

ALTERNATIVE THERAPIES IN WOMEN'S HEALTH

Science-based Information for Clinicians

AHC Media LLC Home Page—www.ahcmedia.com

CME for Physicians—www.cmeweb.com



INSIDE

Soy,
old bones. . .
Genistein and
osteopenia
page 85

Information
gathering
ongoing for
women with
menopausal
symptoms
page 88

Texas
midwives
recommend
CAM
modalities
to clients
page 88

Alternative Therapies in Women's Health is available online. For more information, go to www.ahcmedia.com/online.html or call (800) 688-2421.

Acupuncture and IVF: New Evidence for an Unlikely Duo

By Brandon Horn, PhD, JD, LAc

Board Certified Acupuncture and Oriental Medicine Practitioners, Eastern Center for Complementary Medicine, PC. Dr. Horn reports no financial relationships relevant to this field of study.

WHAT HAPPENS WHEN YOU MIX ONE OF THE MOST TECHNOLOGICALLY advanced medical technologies with one of the oldest medical techniques? According to some studies, you get higher pregnancy rates, and according to others, you don't.

This article analyzes recent studies in the growing field of IVF acupuncture and addresses discrepancies in the available data to suggest a clinical "bottom line." In doing so, common misconceptions about acupuncture will be discussed, and acupuncture's role in a modern IVF setting will be elucidated.

Literature Summary

An excellent review of the pre-2005 literature was featured in the October 2005 issue of *Alternative Therapies in Women's Health*; therefore, we will only touch briefly on the pre-2005 literature. The seminal study on acupuncture and IVF was conducted by Paulus colleagues in 2002.¹ Paulus demonstrated a 62% increase in clinical pregnancies ($P = .03$), which were defined as the presence of a fetal sac at 6 weeks. Paulus repeated the study the following year using a sham acupuncture treatment as the control instead of a non-treatment group.² This time the increase was only 16% ($P = .39$). In commenting on the study, Paulus realized that they had made an assumption that the sham treatment was inert, when in fact it may not have been. Therefore, they concluded that the sham points they chose may have actually had some real effects. Indeed, when comparing the sham pregnancy rates (37%) with the non-treatment control group of Paulus' prior study (26.3%), we see substantial differences. The appropriateness of placebo controls in acupuncture studies is highly problematic, and researchers have suggested that more valuable information is attained through non-placebo control groups.³

EDITORIAL ADVISORY BOARD

Judith Balk, MD, MPH,
FACOG
Assistant Professor
Magee-Womens Hospital
University of Pittsburgh
Pittsburgh, PA

Kay Ball, RN, MSA,
CNOR, FAAN
Perioperative Consultant/
Educator
K & D Medical
Lewis Center, OH

Mary Hardy, MD
Director,
Integrative Medicine
Ted Mann Center
University of California-Los Angeles
Co-Director
Simms/Mann Health and Wellness Programs
Venice Family Clinic
Venice, CA

Lynn Keegan, RN, PhD,
HNC-BC, FAAN
Director,
Holistic Nursing Consultants
Port Angeles, WA

Felise B. Milan, MD
Associate Professor of Clinical Medicine
Albert Einstein College of Medicine
Montefiore Medical Center Bronx, NY

Dónal P. O'Mathúna, BS (Pharm), MA, PhD
Lecturer in Health Care Ethics
School of Nursing
Dublin City University
Ireland

Dr. Balk (peer reviewer) reports no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

Following the Paulus study, Quintero and colleagues designed a pilot study to see if they could reproduce the results with an even more rigorous study design.⁴ They used a randomized, sham-controlled, crossover study. They found a trend toward higher implantation rates (180% increase in the treatment group) and a trend toward higher ongoing pregnancy rates (60% increase in the treatment group). Though neither of these was statistically significant, it is clinically interesting that the percentage increase in ongoing pregnancies was similar to that of the Paulus study. Quintero did, however, find a statistically significant reduction in the amount of gonadotropins used in the treatment group, indicating that acupuncture may have direct effects on ovarian function.

In the same year, Magarelli and colleagues performed a retrospective study where they found a statistically significant 42% increase in ongoing pregnancies.⁵ They also found a statistically significant reduction in the number of miscarriages and ectopic pregnancies. Wang and colleagues used a completely different acupuncture protocol from Paulus, Magarelli, and Quintero.⁶ Contrary to the other studies, Wang demonstrated a trend toward a reduction in pregnancy rates (though not statistically significant). This was the first study showing a possible negative effect of acupuncture on IVF pregnancies, indicating that acupuncture's effects on reproduc-

tive physiology are not simply generalized effects irrespective of the acupuncture protocol.

