

Complementary Urologic Care

An Interview with Bruce R. Gilbert, M.D., Ph.D., FAAMA

Russ Mason, M.S.

Bruce R. Gilbert, M.D., Ph.D., FAAMA is a board-certified urologist who integrates acupuncture and other complementary protocols into his treatment procedures. He has been in private practice in Great Neck, New York, since 1989. He specializes in complex microsurgical procedures for male fertility and sexual function. Dr. Gilbert is a clinical associate professor of urology and of male reproductive medicine and surgery at Cornell University Medical College in New York City, and is an attending physician at several hospitals in the city. He is a Fellow of both the American College of Surgeons and the American Academy of Medical Acupuncture (AAMA), of which he has been a director for the past 3 years and is currently president of its New York chapter. Dr. Gilbert is the principal investigator in a number of clinical research protocols involving complementary medicine. He lives in Great Neck, New York, with his wife and two children, is an avid boater, and is an instrument-rated private aircraft pilot.

Russ Mason: You seem to be one of the few urologists who use acupuncture as part of your treatment.

Bruce R. Gilbert: You may be right. However, as acupuncture becomes more integrated into various medical specialties I believe it will become an important therapeutic modality for many medical practitioners. My particular interest originated with published data suggesting that acupuncture affects the energy of the body, which points to its having an electrical component to it. That is something I have always been interested in.

RM: Can you provide some background on that?

BRG: Yes, my initial training was as an electrical engineer. During completion of my Master's degree in electrical engineering I became interested in biomedical engineering. This in turn led to my obtaining a Ph.D. in physiology at the New York Medical College in Valhalla, New York, with the goal of combining my electrical engineering background with physiology.

RM: What is biomedical engineering?

BRG: Biomedical engineering is the melding of physical sciences, such as engineering, with biological organ systems through the application of physical principles to human physiol-

ogy. What I was initially interested in was bionics—being able to use functioning replacements for physical systems of the body that had been damaged by disease or trauma. Examples of these are mechanical limbs, implantable defibrillators, and devices that assist hearing and vision, to name a few. This led to my doing postgraduate research in the department of physiology at Cornell University Medical College. At the time I was looking at renal function, and particularly the ability to use high-molecular-weight dextrans in the isolated, perfused rat-kidney model to increase the kidney's ability to absorb salt and water. The goal of these studies was to increase the efficacy of fluid reabsorption in patients who had blood loss and impaired renal function. Knowing that I needed more specific clinical training, I began my medical studies at Cornell. Part of my early training involved surgery, and I found I really loved that aspect of urology, especially microsurgery and its applications to fertility and sexual function.

RM: Even though we are discussing your use of acupuncture in a variety of situations, you are primarily a surgeon.

BRG: That's right. Surgery—particularly microsurgery—is my primary activity. This includes male fertility surgery, such as reversal of vasectomy and ligation of varicocele. Actually, however, I think of myself more as a scientist. I was a scientist before I was a physician. As we discussed, I was doing research in renal physiology. But as a scientist I know the importance of keeping an open mind, of continually questioning and evaluating—and that includes ancient therapies. Physicians have a responsibility to provide the best care to their patients. The inability to treat many chronic and unusual diseases with conventional medical techniques led me to my involvement in acupuncture.

RM: That sounds like a pioneering viewpoint for a surgeon.

BRG: I had long felt that Western medicine, sophisticated as it is, is not necessarily the best approach to treating all conditions. I had been in practice only about 2 or 3 years when a young man came to me for consultation, with a chief complaint of erectile dysfunction. Of the young people I see, about 20% have psychological factors that cause them to have sexual dysfunction. That was true with this patient, who, so far as I could see, had nothing physically wrong with him. I had nothing to offer him; my training was based on treating a recognized disease, and I couldn't

find one in this patient. Five (5) years later I saw him again for a different problem and asked him about the state of his sexual dysfunction. He explained that after he had seen me, he had consulted several other doctors and was ultimately treated by an acupuncturist, and that after a series of acupuncture treatments his erectile function had returned to normal.

RM: How did you react to this?

BRG: I was skeptical but tried to keep an open mind. I was curious about acupuncture and how it could help a patient, particularly when allopathic medicine was unable to find a remedy. Not long after this I read an article about the American Academy of Medical Acupuncture (AAMA) and about a course in acupuncture that it was offering for physicians. I decided to look into it, since it was being offered at the medical school of the University of California at Los Angeles, a reputable medical school, and was taught by physicians under the leadership of Dr. Joseph Helms [M.D.], of Berkeley, California, a well-respected physician and teacher. I signed up for the course, which involved didactic sessions, home study, and clinical modules.

RM: What did the clinical modules involve?

