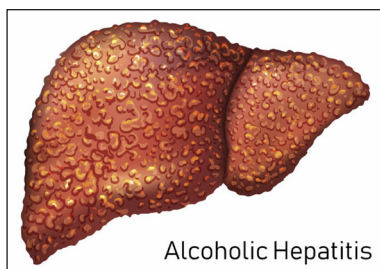


Targeting Intestinal Fungi in Treating Alcoholic Hepatitis

Chronic alcohol consumption is associated with an increased intestinal permeability and alterations in the intestinal microbiota. This potentially leads to the development and progression of alcohol-related liver disease. Data is scarce about commensal fungi in the gut.



Alcoholic Hepatitis

Lang S, Duan Y, Liu J, *et al.* published a paper titled 'Intestinal Fungal Dysbiosis and Systemic Immune Response to Fungi in Patients With Alcoholic Hepatitis'

in *Hepatology*. Lang and colleagues explored the intestinal mycobiota in a cohort of patients with alcoholic hepatitis, alcohol use disorder, and nonalcoholic controls. They also assessed serum anti-*Saccharomyces cerevisiae* antibodies (ASCA) as a systemic immune response to fungal products or fungi.

Among alcoholic hepatitis and alcohol use disorder patients, *Candida* appeared to be the most abundant genus in the fecal mycobiota. Genus *Penicillium* was the most abundant genus in the mycobiome of control subjects. The diversity was lower in the alcohol groups compared to controls. Lower diversity was not tied to antibiotic or steroid treatment. Patients with alcoholic hepatitis were shown to have significantly higher ASCA levels when compared to those with alcohol use disorder and to controls. Within the alcoholic hepatitis patients, those with levels of at least 34 IU/mL had a 90-day survival of 59% compared to 80% among those with ASCA levels less than 34 IU/mL, with an adjusted hazard ratio of 3.13.

A lower fungal diversity is seen in patients with alcohol-associated liver disease, with an abundance of *Candida*, compared with controls. Additionally, there seems to be a link between higher serum ASCA and increased mortality in patients with alcoholic hepatitis.

Intestinal fungi could be a potential therapeutic target for improving survival while ASCA may serve as a useful predictor of the outcome in patients with alcoholic hepatitis.

Compression Therapy to Alleviate Cellulitis Risk in Chronic Leg Edema

Researchers from the University of Canberra, Australia have reported that the risk for future cellulitis reduced by 77% in patients with chronic leg edema and recurrent cellulitis that were wearing compression stockings or wraps. The effect was so striking that the randomized controlled trial was stopped early and all patients in the study were given the therapy.

Senior author Bernie Bissett, PhD, the Discipline of Physiotherapy, Faculty of Health, University of Canberra, Australia. Lead author Elizabeth Webb, MPH, from the Physiotherapy Department at Calvary Public Hospital Bruce, in Bruce, Australia, and colleagues report their findings in an article published online in *The New England Journal of Medicine*.

For the current trial, Webb and colleagues enrolled 84 adults with chronic edema of the leg and recurrent cellulitis. They randomly assigned patients in a 1:1 ratio to receive leg compression therapy plus education about preventing cellulitis (compression group; n = 41) or education only (control group; n = 43).

Compression therapy consisted of wearing knee-high stockings that applied maximum compression at the ankles. The compression gradually decreased up the legs. In addition, 26 patients were treated with "therapist-applied compression bandaging" for 3 to 5 days before receiving the stockings.

Participants underwent follow-up assessments every 6 months for a maximum of 3 years or until 45 episodes of cellulitis, the primary outcome, occurred. Those in the control group crossed over to the compression group once they experienced cellulitis.

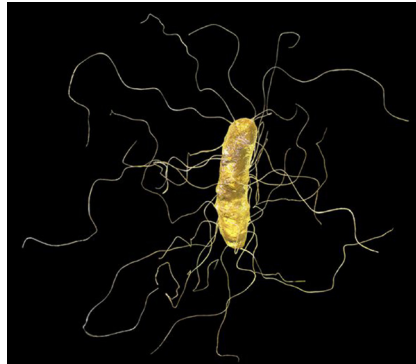
At the time of the monitoring committee's review, six patients (15%) who wore compression stockings and 17 (40%) in the control group had experienced a cellulitis episode (hazard ratio, 0.23; $P = .002$; relative risk [post hoc analysis], 0.37; $P = .02$). On the basis of those findings, the researchers stopped the study, and patients in the control group were started on compression therapy.