Three very interesting studies were published in 2006. Smith and colleagues randomized 228 IVF patients to receive true or non-invasive sham acupuncture.⁷ Smith used a modified Paulus protocol and added a treatment on day 9 of stimulation. The day 9 treatment varied from person to person depending on their "Traditional Chinese Medicine diagnosis." The actual treatments given were not revealed. The true acupuncture group had a 28% pregnancy rate at week 18, whereas the sham group had an 18% pregnancy rate ($P = .08$). This difference, though statistically non-significant, is very significant clinically when read together with the Paulus and Quintero studies, which achieved very similar increases.

Dieterle and colleagues randomized 225 patients to receive true acupuncture or a sham. The true acupuncture group received a modified Paulus protocol with only one treatment done after embryo transfer and another three days later. The sham acupuncture was actually a real acupuncture treatment using points, not thought, to influence fertility. As with Paulus' second study, Dieterle et al did not validate their sham treatment. The true acupuncture group had a 115% increase in clinical pregnancies (33.6% vs 15.6%, $P < .01$) and a 106% increase in ongoing pregnancies compared to the sham group (28.4% vs 18%, $P < .01$). At first glance, this seems astonishing. However, the researchers did not indicate the average pregnancy rates for their clinic without acupuncture. Instead, they provided the national average for clinical pregnancies in Germany, which is 24.6% for IVF and 22.6% for ICSI.⁸ Although the pregnancy rate for the true acupuncture group is still approximately 40% higher than the national average, the sham acupuncture group is approximately 30% lower than the national average.

Despite the shortcomings of the study design, it is a very interesting and important study for 2 reasons. First, it adds evidence that true acupuncture, administered appropriately, can substantially increase pregnancy rates. Second, together with the Wang study, it adds evidence that improperly chosen acupuncture points may have detrimental effects on pregnancy outcomes.

Westergaard and colleagues randomized 273 patients to one of three groups: control group, ACU 1, or ACU 2. In the ACU 1 group, patients received acupuncture in the form of a modified Paulus protocol, where the auricular points were excluded. There is no indication why the researchers removed the auricular points, since auricular acupuncture has

Alternative Therapies in Women's Health, ISSN 1522-3396, is published monthly by AHC Media LLC, 3525 Piedmont Rd., NE, Bldg. 6, Suite 400, Atlanta, GA 30305.

SENIOR VICE PRESIDENT/PUBLISHER: Brenda L. Mooney.

ASSOCIATE PUBLISHER: Lee Landenberger.

MANAGING EDITOR: Leslie Hamlin

EDITOR: Leslie G. Coplin.

GST Registration Number: R128870672.

Periodicals postage paid at Atlanta, GA 30304.

POSTMASTER: Send address changes to

Alternative Therapies in Women's Health, P.O. Box 740059, Atlanta, GA 30374.

Copyright © 2007 by AHC Media LLC. All rights reserved. No part of this newsletter may be reproduced in any form or incorporated into any information-retrieval system without the written permission of the copyright owner.

Back Issues: \$45. Missing issues will be fulfilled by Customer Service free of charge when contacted within one month of the missing issue's date.

This is an educational publication designed to present scientific information and opinion to health professionals, to stimulate thought, and further investigation. It does not provide advice regarding medical diagnosis or treatment for any individual case. It is not intended for use by the layman.

Subscriber Information

Customer Service: 1-800-688-2421.

Customer Service E-Mail: customerservice@ahcmedia.com

Editorial E-Mail: paula.cousins@ahcmedia.com

World-Wide Web: www.ahcmedia.com

Subscription Prices

United States

\$349 per year (Student/Resident rate: \$180).

Add \$12.95 for shipping & handling.

Multiple Copies

Discounts are available for group subscriptions.

For pricing information, call Tia Kreutzer at (404) 262-5482.

Outside the United States

\$379 per year plus GST (Student/Resident rate: \$195 plus GST).

Accreditation

AHC Media LLC is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AHC Media LLC designates this educational activity for a maximum of 20 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This CME publication is intended for the women's health physician. It is in effect for 36 months from the date of the publication.

For CME credit, add \$50.

