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Bee venom therapy for inflammatory conditions: historical and recent trends

by Rain Delvin, LAc, MAOM, LMP

Bee venom therapy (BVT), the application of honey bee venom by direct sting or injection, is one component of apitherapy, the therapeutic use of honey bee products. In addition to bee venom, products of the hive that have medical applications are pollen, honey, propolis, royal jelly, and beeswax.

History of bee venom therapy

The therapeutic use of bees and bee products can be traced to famous physicians throughout antiquity. Methuselah is reputed to have ingested bee pollen and honey for medicinal purposes. Galen crushed dead bees in honey to treat baldness topically. Pliny mixed burned bees with ashes and oil for treating a wide range of ailments. The use of tea made from dried bees as a diuretic is recorded in texts, some of them ancient, from China, India, Arabia, Europe, and the United States.

BVT, used in many ancient cultures, has at least a 3000-year history in China, and one nearly that long in Japan and Korea. Historic texts from 200 B.C. found in the tombs in Mawangdui province in Changsha, China, describe a brutal practice: a small young rooster was plucked and hung upside down beside a beehive and stung until it was dead. The meat was dried under the sun and then mashed with Da Zao (a Chinese date) and put on cloth to make a plaster. Ancient Egyptians treating rheumatism applied bee stings directly to the affected area. Hippocrates used bees and bee stings for treating arthritis. Ivan the Terrible used "bee stinging" to relieve the pain of polyarthritis. Bee stings cured Charlemagne of chronic gout.

Johannes Jühling, after compiling information from German archives on using bees in medicine, said, "In podagra [gout], put the bees on the most painful place; in fluor albus [leucorrhea], let yourself be stung by a bee; for loss of hair, kill bees, mix them with honey, and put it on the bald spot. If a sterile woman eats bees she will be pregnant. If you have rheumatism, get stung by bees." German homeopathic physicians in the mid- to late 1800s applied "apis" tinctures and infusions for treating arthritis, rheumatism, intermittent fevers, ophthalmia, mucosal membrane inflammation, cough, fever, gastritis, nausea, vomiting, distention, and diarrhea.

BVT investigation flourished in Europe, Eastern Europe, and the United States in the 1920s–1940s. This was largely the result of joint research by Russian physician N.M. Artemov and Dr. E. Habermann of Germany, among the earliest scientists to document bee venom's anti-inflammatory properties and its release of cortisol into the blood.

Bee venom research in the United States

Bee venom was first used in the U.S. in 1847, primarily by homeopathic physicians, among whom it is still popular. The branch of American medicine referred to as "Eclectic Medicine" also applied bee venom therapeutically until World War II. Charles Mraz was one of the key proponents of BVT in the U.S. in the 20th century. In 1934 this avid beekeeper, despite his skepticism, successfully treated his acute arthritis, which manifested after he recovered from an acute bout of rheumatic fever. Thus began his 60-year career in BVT research and treatment.

In 1935 Mraz began to observe and apprentice with Dr. Bodog Beck, a highly educated, multilingual historian and physician practicing in New York City. A hive of bees that he kept on his window sill gathered

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AMERICAN APITHERAPY SOCIETY, INC. The AAS is a tax-exempt, nonprofit membership corporation established to promote and teach the use of honey bee products to maintain and improve health and to alleviate pain, suffering, and disability. The AAS carries out this work by 1) assembling information on apitherapy and collecting data on the administration of and reactions to hive products; 2) advising the medical and scientific communities and the general public (national and international) about apitherapy through this *Journal*, a website, and seminars, courses, conferences, workshops, and other means; 3) maintaining a network of people involved with apitherapy as apitherapists, beekeepers, and patients; (4) establishing guidelines for the professional conduct of apitherapists; and (5) training apitherapists.

The efficacy of honey bee products for medical conditions has not been adequately evaluated in the United States, and bee venom therapy has been approved in the U.S. only for the desensitization of persons allergic to bee stings. Thus, the AAS makes no claims about the safety or efficacy of honey bee products and does not endorse any form of apitherapy.

The AAS does not certify individual practitioners or therapists.

Articles appearing in this *Journal* and on the AAS website, as well as private or public representations, are the personal opinion of the author and do not necessarily represent that of the AAS.