BRG: They involved hands-on instruction and refinement of technique. Preceptors were present at every step, demonstrating acupuncture technique and helping to refine the protocols that we had committed to memory. It was one of the best postgraduate courses I had ever taken. After completing the course and becoming certified to practice acupuncture in New York State—for which a physician must complete a 300-hour program—I began to use acupuncture in my practice.

RM: Did you begin to use acupuncture immediately?

BRG: No, I began slowly, using it on a few patients a week. It was my initial goal to use acupuncture only for conditions I was already treating—fertility and sexual dysfunction. As it turned out, I acquired a wider spectrum of patients because, as I learned from Eastern medicine, someone who may present with fertility issues or sexual dysfunction may have a wide range of other conditions that also need to be treated.

RM: Did your experience with acupuncture change your perspective about the treatment of patients?

BRG: I found that acupuncture is a tremendous complement to the Western approach to medicine. A physician must evaluate a patient from the conventional Western perspective before deciding whether or not the patient might benefit from acupuncture. The hardest step is to select those patients who you think will do well with acupuncture. Sometimes you prove to be correct and sometimes not. Not all patients want to try acupuncture, but for those who do it can be a very valuable treatment option. Eastern treatments do not have the same spectrum of side effects as the medicines we often prescribe in allopathic protocols, but are nonetheless very powerful.

RM: How have your patients fared with the combination of treatments?

BRG: Many who are being treated with a conventional Western approach are greatly helped by the addition of Eastern treatments. Part of my practice also involves lifestyle changes, nutritional therapy, and exercise. I attempt to meld the classic medical treatment options, for which we have good research data and quantified success, with Eastern techniques that do not have as many published results. They all come together as complementary approaches. You will notice that I don't use the word "alternative," because I regard what I'm doing as complementary.

RM: Are there different kinds of acupuncture?

BRG: There are many differing systems of acupuncture: French, Japanese, Chinese, and Korean, for example. In addition, there are various microsystems that involve acupuncture treatments confined to the ear, or the hands, or the scalp. There are also the Five Element techniques and various meridian techniques that add many options for the practitioner. Many medical doctors who use acupuncture use a combination of techniques, based on what has worked successfully for them. And usually physicians tend to specialize in an acupuncture approach that is geared to solving a set of problems the physician sees consistently in patients.

RM: Does the integration of Eastern and Western treatments alter the way you perceive the patient?

BRG: Yes, it makes you look at the patient in a very different way. You're not looking at treating a disease specifically but rather at the patient who has the disease. That is a very important distinction.

RM: Can you give an example of this?

BRG: Suppose that I have a patient who has pain on urination. In the Western medical model, the physician would probably treat this symptom with an antibiotic even if the urine analysis and the culture are negative. In this scenario the pain often persists and neither the physician nor the patient is satisfied. However, from the Eastern perspective you're evaluating the patient from a holistic viewpoint, rather than evaluating the pain itself. There are specific treatments in acupuncture to specifically deal with bladder pain, and we use them, but we also evaluate the entire person. You may find that the patient is stressed, or not getting proper nutrition, or enough rest or exercise. You may find other causative factors that influence the patient's condition.

RM: Can you give an example of how you diagnose and treat a patient with a fertility problem?

BRG: A typical patient might be a male with poor sperm quality. The patient's sperm number, sperm motility, and sperm morphology—the appearance of the sperm—might all be impaired. For proper fertility the male needs a good number or effectively motile sperm, as well as sperm that largely appear normal—with an oval head and a nice long tail. We have good data from our in vitro fertilization experience about the relationship between sperm quality and sperm function. I would also do blood studies to determine the patient's hormonal status. From an Eastern per-

spective this isn't necessary, but as I stated earlier, I always evaluate the patient conventionally before considering or offering acupuncture. If this person doesn't want surgery or a hormonal approach, we can turn to a holistic paradigm for treatment.

Very encouraging studies have been reported^{1,2} about the use of acupuncture in treating male infertility, particularly in the area of sperm motility. The patients in these studies have improved over a course of 1–3 months, which is quite remarkable. This means that I can have a reasonable expectation of success if the patient with impaired semen quality elects to have acupuncture treatment of that condition.

RM: How many treatments do you give to such a patient?

BRG: I like to give one or two a week over a course of 4–6 weeks. Then we evaluate the patient for a change in sperm motility. To see an increase in sperm numbers would take at least 90 days, and a change in morphology would take several months longer, given the time course of spermatogenesis.

RM: While you are treating the patient with acupuncture, do you also use other treatments?

BRG: There are quite a few things we can do in addition to acupuncture. In fact these are not options, but items I usually add to the treatment. This includes nutritional support, such as antioxidants, and lifestyle changes. If a patient smokes, we try to eliminate that right away because it is known to impair a variety of physiologic functions, including sperm quality.