Questions & Comments

Please call Leslie Hamlin, Managing Editor, at (404) 262-5416 between 8:30 a.m. and 4:30 p.m. ET, Monday-Friday.



been shown to improve reproductive outcomes.⁹ The ACU 2 group received the same treatment as ACU 1 except that they received an additional treatment 2 days post embryo transfer. Both the ACU 1 and ACU 2 groups had significantly higher clinical pregnancy rates ($P < .05$) compared to controls (39%, 36%, and 24%, respectively).¹⁰

The increases in pregnancy rates were consistent with most of the prior studies. However, interestingly, the ACU 2 group had double the number of pregnancy losses when compared to the ACU 1 and control groups (12, 6, and 5, respectively). This was not statistically significant, but again, when read together with the Wang and Dieterle studies, the trend is certainly of high clinical significance. Westergaard commented, “In our study, an additional session of acupuncture on ET day + 2 (ie, closer to the day of implantation) did not significantly affect the outcome, but showed an insignificant increase in the rate of early pregnancy loss. Whether this implies a possible harmful effect of repeated acupuncture sessions (3) remains unanswered by the present study, but might deserve further investigation.”¹¹

Though highly significant, Westergaard and colleagues did not mention the fact that, although used successfully during embryo transfer, the acupuncture points they chose for the ET day + 2 treatment were traditionally contraindicated during pregnancy due to their potential abortifacient effects.¹² If the traditional contraindications are correct, their use after embryo transfer could theoretically reduce the number of pregnancies.

In addition, Westergaard and many other researchers erroneously generalize the results of their particular methodology to all of acupuncture. This is a crucial mistake. While there is clearly evidence of generalized effects of acupuncture, there is a substantial body of literature demonstrating that various acupuncture points have relatively unique and site specific effects as well.

For example, fMRI studies have shown that stimulation of a point traditionally used to treat visual problems causes visual cortical activations, where stimulation of control points did not.^{13,14} In rat studies, C-FOS expression in the visual cortex was also increased when using similar points, whereas non-relevant acupuncture points produced no increase.¹⁵ Although acupuncture fMRI studies have yet to be conducted in reproductive medicine, Doppler studies investigating pulsatility indices have shown site-specific increases in blood flow in the uterine ($P < .0001$) and ovarian arteries.^{16,17}

Mechanistic Studies

Having established a very strong trend toward increases in pregnancy rates, several studies have begun looking at mechanisms of action. In light of studies such as Richter and colleagues,¹⁸ demonstrating that endometrial thickness may be one factor in pregnancy outcomes, Yu and colleagues conducted a study to examine acupuncture’s effects on the uterine lining when combined with Sildenafil.¹⁹ Inclusion criteria were women who had never achieved a lining of ≥ 8 mm or greater in prior cycles. Although only a pilot study of 4 patients, Yu et al reported that, “All 4 subjects achieved endometrial lining thickness of ≥ 10 mm following the administration of the combination of acupuncture and Sildenafil; this included one patient whose lining did not exceed 5 mm in a previous cycle. Another patient, who had not responded to Sildenafil alone in a prior IVF cycle, responded to the combination of Sildenafil and acupuncture.”

Yu et al concluded that acupuncture’s seeming effects on the endometrium could be mediated by affecting nitric oxide synthase.

Liu and colleagues conducted a very interesting study on rats to investigate acupuncture’s role on implantation. The researchers took 3 groups of rats: a control group and 2 other groups treated with Mifepristone. Half of the Mifepristone rats received acupuncture (the Acupuncture Group), the other half did not. The rats that received Mifepristone and acupuncture had the same implantation rates as normal rats. The Mifepristone only group had significantly less pregnancies ($P < .01$).²⁰ This was fascinating evidence of acupuncture’s ability to reverse certain chemotoxic agents that may be blocking fertility.

Liu et al then followed up with another similarly designed study, this time measuring a number of serum parameters. Liu et al found that the pregnancy rate and average number of blastocysts were significantly higher in the acupuncture group than those in the control group respectively ($P < 0.01$). They also found that acupuncture was able to maintain serum levels of progesterone and prolactin, as well as the protein and mRNA expression levels of progesterone receptors and prolactin receptors ($P < 0.05$).²¹

This study suggests that acupuncture may have the ability to help maintain progesterone levels despite hormonally-adverse environmental factors. In our world of xenosteroids, this is an important consideration. This study also suggests that research should be done on acupuncture’s ability to help maintain a pregnancy in groups at high risk for xenosteroid exposure.