From the Editor

Contact:
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Have you been able to escape the consequences of the current economic meltdown? If so, you're a rarity. Lost jobs and foreclosed houses, unaffordable health care and school tuition, plummeting values of retirement accounts: all of us—regardless of age, profession, income level—have been affected.

Among the best things we can do during tough are to reduce stress and stay healthy. What better source of health and healing than apitherapy? And with its unique features—sources of help, frequently asked questions, testimonials, information for children, opportunities to network with others, even a section in Spanish—what better route to apitherapy than the AAS's glorious new website? Check it out, at www.apitherapy.org.

Speaking of finances, you may recall that as a way to reduce postage costs, the AAS last year began offering members who live outside the United States the option of receiving, in a PDF, the *Journal* by email rather than by regular mail. We now urge all of you, regardless of where you live, to add your name to the list of email recipients. Please do so through my email address, above.

With warm wishes for a brighter future,
Patsy McCook

From the President

Contact:
kellerf@optonline.net

Good news—the AAS's new website is up and running! I encourage you to visit the site regularly and enjoy the new features. See page 11 for more details.

A major goal of the AAS for 2009 is to move in a new direction, one that emphasizes professionalism and greater standardization of the scientific material we present. Chris Kleronomos, D.Ac., has taken a crucial step in helping us achieve this goal. Chris is the AAS's liaison with Ron Sherman, M.D., chair of the board of the BTER (Biotherapeutics Education and Research) Foundation, which studies leeches and maggots as therapeutic agents. Chris has been pursuing the possibility of developing a formal affiliation with BTER—pronounced "better"—that would benefit both organizations. Dr. Sherman also serves on the board of the International Society of Biotherapies, which promotes the use and understanding of living organisms—including maggots, leeches, and honey bees—in treating diseases; AAS vice president Theo Cherbuliez is a founding member.

A maggot, a leech, and a honey bee appear on a hand in the upper left corner of the home page of BTER's website (www.BTERFoundation.org). Educating the public about and studying the medical applications of these three valuable creatures are the goals of our possible affiliation and collaboration with BTER. Among the possible offerings might be a joint membership at a discount; reciprocal links on our websites (BTER's would have a section on apitherapy, and the AAS's would be on biotherapeutics); and a joint electronic newsletter. Cosponsored conferences—which would likely draw more participants than either organization could by itself—are another exciting possibility.

An additional advantage of the AAS aligning with a large group is to broaden our membership and visibility as the basis from which to apply for grants. Other groups that we plan to approach for possible joint membership and benefits include the American Herbalists Guild and Traditional Oriental Medicine organizations.

Greater professionalism and standardization will require that the AAS develop and make formal a basic apitherapy course, one similar to our core CMACC program. Such a course could be taught at other conferences and converted to a series of Web-based seminars and workshops ("webinars") in conjunction with the University of California, Irvine, where Dr. Sherman is based. The course might also be eligible for continuing education units (CEUs) and continuing medical education (CME) credits awarded by the BTER Foundation. Also part of our plan is the submission of manuscripts to the international peer-reviewed journal *Evidence-based Complementary and Alternative Medicine* (eCAM). This would represent a huge advance for the AAS and apitherapy.

If the AAS is to make progress in these areas, we will need the help of our members—professionals and lay people alike. Your strengths and years of experience can be invaluable in increasing the general public's awareness about apitherapy, whether by writing articles or giving community workshops. One terrific tool: the AAS's PowerPoint presentation on apitherapy, which, in addition to standardizing information about apitherapy, establishes a code of professionalism for you to observe as you represent the AAS. A few of the AAS's members have used it, and I'd be delighted to send you a copy.

Now is an auspicious time for all of us to bring sustainable medicine to the planet to benefit the generations to come. There are numerous ways to become involved in this vital work: educating your family and friends about apitherapy and encouraging them to join the AAS; making a tax-deductible donation and helping to further develop our website. I look forward to working hard with each of you in this endeavor.

Peace and health,
Frederique Keller

Using a natural product to treat fungal infections

This article continues a series, launched in the July-September issue, that discusses recently developed compounds containing products of the hive. We encourage readers to submit descriptions of other new honey bee products for possible inclusion in the Journal.