RM: What are the lifestyle changes that you suggest to patients?

BRG: One of the major factors contributing to loss of function and disease is stress. Our lives are full of stressors: I have the stress of dealing with infertility for these patients; others experience stress at work, and possibly stress from various health issues. As a result, exercise and relaxation therapies are not only effective but are necessary. Activities such as yoga or *qigong* are effective in helping patients relax. In acupuncture we also have treatments that can help a patient relax in a way that the patient often experiences immediately after the treatment, with effects that can last 8–24 hours. Acupuncture for stress relief is something I try to add to the treatment plan for most of my fertility patients. I do this because I feel that many of the patients I see, particularly those with fertility issues, are quite anxious about their situations, and I feel they benefit from acupuncture treatment for stress relief.

RM: Can you explain your treatment method for those practitioners who use acupuncture?

BRG: The protocol for treating anxiety is to place needles in dispersion at the LR 2, LR3, and HT 3 acupuncture points, all of which are bilateral, and at the GV 20 point. Patients who present with bladder and pelvic pain often respond to bilateral treatment of the SP6 to CV3 points, with stimulation at 15 Hz. Patients who present with subfertility are treated with a variety of paradigms as well as specific protocols related to their presenting complaints.

The physical atmosphere of the treatment room is also important; the lighting is subdued and calming music is played, the room is heated, and the walls are soundproofed so that the patient can't hear extraneous noise.

RM: How long do the treatment sessions last?

BRG: They last between 20 and 30 minutes each. However, I will sometimes leave the needles in place a little bit longer, depending on the patient's response. For the first treatment I usually limit the treatment to 20 minutes to see the patient's response, and typically extend the treatment time to 40 minutes for additional treatments, sometimes with removal of the needles and use of a second acupuncture protocol. However, most of the time, I give treatments concurrently. This means that I will do an anxiety protocol while also using another "circuit," such as a meridian-based energetic circuit, or I will add a microsystem to the treatment. I will also often send a patient home with micro-ear pellets affixed to specific ear points, which the patient can self-stimulate to continue his treatment at home.

RM: Acupuncture is a very old treatment method. Have there been any new technological developments in the field?

BRG: Yes, there are new technologies available. When I first began my medical practice, I felt that treatments such as acupuncture were unproven and therefore had limited value. But I have been proved wrong. With acupuncture, a patient with a migraine headache, nausea and vomiting, or an acute back spasm, can in most cases be virtually pain- and symptom-free in less than 20 minutes, and the number of conditions that can be effectively treated with acupuncture is staggering. Frankly, I'm surprised that some of my colleagues—particularly those in orthopedic medicine—haven't learned some of these techniques. These practitioners often prescribe 2 weeks of painkilling drugs to a patient with an acute back spasm and confine the patient to bed, when a 20-minute acupuncture treatment can often leave the patient pain-free.

RM: Do you have any specific advice for practitioners who might want to look into acupuncture?

BRG: I think we have to be cautious about the new technologies, because if a physician recommends something it can in some cases be tantamount to an endorsement. I need to review the data before I can endorse something. Right now I am doing some work with micro-electric-current therapy for pelvic pain. It appears to be effective in many musculoskeletal disorders, and some preliminary data suggest that it may reduce pain in patients with interstitial cystitis. But until I have the data in hand, I will refrain from suggesting it to my patients. This goes for any new device or new technology, even those that I myself have developed, and I think all physicians need to do this before using new therapies or combination of therapies; it's our obligation to our patients.

As a further step, I have become very active in the American Association of Medical Acupuncture [AAMA; see box entitled About the American Academy of Medical Acupuncture], the only national organization of physician acupuncturists. It is a

great forum in which physicians who use acupuncture can share and learn from one another's experiences. I believe physicians have a unique perspective, and also an obligation, to maintain their medical knowledge and skills, not only in Western medicine but also in any complementary techniques in which they have been trained. Board certification and fellowship status, offered by the AAMA, are excellent ways of accomplishing this in acupuncture.

RM: You mentioned that you see pediatric patients. Why do they come to see you?

BRG: My colleagues in urology often refer young patients to me for the treatment of enuresis. Medications for this do work, but some parents do not want their children to take these medications, and acupuncture is very effective for treating enuresis in the pediatric population.

RM: How do these children respond to acupuncture treatment?

BRG: Very well. The response rates are 40% after 6 months and as high as 86% after 1 year of treatment.³ Acupuncture can be a challenge for pediatric patients who are needle-phobic, but explaining that the needle is not going to hurt them, and that the technique is very gentle, is usually effective.

RM: Many men, especially older men, develop diseases of the prostate, including prostate cancer. Is this something you treat?