Magarelli et al investigated prolactin and cortisol lev-

els in patients receiving a particular acupuncture protocol during an IVF cycle. Given traditional uses of acupuncture points to increase lactation, the potential of acupuncture to elevate prolactin levels was anticipated. Surprisingly, however, cortisol levels also increased significantly in part of the cycle. The Magarelli study, therefore, suggests that, contrary to popular belief, acupuncture's beneficial effects on fertility are probably not secondary to a relaxation response. In commenting on the results, Magarelli noted that elevated hydrocortisone levels in follicular fluid has been shown to improve ongoing pregnancy rates, and surmised that this may be another avenue by which acupuncture is helping to improve pregnancy rates.²²

Conclusion

The clinical "bottom line" is that with proper point selection, timing, and administration, acupuncture substantially and consistently improves pregnancy outcomes. Because of the potential for negative effects of improper acupuncture administration, it is prudent to utilize acupuncturists that have demonstrated competency in reproductive medicine, such as by passing the oriental reproductive medicine board exams.²³ Lastly, although traditional contraindications have not been proven to be valid, it may be prudent to have traditionally trained acupuncturists on IRBs to ensure that any such contraindications are taken into consideration as part of the risk/benefit analysis. ♦

References

1. Paulus WE, et al. Influence of acupuncture on the pregnancy rate in patients who undergo assisted reproduction therapy. *Fertil Steril.* 2002;77:721-724.
2. Paulus WE, et al. Placebo controlled trial of acupuncture effects in assisted reproductive therapy. *Fertil Steril.* 2003;18:xviii18.
3. Paterson C, Dieppe P. Characteristic and incidental (placebo) effects in complex interventions such as acupuncture. *BMJ.* 2005;330:1202-1205.
4. Quintero R. A randomized, controlled, double-blind, cross-over study evaluating acupuncture as an adjunct to IVF. *Fertil Steril.* 2004;81:11-12.
5. Magarelli P, Cridennda D. Acupuncture & IVF poor responders: A cure? *Fertil Steril.* 2004;81:20.
6. Wang W, et al. A matched controlled study to evaluate the efficacy of acupuncture for improving pregnancy rates following in vitro fertilization-embryo transfer. *Fertil Steril.* 2005;83:S24.
7. Smith C, et al. Influence of acupuncture stimulation on pregnancy rates for women undergoing embryo transfer. *Fertil Steril.* 2006;85:1352-1358.
8. Dieterle S, et al. Effect of acupuncture on the outcome of in vitro fertilization and intracytoplasmic sperm injection: A randomized, prospective, controlled clinical study. *Fertil Steril.* 2006;85:1347-1351.
9. Gerhard I, Postneek F. Auricular acupuncture in the treatment of female infertility. *Gynecol Endocrinol.* 1992;6:171-181.
10. Westergaard LG, et al. Acupuncture on the day of embryo transfer significantly improves the reproductive outcome in infertile women: A prospective, randomized trial. *Fertil Steril.* 2006;85:1341-1346.
11. Westergaard LG, et al. Positive effects of acupuncture in assisted reproductive technologies are not mediated by changes in ovarian and endometrial production of estradiol, progesterone, and placental protein 14. *Fertil Steril.* 2006;85:1368-1369.
12. Deadman, Peter. A manual of acupuncture (Second Edition). East Sussex: Journal of Chinese Medicine Publications, 2007.
13. Li G, et al. Visual cortical activations on fMRI upon stimulation of the vision-implicated acupoints. *Neuroreport.* 2003;14:669-673.
14. Cho ZH, et al. New findings of the correlation between acupoints and corresponding brain cortices using functional MRI. *Proc Natl Acad Sci U S A.* 1998;95:2670-2673. Note half of the authors retracted the conclusions of this study in 2006 based upon reasons that had nothing to do with the study itself (which is probably why the other half did not retract the conclusions).
15. Lee H, et al. Acupuncture stimulation of the vision-related acupoint (Bl-67) increases c-Fos expression in the visual cortex of binocularly deprived rat pups. *Am J Chin Med.* 2002;30:379-385.
16. Stener-Victorin E, et al. Reduction of blood flow impedance in the uterine arteries of infertile women with electro-acupuncture. *Hum Reprod.* 1996;11:1314-1317.
17. Stener-Victorin E, et al. Ovarian blood flow responses to electroacupuncture stimulation depend on estrous cycle and on site and frequency of stimulation in anesthetized rats. *J Appl Physiol.* 2006;101:84-91.
18. Richter K, et al. Relationship between endometrial thickness and embryo implantation, based on 1294 cycles of in vitro with transfer of two blastocyst-stage embryos. *Fertil Steril.* 2006;87:53-59.
19. Yu W, et al. A pilot study evaluating the combination of acupuncture with sildenafil on endometrial thickness. *Fertil Steril.* 2007;87:S23.
20. Liu XY, et al. Effects of acupuncture promoting embryo implantation and development in the rat with