Of the innumerable microscopic species of fungi, some cause acute infections. For instance, the *Candida* type of yeasts can cause septicemias (generalized infections), organ infections, infections of the fingernails or the mouth's mucosa, vulvo-vaginitis, balanitis, or urethritis. The opportunistic yeast *Candida albicans* lives in the bacterial flora of the human gut. Generally, when intestinal flora is well balanced, the proportion of *Candida* is of one cell to one million other bacteria. When this balance is disrupted—by overuse of antibiotics, insufficient dietary fiber, or weakened defenses of the alimentary tract—a proliferation of *Candida* results. This in turn can lead to the general infection known as candidosis.

A natural product, CandiCIDE®, which includes a mix of essential oils and propolis, can alleviate symptoms resulting from an imbalance of yeasts in the organism, in particular in the digestive system.

Brown propolis

Of exceptional quality, this propolis has a concentration of active components as much as ten times that of natural propolis. It has an antimicrobial, mainly antifungal, action and antioxidant effects. It also contains flavonoids: quercetin, artepilin C, pinocembrin, and galangin, with a strong antifungal action; oligoelements, which contribute to cell metabolism; and the phenethyl ester of cafeic acid (CAPE), with an anti-inflammatory effect. Together they augment the action of the natural C vitamin, needed by the body to prevent oxidation.

A cocktail of essential oils

The essential oil (EO) of peppermint *(Menthe piperita)* is rich in monoterpenol, a menthol with powerful anti-infectious, chiefly antifungal, action. It also contains menthone, which has major antiparasitic properties. The principal component of the EO of clove (*Eugenia caryiophyllus*) is a phenol (eugenol) with immune-stimulant, general, antioxidant, anesthetic, antispasmodic, and fungicidal actions. And it contains a terpenic ester that is antispasmodic, sedative, anti-inflammatory, and analgesic.

The oxide contained in the EO of rosemary *(Rosmarinus officinalis)* has antifungal, anti-parasitic, immunomodulating, and metabolism-stimulating properties. This EO also improves the organism's defenses.

The Belgian company Api-Ar has made significant advances regarding the synergic action of essential oils and propolis. CandiCIDE®, born from this research, associates brown propolis with three essential oils, combining antifungal and antiparasitic properties with immuno-stimulating actions. A peculiarity of *Candida albicans* is to become extremely toxic as it decomposes. The Api-Ar International's team took this into account, and so CandiCIDE®—primarily antifungal—also supports the body and insures the safe evacuation of these toxins.

CandiCIDE® is sold in pharmacies. Suggested dose: one to two capsules three times a day.

— Liena Hernandez-Horizondo, PhD, pharmacist

Apitherapy's limitations—and its possibilities

by Theo Cherbuliez, MD

Let your food be your medicine and your medicine be your food: this is Hippocrates' view of medicine. It can also be regarded as the basis of apitherapy, whose basic mission is to maintain health and restore health in the case of an illness or accident.

Bee products' advantage: diversity

Because all of apitherapy's products—bee venom, honey, pollen, propolis, and royal jelly—are natural substances, their chemical composition varies by time, place and, probably, species of bee. Thus, no exact chemical composition can be established for any one product, and none of them can be manufactured from scratch.

Apitherapy often includes other products or clinical techniques as therapeutic agents, combining their synergistic effect with that of the bee products'. Combinations most frequently encountered are a technique—acupuncture—and two products—essential oils and herbs.

When treating infection, apitherapy has one huge advantage over the unique, active, chemically identified molecule of antibiotics. It does not lead to habituation, which expresses itself as resistance, which in turn demands the creation of new compounds to overcome the state produced by the previous ones. This, if commercially profitable, is a deadly spiral: the process creates monsters and, in turn, the need to develop ever stronger weapons to defeat them. The end result may well be to harm or even kill the hosts, along with the targeted offending agents.

Educating medical professionals

Apitherapy's future will be determined by success in overcoming its limitations. One of these is bee venom's intimidating reputation in the United States. Uninformed people argue strongly against its use, invoking real and imagined risks, especially allergy (not to mention the likelihood of pain).

Knowledge and training are prerequisites for the safe, tolerable use of BVT. However, apitherapy is not an acknowledged form of medical treatment in the United States: it is not taught in medical schools, and the medical community opposes its use. But this limitation suggests an opportunity: educating medical professionals to include it as a complementary modality that is supported by peer-reviewed publications. Only this way will apitherapy gain broad acceptance and legal recognition.