BRG: I use acupuncture to treat the anxiety that goes along with the conventional treatment for benign prostatic disease, but I will not use it for a patient who has prostate cancer. There are no data to support acupuncture use in this setting, and I wouldn't recommend it. However, I have several patients who are not candidates for surgery and are pursuing conventional therapy for prostate cancer, and I treat them with acupuncture for anxiety, or for nausea and vomiting related to chemotherapy. Acupuncture is a well-documented treatment for chemotherapy-induced nausea and vomiting.

RM: Do you use acupuncture for your female patients?

BRG: Many women experience nausea and vomiting during pregnancy, and acupuncture is wonderfully effective at relieving these conditions. But from a urologic perspective, I also treat pelvic pain, vulvodynia, and interstitial cystitis with acupuncture. All of these conditions are fairly hard to treat from a medical perspective, but acupuncture is very effective in helping 40–60% of men and women with chronic pelvic pain.⁴

RM: Among your patients, how many do you treat for anxiety?

BRG: I feel that everyone who has a medical problem also has a corresponding psychogenic condition—an anxiety component. So if I'm treating someone with a sexual dysfunction problem, I'll also treat that person for anxiety. One of the best things my acupuncture training has given me is a better understanding of the various components of a disease and the various issues a

patient can have. Patients need to be evaluated and treated, and there are very good treatments from both the Western and Eastern perspectives.

RM: It's interesting that 20 years ago very few physicians took acupuncture seriously.

BRG: It's insightful that you bring up that point. One of the things that has happened is the parallel awareness of complementary medicine with the increased prevalence of managed care. Managed care plans are covering less of the costs of medical care, as well as reimbursing physicians to an ever-smaller degree. This has created a situation in which patients are seeking a lower-cost but effective treatment options and physicians are looking for ways to increase their income. So we are in interesting times. Complementary medicine, with its lower associated costs, is being sought by a growing number of patients. This has motivated physicians to learn about complementary approaches and possibly to introduce them into their practices. Further fueling the public acceptance of complementary therapies is the research support given them by the National Institutes of Health, together with the publicity provided by the media. In the New York metropolitan area where I practice, most hospitals have begun to credential both physicians and nonphysician practitioners, in many cases including practitioners of alternative medicine. This is something one would never have expected 20 or even 10 years ago.

RM: How would you summarize your viewpoint about acupuncture and allopathic medicine?

BRG: We must learn from ancient treatment paradigms, like acupuncture, that have developed over the past 3000 years, and incorporate these valuable techniques into modern medicine. Before we do that, however, we have the obligation to insure that they are safe and effective. □

References

1. Pei J, Strehler E, Noss, U. et al. Quantitative evaluation of spermatozoa ultrastructure after acupuncture treatment for idiopathic male infertility. *Fertil Steril* 2005; 84:141–147
2. Siterman S, Eltes F, Wolfson V, et al. Effect of acupuncture on sperm parameters of males suffering from subfertility related to low sperm quality. *Arch Androl* 1997;39:155–161.
3. Jodorkovsky R. Treatment of primary nocturnal enuresis with hand therapy: A randomized, double-blind, placebo-controlled trial. *Med Acupunct* 2003;14:28–.
4. Chen R, Nickel JC. Acupuncture ameliorates symptoms in men with chronic prostatitis/chronic pelvic pain syndrome. *Urology* 2003; 61:1156–1159.

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To Contact Dr. Bruce Gilbert

Bruce R. Gilbert, M.D., Ph.D., FAAMA

900 Northern Boulevard, Suite 230
Great Neck, NY 11021
Phone: (516) 487-2000
Fax: (516) 487-2007
E-mail: bruce.gilbert@verizon.net
Website: www.BruceGilbertMD.com/

About the American Academy of Medical Acupuncture

American Academy of Medical Acupuncture (AAMA)

4929 Wilshire Boulevard, Suite 428
Los Angeles, CA90010
Phone: (323) 937-5514
E-mail: administrator@medicalacupuncture.org
Website: <http://www.medicalacupuncture.org/>

The AAMA was established in 1987 to integrate traditional and modern forms of acupuncture, along with their philosophical concepts, within the Western medical model.

The organization was founded by physicians who were graduates of the Medical Acupuncture Training Program for Physicians under the sponsorship of at the University of California, Los Angeles, School of Medicine. As the only professional acupuncture organization in North America whose membership is limited to physicians, the AAMA accepts members from a wide range of medical disciplines. All members receive a subscription to *Medical Acupuncture*, the the official journal of the AAMA (visit www.liebertpub.com/acu for more information on this journal). The AAMA represents the highest standards of training and proficiency among physicians practicing acupuncture in North America.



Bruce R. Gilbert, M.D., Ph.D.,
FAAMA, Great Neck, New
York.