- dysfunctional embryo implantation. *Zhongguo Zhen Jiu*. 2007;27:439-442.
21. Liu XY, et al Preliminary study on the mechanisms of acupuncture in promoting embryo implantation in rats. *Zhongguo Zhong Xi Yi Jie He Za Zhi*. 2007; 27:633-636.
 22. Magarelli PC, et al. Proposed mechanism of action of acupuncture on IVF outcomes. Program and abstracts of the American Society for Reproductive Medicine 62nd Annual Conference; October 21-25, 2006; New Orleans, LA. Session P-118.
 23. The first Board exam is scheduled in March of 2008. A list of practitioners who have passed their board exams and demonstrated competency in oriental reproductive medicine will be listed on the ABORM website (www.aborm.org).

Soy, Old Bones... Genistein and Osteopenia

A B S T R A C T & C O M M E N T A R Y

By Russell H. Greenfield, MD

Dr. Greenfield is Clinical Assistant Professor, School of Medicine, University of North Carolina, Chapel Hill, and Visiting Assistant Professor, University of Arizona, College of Medicine in Tucson. Dr. Greenfield reports no financial relationship relevant to this field of study.

Source: Marini H, et al. Effects of the phytoestrogen genistein on bone metabolism in osteopenic postmenopausal women. *Ann Intern Med*. 2007;146:839-847.

MARINI AND COLLEAGUES OF THIS RANDOMIZED, double-blind, placebo-controlled trial performed at three university centers were interested in determining whether or not the isoflavone genistein had a clinically significant effect on bone metabolism in osteopenic postmenopausal women. Subjects (n=389) were women between the ages of 49-67 who had been postmenopausal for at least 12 months, with a bone mineral density (BMD) $< 0.795 \text{ g/cm}^2$ (corresponds to a T score of -1.0 SD) at the femoral neck and no significant comorbid conditions. Following a complete physical examination and laboratory evaluation, BMD was measured at the lumbar spine and femoral neck using dual-energy x-ray absorptiometry. During a 4-week stabilization period, subjects received a low-soy,

reduced fat diet. They were then randomized to receive either 54 mg genistein (n=198) or placebo (n=191) daily for 24 months. Primary outcome was BMD at the anteroposterior (AP) lumbar spine and femoral neck at 24 months. Multiple secondary outcomes included serum levels of bone-specific alkaline phosphatase and insulin-like growth factor I, urinary excretion of pyridinoline and deoxypyridinoline, lipid profile, triglyceride levels, calcium levels, genistein levels, and endometrial thickness (the latter assessed at baseline, 1 and 2 years). Clinic visits occurred every 3 months, during which subjects were queried about symptoms, while blood tests were performed every 6 months.

At 24 months follow-up, BMD, at the AP lumbar spine, had increased in genistein recipients ($+0.049 \text{ g/cm}^2$) and decreased in placebo recipients (-0.053 g/cm^2). The same was true for BMD at the femoral neck ($+0.035 \text{ g/cm}^2$ vs -0.037 g/cm^2). Use of genistein significantly decreased urinary excretion of bone resorption markers (pyridinoline and deoxypyridinoline) and increased levels of bone formation markers (bone-specific alkaline phosphatase and insulin-like growth factor I). Genistein had no discernible effect on endometrial thickness compared with placebo, and body mass index did not change significantly between the 2 groups at trial's end. More subjects in the genistein group developed gastrointestinal complaints, however, and discontinued the study compared with the placebo group (19% vs. 8%). Marini and colleagues concluded that 24 months of pure genistein produces a net gain in bone mass after 1 and 2 years of therapy.

■ COMMENTARY

Genistein is an isoflavone found in significant concentrations in soybeans, with a chemical structure similar to 17-beta estradiol. It appears to act as a plant-based estrogen, binding to both alpha and beta estrogen receptor sites, but with greater affinity for beta receptors. This is clinically important because beta estrogen receptor sites are more prevalent in bone, whereas alpha receptors are more common in reproductive organs. Genistein has been promoted as a natural selective estrogen receptor modulator (SERM), and many women have turned to soy isoflavones in the hope of supporting bone health later in life. Results of this trial support the use of purified genistein in this way in a manner methodologically sound. Indeed, while more research is warranted, especially as relates to fracture rates and bone loss due to other reasons (steroid use, for example), these results are exciting.