Ensuring quality control

Without apiculture, apitherapy would not exist. Thus, to serve apitherapy optimally, products of the hive should be manufactured according to specific protocols, including systematic quality control. However, to date this has happened only rarely.

Biological and chemical research, animal testing, and clinical applications have expanded dramatically in recent years. The investigations of various compounds extracted from bee products generally address the effects of isolated compounds. However, outside the laboratory these compounds act in synergy with others. It is important that future studies examine this synergy.

Although apitherapy holds tremendous promise, it has equally large vulnerabilities. Because in most countries apitherapy is not legally recognized or regulated, it can be practiced by people who are uneducated and unskilled in its use. If it is true that few examples of major harm or risk have been reported following the administration of apitherapy, it is also true that the risks are real, and serious. Also worrisome are situations where apitherapy is applied instead of measures that are medically indicated and that should take priority.

A humanitarian note

Apitherapy can become a reality wherever bees can live—that is in nearly all inhabited parts of the world. And if apitherapy were to become well developed and organized, it could be made available at very low cost to whole populations currently deprived of a fundamental right: access to medical care. □

BVT for inflammatory conditions

Continued from page 1

pollen and nectar from nearby Central Park, providing easy access to bee venom for use in treating arthritis and other inflammatory conditions. Dr. Beck, who regarded arthritis and rheumatism as an oxidative deficiency of the tissue cells and joints, posited that the hemorrhagic effects of bee venom served to correct this imbalance. Dr. Beck kept in touch with many European researchers—he was originally from Hungary—and experimented with a range of injectable bee venom serums intended to imitate actual bee stings. At that time, however, there was no efficient way to extract large quantities of venom without risking contamination. The serums that he did apply demonstrated significantly poorer results than treatments using live stings.

With the outbreak of war in 1939, communication was suspended with physicians in Europe, in particular in Germany, where much of the BVT research was being conducted. Once the U.S. entered the war in 1941, research stateside was further inhibited, leaving Dr. Beck unable to further his studies before his death in 1942.

In 1950 Charles Mraz came into contact with Dr. Joseph Broadman, who began practicing bee venom therapy in New York after learning about it from contacts in Europe. He was having good results using BVT and a German bee venom solution called Forapin for the treatment of rheumatic diseases. The Arthritis Foundation, however, dismissed the 1962 publication of his text *Bee Venom, the Natural Curative for Rheumatism and Arthritis* as a "quack cure." The otherwise well-reputed Dr. Broadman sued the foundation for libel; the statement was later revoked because of insufficient scientific evidence disproving Broadman's work. But the damage had been done.

Also in 1950, antibiotics and cortisone drugs were introduced, and interest in BVT declined. Meanwhile, initial trials promoted the use of steroidal hormones as a quick and easy cure for inflammatory rheumatic and autoimmune diseases and even cancer. Still, they failed to fully identify the sometimes devastating side effects of intensive prolonged treatment.

In the 1970s Glenn B. Warren, a private patron who suffered from a hereditary form of arthritis, established a foundation in his name to support further BVT research in the U.S. In a San Francisco laboratory, William Shipman, D.D.S., fractionated bee venom into its primary components, which were then sent to James Vick, Ph.D., and Robert Brooks at the Walter Reed Army Institute of Research. This led to the publication of their study, "The Effect of Treatment with Whole Bee Venom on Daily Cage Activity and Plasma Cortisol Levels in the Arthritic Dog," which reported that bee venom injections given to arthritic dogs resulted in elevated levels of cortisol and vitamin C production and increased activity levels. After the authors failed to find a U.S. publication willing to disseminate their research, it was published by a scientific journal in England.

Shipman also sent bee venom fractions to Gerald Weissmann, M.D., at the Bellevue Arthritis Clinic in New York. The clinic's study of rats validated Dr. Artemov's earlier findings demonstrating bee venom's stimulation of the immune system through the hypothalamus, pituitary, and adrenal glands.

