida and supports the liver, digestion and is relaxing for the body.

* Take **B50 Complex** three times a week - this is beneficial for digestion and will also help fight candida. It also acts synergistically when higher dose B3 is also supplemented.
Liver and Kidney Support(Optional)
* Take herb supplements like Chanca Piedra, Milk Thistle or Dandylion because the candida die-off will create a big strain on both your immune system and the liver/kidneys which will have to clear the dead candida debris and toxins from your blood. Think of this as taking out the candida trash. This die-off will give you flu-like or liverish symptoms and perhaps some diarrhea. You will probably feel much worse before you feel better. Accept this and work your way through it as this should disappear once your body gains control again. If you have actual liver damage then taking Milk Thistle(1000 mgs twice a day at lunch and dinner) in combination with Alpha Lipoic Acid(300 mgs twice a day at lunch and dinner) and Selenium(200 micrograms twice a day at lunch and dinner) will help to support the liver and kidneys.

Can a foot cream really do battle with HIV?
A study has found that the antifungal drug Ciclopirox kills HIV in cell cultures -- and the virus doesn't bounce back when the drug is stopped. But the research has yet to be performed on people.

by Elizabeth Armstrong Moore

September 24, 2013 4:26 PM PD
Ciclopirox is currently approved by the FDA as a topical antifungal cream. (Credit: Fougera)

A drug commonly prescribed to treat nail fungus appears to come with a not-so-tiny side effect: killing HIV in cell cultures.

In a study performed at Rutgers New Jersey Medical School, not only does the drug Ciclopirox rid infectious HIV from cell cultures, but the virus also doesn't bounce back when the drug is withheld. The same group of researchers had previously shown that Ciclopirox -- approved by the FDA and Europe's EMA as safe for human use to treat foot fungus -- inhibits the expression of HIV genes in culture. Now they have found that it also blocks the essential function of the mitochondria, which results in the reactivation of the cell's suicide pathway, all while sparing the healthy cells.

The researchers said that one aspect of HIV that makes it particularly persistent, even in the face of strong antiviral treatments, is its ability to disable a cell's altruistic suicide pathway -- which is typically activated when a cell is damaged or infected. In other words, infected cells that would normally commit suicide to spare healthy cells no longer pull any altruistic kamikaze missions. Ciclopirox tricks these cells back into their old ways with a double negative, disabling the disabling of the suicide pathway.

"The key thing these drugs do is, unlike anti-retrovirals in the current clinical arsenal, and there are lots of them and they have controlled this disease pretty successfully, these drugs kill the HIV-infected cell," says Michael Matthews, lead researcher and chair of the school's department of biochemistry and molecular biology. "That's what's so new and so promising about it."

It's obviously still going to take clinical trials on humans to study the safety and efficacy of Ciclopirox as a potential topical HIV treatment, but the fact that it's already deemed safe for one type of human use could make the regulatory process faster than usual.

Unfortunately, says Dr. Robert Gallo, a professor of medicine at the University of Maryland best known for co-discovering HIV in 1984, even if the topical antifungal treatment successfully kills HIV-infected cells in clinical trials, it would need to be a systemic treatment, not a topical one, to actually treat (instead of simply prevent) HIV.

"On the positive side, I know Mike Matthews, and he's a superb scientist, probably the lead guy on this," says Gallo, who did not participate in this research. "And that is exciting that it kills cells. That would be very exciting if you could give it systemically and it kills only HIV-infected cells. But topical treatment would be for prevention, not as a therapy. The only way you could use it as a therapy is systemically, and it would be unlikely this could be used systemically."

But Rutgers researcher Hartmut Hanauske-Abel, who is working with Matthews, says that the topical treatment may some day be used systemically, and that Ciclopirox "must no longer be considered a topical-only drug."

The researchers also note that another FDA-approved drug now thought to help subdue HIV, called Deferiprone, skipped studies in animals and went straight from tests in culture to a phase I human trial in South Africa, possibly paving the way for other FDA-approved drugs to move faster through the study phases. (Unlike Ciclopirox, which is approved for topical treatment, Deferiprone is FDA- and EMA-approved for systemic use.)

The new findings on Ciclopirox appear in the current issue of the journal PLOS ONE.

Update, September 26 at 1:47 p.m. PT: The headline and lead paragraphs have been changed to clarify what the study found. Also this story has been updated with comments from Michael Matthews, Hartmut Hanauske-Abel, and Robert Gallo.
"At IMUNE you Teach Yourself Medicine, but I Train your Mind your Spirit and your Soul to Heal"

Desiree Dubouneet