Investigational Microbiome Therapy to Reduce CDI Recurrence

Positive topline results were announced from a pivotal phase 3 study investigating the oral microbiome therapeutic SER-109 (Seres Therapeutics, USA) for the treatment of recurrent *Clostridioides difficile* infection (CDI). Treatment was associated with a statistically significant 30.2% absolute reduction in the rate of *C. difficile* infection recurrence.

SER-109 contains purified bacterial spores of multiple *Firmicute* species obtained from the stool of healthy human donors. The multicenter, placebo-controlled ECOSPOR III study evaluated the efficacy and safety of SER-109 in 182 adult patients with recurrent



CDI (defined as a history of ≥ 3 CDI episodes within 9 months, including the current episode) who have received standard of care antibiotic treatment.

Patients were randomized 1:1 to receive either SER-109 or placebo orally for 3 consecutive days. The

primary end point was the proportion of patients with recurrent CDI at up to 8 weeks. Results showed the CDI recurrence rate was 11.1% in the SER-109 group compared with 41.3% for the placebo group (30.2% absolute reduction; $P < .001$); the SER-109 treatment arm relative risk was 0.27 (95% CI, 0.15-0.51) vs placebo.

The safety profile of SER-109 was similar to that seen in the placebo arm. SER-109 was well tolerated with no treatment-related serious adverse events. The most common adverse events observed in both the SER-109 and placebo arms were flatulence, abdominal distention, and abdominal pain.

Ayurvedic Herbs to Reduce Arthritis Pain

The tenacity of Arthritis can affect one or multiple joints. The symptoms of arthritis are most commonly seen in adults above the age of 60-65 years; cold weather only adds to the excessive pain, stiffness and swelling in the joints. While there is no permanent cure for the condition, many health experts suggest tweaking their diet in a bid to better manage the condition.

Following are herbs that you can be tried using at home in order to get some relief from the arthritis related pain.

1. Nirgundi

Nirgundi is one of the most common herbs used to bring respite in joints. The plant is easily available and is known to reduce swelling as well as excessive pain. Its potent anti-inflammatory, anti-convulsing and anti-oxidant properties help the joints in many ways. The leaves of the plant Nirgundi are believed to have the most medicinal properties, followed by the stem and the seeds. The plant is bitter in taste and has hot potency, making it useful in this condition. Nirgundi oil or paste of the leaves is to be applied on joints.

2. Ajwain

Ajwain acts as a natural aid to arthritis pain due to the presence of anti-inflammatory components. It also contains anesthetic proper-

ties that further help in relieving excessive pain during winter. A spoonful of carom seeds or ajwain is to be added in a tub of hot water and aching joints are to be soaked in the water for 5-10 minutes; to help ease swelling and pain. Another way is to crush these seeds and make a paste and apply it on the affected areas in order to alleviate the pain.

3. Dashmool

Dashmool is not one ayurvedic herb but a mix of ten medicinal herbs that are used to cure a variety of ailments. Dashmool literally translates to 'ten roots'; out of which five roots are of trees and five are of shrubs. These include patala, gambhari, brihati, shalparni and more. Dashmool or Dashmula is effective in inflammatory conditions in the body or Vata Rog. Its anti-inflammatory, anti-oxidant, analgesic and sedative properties help cure joint pain. It is available in the form of oil and powder.

4. Shallaki

Shallaki herb is known to keep your joints strong and relieve them from any pain. It not only reduces the pain, but also helps in diminishing the swelling and further increases mobility. Popularly known as *Boswellia Serrata*, Shallaki is also sometimes used by experts as a substitute to modern pain killers. It is



available in the form of essential oil and powder.

5. Eucalyptus

Eucalyptus oil makes for the most common herbal treatment for arthritis. The eucalyptus plant leaves contain tannins that may be helpful in reducing swelling and the pain arthritis causes. The aroma of eucalyptus oil is said to have calming effects on the brain, while the oil relieves the pain and swelling in joints.

6. Ginger

Ginger is known for its exceptional antiseptic properties that help reduce joint pain and swelling. It is also known to increase blood circulation, which brings heat and healing properties to the affected areas. Drinking ginger tea or applying ginger paste on joints prove helpful in relieving joint pain.

Essential Oils to Treat Vertigo

Many who suffer from vertigo looking for drug-free ways to keep it under control. Use of essential oils is an alternative cure vertigo.

1. Thyme

Thyme is a herb with great medicinal properties. One study found that it was better for menstrual cramping than ibuprofen. Of course, pain and dizziness are two different symptoms, but many people treat thyme oil is a sort of cure-all. Diffusing the oil or drinking tea made from thyme is an efficient cure for dizziness.