Bee venom's composition and physiological effects

Bee venom possesses potent antioxidant, antifungal, anti-inflammatory, antibacterial, and radioprotectant qualities and is an immuno-stimulant. It can treat autoimmune, inflammatory, and neurodegenerative diseases; it is also a cardiotonic, diaphoretic, and diuretic. Recent investigations have focused on arthritis, gout, rheumatic diseases, multiple sclerosis, lupus, Hodgkin's disease, cancer, asthma, premenstrual syndrome, orthopedic injuries, diseases of the nervous, cardiovascular, respiratory, digestive, and urogenital systems, dermatological conditions, eye disorders, and Lyme disease and other inflammatory conditions.

Using modern protocols for biochemical analysis, bee venom has been found to contain 18 components. Major constituents include enzymes (phospholipase A2, hyaluronidase, acid phosphate); peptides (melittin, apimin, mast-cell degranulating peptide, secapin, tertiapin, adolapin); biogenic products (histamine); and amines (dopamine, norepinephrine, leukotrienes), protease inhibitors, glucosidase, lysophospholipase glucose, and fructose.

- ***Melittin***. This peptide, which constitutes 40-60 percent of bee venom volume, is one of the most potent anti-inflammatory agents available. It also is antifungal and has stronger antibacterial qualities than many drugs. Melittin is a central nervous system inhibitor, promotes the release of histamines, supports radioprotection, and increases vascular permeability. It stimulates the hypophyseal-adrenal system, resulting in the production of cortisone, while also stabilizing the lysosome cell membrane, thus inhibiting the inflammatory process. Recent research shows that it has a powerful capacity to reduce the size and progression of tumors.
- ***Apimin***. This peptide also acts as an anti-inflammatory by elevating cortisone levels and inhibiting the (C3) component of the complement system, which plays a key role in inflammatory processes. It also acts as a mood elevator. Similarly, it elicits an immune system response by slowing interleukin-1 production, thus reducing inflammatory responses.
- ***Mast-cell degranulating peptide***. MCD peptide or peptide 401 possesses anti-inflammatory effects 100 times more potent than hydrocortisone. This results from its capacity to block the production of arachidonic acid and inhibit prostaglandin synthesis.

- ***Adolapin***. This peptide acts as a pain killer and anti-inflammatory agent by inhibiting components that contribute to inflammatory cycles, including lipoxygenase, thromboxane (a vasoconstrictor), and prostacycline. It inhibits microsomal cyclooxygenase and is 70 times stronger than indomethacin (a drug frequently used as a substitute for salicylates in rheumatoid and degenerative joint diseases).
- ***Protease inhibitors***. These reduce the inflammatory effects of carrageenin, prostaglandin E1, bradykin, and histamines.

A note on cortisone

The hormone cortisone plays major roles in the body's response to stress, in regulating the immune system, and as an anti-inflammatory. It is largely inactive until its conversion to cortisol. Naturally occurring cortisone and cortisol originate in the adrenal cortex. In-vivo experiments have shown that melittin and other components of bee venom help regulate the endocrine system and stimulate the body to produce its own cortisone-like anti-inflammatory.

Pharmaceutical versions of cortisone include a range of corticosteroids that can be administered orally, intravenously, topically, by inhalation, or through direct injection into specific tissues. Although pain from inflammation may be reduced for a few months to several years, these effects are not guaranteed. Prolonged use of corticosteroids also carries the potential for significant side effects. Repeated injections can produce thinning of the skin, easy bruising, osteoporosis, avascular necrosis in joint areas, weight gain, face puffiness, elevated blood pressure, and cataract formation.

Bee venom therapy: an overview

Bee venom is a colloidal substance that can be dialyzed through membranes and absorbed through the skin. It is ineffectual if ingested orally, as it is quickly destroyed by saliva and gastric secretions.

A variety of methods have been developed for accessing and administering bee venom. It is possible to collect venom from bees without killing them, by pressing on their lower abdomen using fingers or forceps to make the stinger protrude and release a drop of venom. Venom can also be extracted by placing the stinger in water, where the venom is released and can be filtered out. Venom can be collected and processed through drying and then used to form a solution in water or another base. Bee venom is water- and acid-soluble but insoluble in alcohol. It maintains its potency when dried at room temperature, and it is stable at temperatures of up to 100 degrees C for as long as ten days. If preserved in some form of carrier, such as glycerin, it remains potent for years. It is therefore possible to make injectable solutions of bee venom. The volatile oils contained in bee venom largely account for the pain from being stung. They also increase the venom's rate of absorption.