Confidence in Marini et al's conclusions is enhanced because of the sample size, as well as the inclusion of

biomarker studies. The dropout rate was significant, however, with at least 10% of participants dropping out of each group every year. Marini et al are quick to point out that while genistein had a beneficial effect on biomarkers for bone metabolism, these results may not correlate well with fracture risk. It is also noteworthy that the tablets for each group contained both calcium carbonate (500 mg) and vitamin D (400 IU).

Another interesting outcome detected by the researchers is that women in the genistein group experienced a significant decrease in daily hot flashes, unlike the comparison group.

Multiple effective pharmaceutical options exist for the treatment of postmenopausal bone loss. It remains to be seen whether purified genistein could be safely combined with some of these existing therapies to enhance clinical response, or if genistein alone is a reasonable option for those women who do not tolerate medication well. It is important to remember that epidemiological data suggest that women with high dietary isoflavone intakes, notably from soy products, seem to have a lower risk for bone loss. The dose of 54 mg genistein per day employed in the study is comparable to the isoflavone content found in many vegetarian diets, and dietary intake of nutrients trumps supplementation unless the dosage needed cannot be met through diet alone. Based on these results, it seems reasonable to recommend moderate soy food intake or purified genistein as employed in this study for postmenopausal osteopenic women; however, even with no effect on endometrial thickness, most experts advise caution regarding phytoestrogens for women at high risk for hormonally-driven tumors. ♦

To reproduce any part of this newsletter for promotional purposes, please contact:

Stephen Vance

Phone: (800) 688-2421, ext. 5511

Fax: (800) 284-3291

Email: stephen.vance@ahcmedia.com

Address: AHC Media LLC

3525 Piedmont Road, Bldg. 6, Ste. 400,
Atlanta, GA 30305 USA

To reproduce any part of AHC newsletters for educational purposes, please contact:

The Copyright Clearance Center for permission

Email: info@copyright.com

Website: www.copyright.com

Phone: (978) 750-8400

Fax: (978) 646-8600

Address: Copyright Clearance Center
222 Rosewood Drive, Danvers, MA 01923
USA

Site updated for ease-of-use!



The Global Continuing Medical Education Resource

Exciting **site improvements** include advanced search capabilities, more bulk purchasing options, certificate printing, and much more.

With **more than 1000 hours** of credit available, keeping up with continuing education requirements has never been easier!

Choose your area of clinical interest

- Alternative Medicine
- Internal Medicine
- Primary Care
- Cardiology
- Medico-Legal Issues
- Psychiatric Medicine
- Emergency Medicine
- Neurology
- Radiology
- Geriatrics
- OB/GYN
- Sports Medicine
- Infection Control
- Oncology
- Travel Medicine
- Pediatrics

Price per Test

\$15 per 1.5 credit hours *Purchase blocks of testing hours in advance at a reduced rate!

Log onto
www.cmeweb.com

today to see how we have improved your online CME

HOW IT WORKS

- 1. Log on at <http://www.cmeweb.com>**
- 2. Complete the rapid, one-time registration process** that will define your user name and password, which you will use to log-on for future sessions. **It costs nothing to register!**
- 3. Choose your area of interest** and enter the testing area.
- 4. Select the test you wish to take** from the list of tests shown.
Each test is worth 1.5 hours of CME credit.
- 5. Read the literature reviews and special articles,** answering the questions associated with each.
- 6. Your test will be graded online** and your certificate delivered immediately via e-mail.

CALL 1-800-688-2421 OR E-MAIL

CUSTOMERSERVICE@CMEWEB.COM

**United States Postal Service
Statement of Ownership, Management, and Circulation**

1. Publication Title Alternative Therapies in Women's Health	2. Publication No. 1 5 2 2 - 3 3 9 6	3. Filing Date 10/1/07
4. Issue Frequency Monthly	5. Number of Issues Published Annually 12	6. Annual Subscription Price \$349.00
7. Complete Mailing Address of Known Office of Publication (<i>Not Printer</i>) (Street, city, county, state, and ZIP+4) 3525 Piedmont Road, Bldg. 6, Ste. 400, Atlanta, Fulton County, GA 30305		
8. Complete Mailing Address of Headquarters or General Business Office of Publisher (<i>Not Printer</i>) 3525 Piedmont Road, Bldg. 6, Ste. 400, Atlanta, GA 30305		

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (*Do Not Leave Blank*)

Publisher (Name and Complete Mailing Address)
Brenda Mooney, 3525 Piedmont Road, Bldg. 6, Ste. 400, Atlanta, GA 30305

Editor (Name and Complete Mailing Address)
Leslie Hamlin, same as above

Managing Editor (Name and Complete Mailing Address)
Lee Landenberger, same as above

10. Owner (*Do not leave blank*. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual. If the publication is published by a nonprofit organization, give its name and address.)