2. Peppermint

If the patient's vertigo is related to a cold or flu, the menthol in peppermint oil may help. Peppermint is also supposed to help with blood flow, and reduced blood flow can play a key role in both central and peripheral vertigo types. Peppermint may be one of the best essential oils for vertigo.

3. Lemon

One of the side effects of serious vertigo can be nausea and even vomiting. This makes lemon an important essential oil for dizziness. In a 2014 study, inhaling lemon oil helped pregnant women with morning sickness. Using a diffuser to keep lemon oil in the air may thus provide some relief if vertigo strikes unexpectedly and severely.

4. Lavender

Lavender can be particularly beneficial for vertigo patients if stress is a major trigger for the patient. Lavender is well-known for being a calming scent. The calming scent may help in managing anxiety before an episode of vertigo strikes.

5. Ginger

Ginger oil is certainly beneficial for a number of ailments. Taken more often as a tea, ginger can often relieve nausea when inhaled, but also has numerous benefits when ingested. Fresh

ginger root can be stored in the freezer and used to make a natural tea when the need arises. Breathing the vapors makes it an effective essential oil for vertigo or dizziness.



Treating Back Pain with Yoga

Practicing yoga for even a few minutes a day can help in gaining more awareness of the body. The yoga poses explained below are potentially helpful in treating back pain.

1. Cat-Cow Pose

The Cat-Cow pose is a gentle, accessible backbend that stretches and mobilizes the spine. Practicing this pose also stretches the torso, shoulders, and neck.

Muscles worked:

- erector spinae
- rectus abdominis
- triceps
- serratus anterior
- gluteus maximus

2. Downward-Facing Dog

This traditional forward bend can be restful and rejuvenating. Practicing this pose can help relieve back pain and sciatica. It helps to work out imbalances in the body and improves strength.

Muscles worked:

- hamstrings
- deltoids
- gluteus maximus
- triceps
- quadriceps

3. Extended Triangle

This classic standing posture may help alleviate backache, sciatica, and neck pain. It stretches spine, hips, and groin, and strengthens shoulders, chest, and legs. It may also help relieve stress and anxiety.

Muscles worked:

- latissimus dorsi
- internal oblique
- gluteus maximus and medius
- hamstrings
- quadriceps

4. Sphinx Pose

This pose is gentle backbend that strengthens the spine and buttocks. It stretches the chest, shoulders, and abdomen. It may also help relieve stress.

Muscles worked:

- erector spinae
- gluteal muscles
- pectoralis major
- trapezius
- latissimus dorsi

5. Cobra Pose

The Cobra pose is a gentle backbend pose that stretches abdomen, chest, and shoulders. Practicing this pose strengthens spine and may soothe sciatica. It may also help to relieve stress and fatigue that can accompany back pain.

Muscles worked:

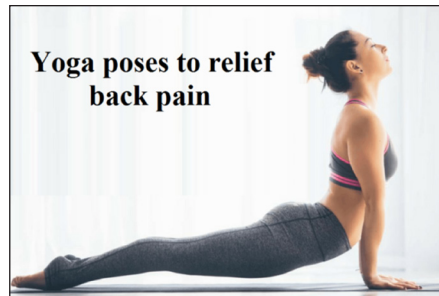
- hamstrings
- gluteus maximus
- deltoids
- triceps
- serratus anterior

6. Locust Pose

This pose may help relieve lower back pain and fatigue. It strengthens the back torso, arms, and legs.

Muscles worked:

- trapezius



- erector spinae
- gluteus maximus
- triceps

7. Bridge Pose

The Bridge pose is a backbend and inversion that can be stimulating or restorative. It stretches the spine and it may relieve backaches and headaches.

Muscles worked:

- rectus and transverse abdominis
- gluteus muscles
- erector spinae
- hamstrings

8. Half Lord of the Fishes

This twisting pose energizes the spine and helps to relieve backache. It stretches hips, shoulders, and neck. This pose can help alleviate fatigue and stimulate internal organs.

Muscles worked:

- rhomboids

- serratus anterior
- erector spinae
- pectoralis major
- psoas

9. Two-Knee Spinal Twist

This restorative twist promotes movement and mobility in the spine and back. It stretches spine, back, and shoulders. Practicing this pose can help relieve pain and stiffness in back and hips.

Muscles worked:

- erector spinae
- rectus abdominis
- trapezius
- pectoralis major

10. Child's Pose

The Child's pose is a gentle forward fold, and is a perfect way to relax and release tension in the neck and back. The spine is lengthened and stretched. Child's Pose also stretches hips, thighs, and ankles. Practicing this pose can help relieve stress and fatigue.