Less complicated methods for administering bee venom include the direct administration of stings to areas of pain or inflammation or to acupuncture points. The bee's abdomen can be compressed with forceps, which stimulates a release of venom, and the stinger put in contact with acupuncture or trigger points. Forceps can remove the entire sting apparatus, including stinger, adnexa, poison sac, and glands. Even after the stinger has been removed, it can be inserted like an acupuncture needle into points where it will continue to pump and release venom for 10 to 20 minutes.

There are five types of bee venom immunity:

- Congenital/absolute (rare)
- Active/acquired immunity (beekeepers)
- Passive immunity (by inoculation with blood or serum of an immunized animal)
- Pathological immunity (rheumatoid conditions)
- More chronic/severe conditions (higher resistance to bee venom)

BVT is contraindicated for people who have allergies or hypersensitivity to honey bee venom and for those who are taking large doses of nonsteroidal anti-inflammatory drugs (NSAIDs) or are taking any steroidal anti-inflammatories or pharmaceutical immune suppressants. Treatment sites should be at least 10 inches from sites of surgical implant materials. BVT should be avoided during late-stage pregnancy or by patients in extremely weakened or compromised conditions.

Although there remains some interest in bee venom applications in the United States, its research and application have been explored more extensively in Asia and Europe. These efforts are focused mainly on treating arthritis, rheumatic conditions, gout, neuralgia, multiple sclerosis, and cancer.

Bee venom's complex nature and multiple active constituents have prevented pharmaceutical companies from synthesizing it effectively. Large-scale beekeeping and extraction of venom from live bees requires significant time and money, as well as expertise in apiculture. The collection of venom is logistically complicated, and the yield is only about 1 gram of venom per 200,000 bees. Purifying, preserving, and packaging the venom adds further cost to the final product. To recoup their expenses, pharmaceutical companies would have to charge a significant amount even for small quantities of venom, which the consumer can access for free, simply by going outdoors. Broad-based medical research on bee venom has been hindered for similar reasons. The cost and inconvenience of its mass production and Western medicine's longstanding skepticism about its therapeutic applications have prevented its integration into the conventional medical system.

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BVT for inflammatory conditions

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Bee venom acupuncture in Traditional Chinese Medicine

Bee venom is classified in Traditional Chinese Medicine (TCM) as bitter, sweet, harmonizing, and toxic. Its nature is bland, and its flavor is sour. Bee stings promote the flow of qi (vital life energy) and blood, promote the opening of channels and collaterals, and expel pathogens. The most common clinical use is for the treatment of "bi" syndrome or channel blockage (due to the presence of wind, damp, or other such pathogens), which often results in pain.

Bee venom acupuncture (BVA) treats the branch (symptom manifestation) and root (constitution or underlying pathology). It promotes the stimulation of acupoints on both local and channel levels, in addition to serving as an active pharmacological agent. In this way BVA can simultaneously treat mixed excess and deficient conditions. For example, for wind-damp conditions it stops pain and reduces swelling, while also treating the root by energizing and balancing deficiency by augmenting the spleen and benefiting the kidney.

Both the root and the branch can be treated by choosing a point, deciding how long to retain the stinger, and modulating treatment frequency. For example, in dealing with arthritis where there is swelling and pain, the affected area can be treated locally. Back shu points on either side of the vertebral column along with Stomach 36 can be added or used instead. Most non-TCM research emphasizes local treatment or systemic treatment by stings on the back or other less sensitive areas. However, these methods lack the specificity conferred by the knowledge that undergirds acupuncture point formulations as a component of traditional Chinese medicine.

BVA eases pain, combats microbes, opens the channels, invigorates blood, and reduces stasis (from a biomedical perspective it is an anti-coagulant). Within a TCM framework, bee venom's adaptogenic and immune-stimulatory properties serve to regulate the "ying," or nutritive level associated with the muscle layer. They also regulate the "wei," associated with the immune system—a characteristic especially useful in mitigating autoimmune patterns.

Clinical applications of bee venom acupuncture

As a method for bee venom application, BVA, similar to herbal acupuncture, has gained adherents in recent decades. The venom is extracted and processed and then injected into acupuncture points, thus directly stimulating the point and producing local and systemic effects through the introduction of bioactive compounds.