Full Name AHC Media LLC	Complete Mailing Address 3525 Piedmont Road, Bldg. 6, Ste 400 Atlanta, GA 30305

11. Known Bondholders, Mortgagors, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box None

Full Name Thompson Publishing Group Inc.	Complete Mailing Address 1725 K Street NW, Suite 700 Washington, D.C. 20006

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates.) (*Check one*)
The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes:
 Has Not Changed During Preceding 12 Months
 Has Changed During Preceding 12 Months (*Publisher must submit explanation of change with this statement*)

PS Form 3526, September 1998

See Instructions on Reverse)

13. Publication Name
Alternative Therapies in Women's Health

14. Issue Date for Circulation Data Below

September 2007

15. Extent and Nature of Circulation	Average No. of Copies Each Issue During Preceding 12 Months	Actual No. Copies of Single Issue Published Nearest to Filing Date
a. Total No. Copies (<i>Net Press Run</i>)	500	500
(1) Paid/Requested Outside-County Mail Subscriptions Stated on Form 3541. (Include advertiser's proof and exchange copies)	125	108
(2) Paid In-County Subscriptions (Include advertiser's proof and exchange copies)	1	1
b. Paid and/or Requested Circulation		
(3) Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Non-USPS Paid Distribution	10	12
(4) Other Classes Mailed Through the USPS	7	4
c. Total Paid and/or Requested Circulation (Sum of 15a(1) and 15a(2))	143	125
d. Free Distribution Outside the Mail		
(1) Outside-County as Stated on Form 3541	27	28
(Samples, Complimentary and Other Free)	1	1
(2) In-County as Stated on Form 3541	0	0
(3) Other Classes Mailed Through the USPS	32	20
e. Free Distribution Outside the Mail (Carriers or Other Means)	60	49
f. Total Free Distribution (Sum of 15d and 15e)	203	174
g. Total Distribution (Sum of 15c and 15f)	297	326
i. Total (Sum of 15g and h)	500	500
Percent Paid and/or Requested Circulation (15c divided by 15g times 100)	71%	72%
16. Publication of Statement of Ownership Publication required. Will be printed in the November 2007 issue of this publication.	□ Publication not required.	
17. Signature and Title of Editor, Publisher, Business Manager, or Owner <i>Brenda E. Mooney</i>	Date	9/27/07

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including multiple damages and civil penalties).

Instructions to Publishers

1. Complete and file one copy of this form with your postmaster annually on or before October 1. Keep a copy of the completed form for your records.
2. In cases where the stockholder or security holder is a trustee, include in items 10 and 11 the name of the person or corporation for whom the trustee is acting. Also include the names and addresses of individuals who are stockholders who own or hold 1 percent or more of the total amount of bonds, mortgages, or other securities being offered or sold.
3. Be sure to furnish all circulation information called for in item 15. Free circulation must be shown in items 15d, e, and f.
4. Item 15h, Copies not Distributed, must include (1) request-and-copy originally stated on Form 3541, and returned to the publisher, (2) estimated returns from news agents, and (3), copies for office use, leftovers, spoiled, and all other copies not distributed.
5. If the publication had Periodicals authorization as a general or requester publication, this Statement of Ownership, Management, and Circulation must be published; it must be printed in any issue in October or if the publication is not published during October, the first issue printed after October.
6. Item 16, indicate date of the issue in which this Statement of Ownership will be published.
7. Item 17, must be signed.

Failure to file or publish a statement of ownership may lead to suspension of second-class authorization.

PS Form 3526, September 1998 (Reverse)

CME Objectives

After reading *Alternative Therapies in Women's Health*, the health care professional will be able to:

1. evaluate alternative medicine and complementary therapies for women's health concerns;
2. identify risks and interactions associated with alternative therapies;
3. discuss alternative medicine options with patients;
4. offer guidance to patients based on latest science and clinical studies regarding alternative and complementary therapies.

CME Instructions

Physicians participate in this continuing medical education program by reading the article, using the provided references for further research, and studying the questions at the end of the article. Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this activity, you must complete the evaluation form provided and return it in the reply envelope provided at the end of the semester to receive a certificate of completion. Upon receipt of your evaluation, a certificate will be mailed.