Muscles worked:

- gluteus maximus
- rotator cuff muscles
- hamstrings
- spinal extensors

Treating Menopause with Alternative Sources

As menopausal women face fluctuating levels of estrogen and progesterone, they will likely experience symptoms including hot flashes, insomnia, depression, breast pain, and mood swings. An array of alternative medicines are described below to help cope with menopause.

1. Black cohosh

Black cohosh is among the most popular and longest-studied natural hot flash remedies for women who don't want to turn to hormone replacement or antidepressants to treat their menopause symptoms.

Black cohosh is derived from a plant in the buttercup family, and it

has been used for centuries. Black cohosh can be administered in many forms: capsules, tablets, or mixed with water.

It's thought to behave similarly to serotonin in the brain. This behaviour includes easing feelings of depression and regulating body temperature.



2. Vitamin D

Vitamin D is an essential building block for a healthy body. It promotes healthy bone renewal, normal cell growth, and hormone balance, which are all important for menopausal women.

As women age, their ability to

absorb vitamin D decreases, heightening their risk of bone density loss. This makes the need to incorporate vitamin D into their diets that much more critical.

To get the recommended daily dose of 600 international units (IU), a 15- to 20-minute walk outdoors is advised.

3. Acupuncture

Many women find relief from their menopause symptoms through acupuncture. Skeptics argue that acupuncture benefits are purely the result of the placebo effect, but studies have shown that acupuncture might be a reasonable alternative to hormone therapy for women suffering from hot flashes.

4. Mindful breathing/ Meditation

Mindful deep breathing such as that practiced during yoga and meditation has a proven calming effect on the mind and can ease some menopausal symptoms such as anxiety and hot flashes.

Inhaling through nose to the count of four and holding breath for seven counts. Then, exhale completely through mouth to a count of eight. This is one breath. This cycle is recommended to complete two more times.

5. St. John's wort

Among the most popular herbs used in the United States, St. John's wort has long been an alternative treatment for menopausal mood swings, improved sleep, relaxation, and reduced depression and anxiety. Derived from a wild flowering plant called *Hypericum perforatum*, the leaves and flowers are harvested and dried. They can then be brewed in a tea or taken in a pill or liquid form.

Scientific studies affirm that while St. John's wort is effective for treating mild depression, it works no better than a placebo for treating severe depression.

Light Therapy to Reduce Psoriasis Symptoms

UVB phototherapy and psoralen plus ultraviolet A (PUVA) are the approaches of UV light therapy that can effectively reduce psoriasis symptoms. But the treatment involves quite a lot of effort because you need several sessions per week. Repeated and long-term light therapy can also increase the risk of skin cancer.

Psoriasis can often be effectively treated with a good skincare routine and medication applied to the affected areas of skin. But this doesn't always help enough in moderate and severe psoriasis. UV light therapy is then considered. This treatment, also known as phototherapy, can be used on its own or in combination with topical (externally applied) medication or tablets. It involves exposing the affected areas of skin to ultraviolet light (UV light). UV light reduces inflammation and slows the production of skin cells.

The treatment is usually given three times a week in a dermatology practice or hospital. It takes place in special cabins with fluores-



cent lamps that emit UV light of a certain wavelength. There are also lamps that can be used to treat individual parts of your body, such as your head, hands or feet.

The type of light therapy that is generally used to treat psoriasis is known as narrow band UVB phototherapy. Here the skin is only exposed to UVB light wavelengths between 311 and 313 nanometers. The idea is that limiting the light spectrum in this way reduces the risk of side effects.

Another kind of light therapy is known as balneophototherapy. Here people bathe in warm water containing specific substances for about 20 minutes. Their skin is ex-

posed to artificial UV light while bathing, or immediately afterwards. The bath often contains a solution made out of common salt or Dead Sea salt.

There is also another option called "psoralen plus ultraviolet A" (PUVA) therapy. It involves exposing the skin to UVA light and using a medication known as "psoralen" too. The medication makes the skin more responsive to UVA light, increasing its effect. Psoralen can be taken as a tablet, applied to the skin in the form of a gel or cream, or added to a bath.

Before the treatment starts, the wavelength and dose of the light used have to be determined, as well as the duration of treatment. Many different factors play a role here, including what kind of skin you have, whether you have had other medical conditions such as skin cancer, and whether you are taking medication that makes your skin more sensitive to light. It is important to be treated by a skin specialist (dermatologist) who knows how to carry out light therapy. +