In treating inflammatory conditions, the effects of BVA have often been found superior to the effects of traditional needle acupuncture at the same acupoints. In one study BVA and traditional acupuncture were used to treat knee osteoarthritis. Compared efficacy was evaluated based on pain relief scores and computerized infrared thermography (IRT) following 4 weeks of treatment. The study concluded that "a significantly higher proportion of subjects receiving BVA reported substantial pain relief as compared with those receiving traditional needle acupuncture therapy" (Kwon et al. 2001). IRT was also significantly improved in BVA patients, coinciding with levels of pain relief.

Conclusion

In the West, bee venom's limitations as a profit source for the medical industry and the resultant lack of support within the medical community have prevented its integration with conventional medicine. Yet bee venom therapy's effectiveness in treating a wide range of inflammatory conditions is undeniable. Using BVT within the framework of Traditional Chinese Medicine and acupuncture further extends its potential. □

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Rain Delvin completed a B.A. at the Evergreen State College and the Jackson School of International Studies, massage certification at the New Mexico School of Natural Therapeutics, Western herbal training at the Southwest School of Botanical Medicine, and a Master's degree in Acupuncture and Oriental Medicine at the Seattle Institute of Oriental Medicine. She was a Peace Corps volunteer in Thailand and worked with World Wildlife Fund in China, where she assisted hillside communities with beekeeping projects. She and her husband are beekeepers in Olympia, Washington, where she has a full-time acupuncture, herbal, and massage practice. Her email: raindelvin@hotmail.com

TESTIMONIAL

Bee venom therapy for skin cancer

You know me. I'm the one who, in a conversation about too much sun, says, "I'm not worried. I have dark skin and I tan right away. I never burn."

A few years ago I noticed a sore on my forehead. I thought I'd burned myself with a curling iron. But months later the sore kept breaking open. When I mentioned it during an annual exam, my doctor had it tested. Then the dreaded phone call: skin cancer, a basal cell carcinoma. Surgery was scheduled: a scraping—or scrapings—layer by layer, followed by a test to determine when all the layers with cancer cells had been removed.

Meanwhile, my husband, Jim, had neck and shoulder pain from a car accident. Nothing helped. Then a friend, Kristine Jacobson, persuaded him to try bee therapy. "Nothing else is working," she grinned. "It can't hurt!" After a consultation, Jim started on the bee products and bee stings, with immediate results. During one session, he mentioned that I had skin cancer. Two days later Kristine was peppering my sore with bee stings. First one sting, then 2, then 3, 4, 5, 6, 7 stings, in and around the sore.

Surgery day. During the numbing time the doctor noted, "Numb deeply—this has been here too long. We'll need to do more than one scrape." After one scrape I joined other patients who had bandages on their nose, eyes, cheeks, ears, and neck and were waiting for further—2nd, 3rd, even 4th—scrapings. Finally I heard my results: they got everything the first time.

While I was being stitched, the doctor asked what I'd been doing. Had I been poking the sore? There were dead cells or scars all around the cancer cells. "Bee stings," I whispered. Silence. All I heard was a needle stitching my forehead. Finally, he said, under his breath. "Sometimes our bodies do weird things just to protect themselves." That conversation was over!

Later, when having the stitches removed, I learned that the numbness in my forehead might last two years before the feeling returned, so I'd probably want to have plastic surgery and have the other eyebrow pulled higher to make both of them seem more even. I looked like a monster. My eyebrow was shaped like an upside-down 'V,' and the scar was terrible. Fortunately I had long bangs.

I went back to Kristine's house three times a week. As I was numb anyway, there was no reason not to sting. Again the stings: on top of my head, on my forehead, and on the scar. Within a month the feeling was back and my eyebrow began relaxing. Now I can't find the scar, and I don't need plastic surgery. Today Jim and I say, "Thank God for the bees, and thank God for Christine."

Ann Ashby
Nashville, MI

EL RINCÓN DE LA ABEJA CURANDERA

Un resumen breve de las acciones y funciones de los productos de la colmena

por Frederique Keller, DOM, LAc

La miel es rica en carbohidratos completos, es lubricante y humectante. Tiene acción antioxidante, desintoxicante, digestiva. Desinfección de heridas y tratamiento de quemaduras. Utilizada en el tratamiento de ulceras gastrointestinales y es protectora del hígado, la vesícula biliar, el estomago y baso.