CME Questions

38. Acupuncture substantially and consistently improves pregnancy outcomes with:

- proper point selection.
- proper timing.
- proper administration.
- All of the above

39. At 24 months, BMD, at the AP lumbar spine had:

- increased in genistein recipients.
- decreased in placebo recipients.
- decreased in genistein recipients.
- A and B
- B and C

40. Genistein, an isoflavone found in soybeans,:;

- binds to alpha receptor sites.
- binds to beta estrogen receptor sites.
- A and B
- None of the above

Answers: 38. (d); 39. (d); 40. (c)

Information-gathering ongoing for women with menopausal symptoms

A recent study shows that women who sought information on complementary and alternative medicine (CAM) options for managing menopausal symptoms did so on an ongoing basis.

Researchers in Calgary, Alberta, Canada, wanted to examine how menopausal women gather, evaluate, and use information on CAM options. The researchers used in-depth, semi-structured interviews to evaluate 22 women with a mean age of 52 years (ranging from 42 to 58 years), and then they interpreted the data with category coding and thematic analysis.

Four major themes emerged: how women gathered information, how they evaluated the information, how they used the information, and the challenges they experienced in making informed decisions. Information-gathering was an ongoing process, the researchers say. As women's symptoms changed, their information needs changed, too. The participants' preferred sources of information included physicians, CAM practitioners, staff at health food stores, and personal contacts.

The women, who were highly educated, sought information on the process of menopause, as well as about both CAM and conventional treatments. Most of them "systematically evaluated information from many sources using such criteria as whether information was biased, where the information came from, and whether the information was current. Information was used to validate their symptoms and to choose treatment based on cost-benefit analysis, risk-benefit analysis, and possible negative side effects or interactions between medications," the researchers say.

The women thought that finding reliable information was a challenge because of structural or information-related barriers. Some participants also cited a lack of time as a problem. They felt pressure to search for and evaluate information, but they also wanted rapid relief from the symptoms of menopause.

Women who are, or will, experience menopause need reliable information in an accessible format about the transition and the risks and benefits of CAM options, the researchers conclude. "As a trusted source, family physicians have a role in disseminating this information." For more information, see the January issue of *Canadian Family Physician*.

Texas midwives recommend CAM modalities to clients

All of Texas midwives recently surveyed indicated that they

had used, recommended, or referred their clients for at least one complementary and alternative medicine (CAM) therapy during the preceding year, according to the September/October issue of *The Journal of Midwifery & Women's Health*.

This cross-sectional survey sought to document CAM use by the midwives, as well as to determine whether licensed direct-entry midwives (LMs) and certified nurse-midwives (CNMs) differed significantly in their patterns of use. Ninety percent (90%) of the 69 respondents used, recommended, or referred their clients for an herbal remedy (not including homeopathic tinctures).

Herbal therapies were among the top three modalities recommended for seven of 12 (58%) clinical indications. Herbs were the most salient CAM therapy used for cervical ripening (83%), followed closely by use for nausea, vomiting, hyperemesis (80%), and labor induction (77%). Herbal therapies also constituted 50% or more of the CAM therapies used for the following indications: anemia/iron supplementation (70%), perineal healing (66%), and anxiety/stress/fatigue (50%).

LM respondents used, recommended, or referred their clients for a greater number of herbal therapies compared to CNMs. While several of the CAM modalities used or recommended by Texas midwives show potential for clinical benefit, the researchers concluded that few have been studied sufficiently to determine their efficacy or safety during pregnancy.

Meeting on status and future of acupuncture held in November

The Society for Acupuncture Research is holding its annual conference in Baltimore, MD, on Nov. 8-11. The title of this year's meeting is "The Status and Future of Acupuncture Research: 10 Years Post-NIH Consensus Conference."

The meeting is being held to review scientific progress in acupuncture research during the past decade and examine opportunities and challenges for future studies. In November 1997, a report by a consensus panel convened by the National Institutes of Health (NIH) concluded that there is clear evidence of acupuncture efficacy for postoperative- and chemotherapy-related nausea and vomiting, for nausea of pregnancy, and for postoperative dental pain, the society says. The NIH panel also cited other conditions for which acupuncture may be effective as a stand alone or an adjunct therapy, but for which there is less convincing scientific data. ♦

In Future Issues:

Medicinal Properties of Tea

Calcium and Vitamin D for Breast Cancer

Herbs and Urinary Tract Infections