El polen es rico en vitaminas y proteínas. Activa el crecimiento y desarrollo. Regula problemas de peso corporal. Tratamiento de tensión arterial, accidentes cardio-vasculares, y tiene beneficio en el tratamiento preventivo del cáncer de próstata.

El propoleo, un resino mezclado con la saliva de abeja, tiene propiedades antimicóticos, antibióticas, antivirales, anticancerígeno, cicatrizantes, etc. Tiene función de inmunización y protección y activa el sistema inmunológico. Tratamiento del resfriado común e infecciones de las vías respiratorias aunque el asma alérgica y bronquial. Se utiliza en la desinfección y cicatrización de heridas.

La jalea real posee propiedades de juventud y es rica en hormonas. Tiene función de regeneración y longevidad. Es vigorizante y gran afrodisíaco. Activa el crecimiento y desarrollo y estimula las funciones cognitivas. Se utiliza en el tratamiento de accidentes cardiovasculares.

La cera se usa en la fabricación de cosméticos, cremas y supositorio curativos. Tratamiento de inflamación articular y muscular.

El veneno de abeja activa el sistema inmunológico, relaja el sistema nervioso, desinflama articulaciones. Incrementa niveles de energía y corrija problemas circulatorios, varices, y hemorroides. Tratamiento de esclerosis múltiple, lupus, "Lyme", cansado crónico, asma, alergias, problemas de visión, gota, artritis, etc., etc. Apipuntura, una técnica basada en la Medicina Tradicional China, aplicando piquetes de abeja en puntos exactos de acupuntura para aliviar varios síntomas.

Atención a todos

Solicitamos artículos o obras científicas y también historias/experiencias personales con l'apitherapia para el AAS Journal en español.

Por favor enviarlos por email: aasoffice@apitherapy.org o por correo a: Frederique Keller, 500 Arthur Street, Centerport NY 11721. Muchas gracias!

AAS UPDATES

Charles Mraz Course and Conference (CMACC), April 2009

Check the AAS website OR call the AAS office to learn of last-minute changes to the program or other CMACC details.

A warm welcome to our new members

Australia
John Smith

Bosnia
The Hatibovic family

Greece
Stavros Korasidis

India
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Arizona
Shannon Smith

California
Christine Springer
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Shop… and benefit the AAS!

If you've paid a recent visit to the AAS's new website, you may have noticed a shopping bag icon on the lower left corner of the home page. The icon is for a site called Fundraising Solutions, a program that directs prospective shoppers to more than 1,000 online stores. Fundraising Solutions donates a percentage of each purchase to the subscribing organization—in this case the AAS. Among the stores are Amazon.com, Barnes & Noble, Macy's, Sears, Lands' End, Kmart, Kohl's, Nike, Target, Gap, and PCConnection/MacConnection.

You'll be directly dealing with the store; the only difference from customary online shopping is that you'll access the store through our website. Give it a try!

AAS launches renovated website!

Action needed by all members — Join the AAS again to be on the new database

Have you visited our new website? If not, please do so.
www.apitherapy.org

We ask that while browsing the site you re-join the AAS as a member. A new database has been posted on the website, and we want you to be listed. Please take a minute to become a member again! You do not need to make a payment, nor do you need to enter your Join or Expiration dates if you do not have them; we will do that. What we do want is for everyone to be entered in this database SOON.

In addition, by re-joining the AAS you'll be able to access the "For Members Only" section, which contains our Network. You can be listed on the Network, but only if you join or re-join.

Also found in the "Members Only" section are a Blog, associated with the Journal *articles that are posted there, and a Forum. Only AAS members may post to these.*

You may also renew your membership on the website.

Please let us know what you think about the website. Send your likes, dislikes, ideas for improvement, and ways you may be able to help. Some examples: writing, managing the Forum, providing photos.

And if there are other contributions you might be able to make to the AAS, financial or otherwise, please let us know. As a membership organization, we value and depend on your participation.

We look forward to hearing from you about the website or any other matter. Please contact our office at aasoffice@apitherapy.org.

A final note: Tell your friends about the website!

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