Six-month depression relapse rates among women treated with acupuncture

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SUMMARY. Conventional treatments for Major Depression, although reasonably effective, leave many without lasting relief. Alternative approaches would therefore be welcome for both short- and long-term treatment of depression. Thirty-eight women were randomized to one of three treatment conditions in a double-blind randomized controlled trial of acupuncture in depression.1 All participants eventually received eight weeks of acupuncture treatment specifically for depression. From among the 33 women who completed treatment, 26 (79%) were interviewed at six-month follow-up. Relapse rates were comparable to those of established treatments, with four of the 17 women (24%) who achieved full remission at the conclusion of treatment experiencing a relapse six months later. Compared to other empirically validated treatments, acupuncture designed specifically to treat major depression produces results that are comparable in terms of rates of response and of relapse or recurrence. These results suggest a larger trial of acupuncture in the acute- and maintenance-phase treatment of depression is warranted. © 2002 Elsevier Science Ltd. All rights reserved.

INTRODUCTION
Depression frequently recurs, even among those successfully treated with pharmacotherapy, psychotherapy or combined treatments. Following acute treatment, naturalistic follow up across six to thirty six months reveal relapse and recurrence rates ranging from approximately 20%–80%.2,4 Even with continued treatment a substantial proportion (10%–34%) of treatment responders re-experience depression regardless of the type of treatment received.3,5–12 with larger rates of re-emergence (52%–70%) during long-term treatment for more severe depression.9,13 Cognitive and interpersonal therapies for depression may provide some benefit in maintaining treatment gains, but are not immune from the spectrum of relapse. Relapse rates with maintenance psychotherapies range from 17% with weekly visits over eight months to 60% with monthly visits over three years.7,11 These data highlight the recurrent nature of depression, even during the course of long-term treatment, and underscore the importance of developing alternative approaches for both short- and long-term treatment of depression. Several studies have suggested the promise of acupuncture in depression,14–16 and a small-scale randomized double blind trial1 found support for the efficacy of acupuncture specifically designed to treat depression, with response rates similar to established well-researched treatments. The longer-term prognosis of these acupuncture responders is unknown, and is the focus of the present report.

METHODS
Participants
As detailed in the acute phase report,7 38 women aged 18–45 were enrolled, all with a current, non-chronic, major depressive episode based on DSM-IV17 criteria. Exclusion criteria were:
1. any other current Axis I disorder
2. history of mania, hypomania, or psychosis

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3. substance abuse or dependence within the past four months
4. concurrent treatment
5. endocrine abnormalities, CNS lesions, or any medical disorder or treatment that could cause depressive symptoms
6. pregnancy
7. active and imminent suicidal potential.

Experimental procedures were approved by the university committee on human subjects research. During the acute phase, the severity of participants’ depression was rated using a modified 19-item version of the Hamilton Rating Scale for Depression (HRSD). During acute and follow-up phases, clinical status was assessed by blind clinical raters using the depression module of the Structured Clinical Interview for the DSM (SCID-P). Five women dropped out before completing the entire acute-phase treatment, leaving 33 women in the final sample for possible follow-up.

**Study design**

In the first eight-week acute treatment phase of the study, participants were randomly assigned to one of three groups: acupuncture specifically designed to address depressive symptoms (specific treatment), acupuncture for a condition other than depression (non-specific treatment), or wait list. All women eventually received eight-weeks of specific treatment. The non-specific treatment provided an active but hypothetically ineffective treatment for depression, controlling for expectation of treatment effects. With the intent of blinding treatment providers, the following strategies were employed:

1. An assessing acupuncturist devised for each participant a unique set of points that were individually tailored to address her signs and symptoms according to a manualized protocol.
2. Acupuncture treatment plans (specific and nonspecific alike) all involved active and credible constellations of points.
3. Treating acupuncturists did not assess participants to identify the full signs and symptoms of their presentation, and were therefore unlikely to determine whether points would address a given participant’s configuration.

It appeared that this design could be considered double-blind since neither provider nor participant expectations of effectiveness differed between specific and nonspecific treatments.

As reported previously, symptom reduction (mean ± s.d. on the 19-item HRSD) in the specific group (−11.7 ± 7.3) exceeded that of the nonspecific group (−2.9 ± 7.9), and there was a nonsignificant trend for symptom reduction in the specific group to exceed that of the waitlist group (−6.1 ± 10.9). Following eight weeks of treatment, participants in the non-specific treatment group and those in the wait list received eight weeks of specific treatment, whereas participants in the specific treatment group discontinued treatment. After completing specific treatment, 22 of the 33 women experienced full remission (defined below).

**Follow-up phase**

Participants were interviewed six months after completing specific treatment, using the depression module of the SCID. The interviewer inquired about the worst two-week period during the follow-up period to identify any recurrence or relapse that may have transpired. Data were available for 26 of the original 33 completers (79%). Five of the seven who did not participate in the follow-up phase were fully remitted at acute phase end; nonparticipants did not differ in terms of clinical status at the end of treatment from those who did participate (17/26 remitted at acute phase end; chi-square = 0.09, ns).

**RESULTS**

Full remission was defined as the absence of both core symptoms of depression (depressed mood, anhedonia) as determined by the SCID. Relapse was defined as once again meeting DSM-IV criteria for major depression. Among the 17 women who had achieved full remission after treatment, 4 (24%) had fully relapsed within six months. Remission status at study exit predicted clinical status at six months (X²(2) = 6.62; P = .04); whereas four of 17 (24%) participants in remission at the conclusion of treatment had a full depressive relapse during follow-up period, six of nine (67%) participants without full remission after treatment met criteria for major depressive episode at some point during the six-month follow-up period. Similarly, a one-way analysis of variance (ANOVA) indicated that symptom severity at study exit also predicted clinical status at six months (F[1,25] = 3.74, p [one-tailed] = .033). Participants depressed at follow-up had an average HRSD score (19 items) after treatment of 15.5 ± 10.1 (mean ± s.d.); participants not depressed at follow-up had HRSD of 9.3 ± 6.3 after treatment.

**DISCUSSION**

The results of the acute-phase study and the present follow-up study indicate that response rates and relapse rates with acupuncture are similar to those reported with other empirically
validated treatments, suggesting that a larger clinical trial of acupuncture for depression is warranted. These results suggest that acupuncture may be a promising alternative for those who reject traditional treatments, for those who do not show adequate response to traditional treatment, or for those for whom pharmacokinetics are a concern (e.g. the frail, elderly, pregnant women). Acupuncture may also hold promise as a cost-effective long-term maintenance treatment for depression, regardless of the initial treatment modality. These questions will remain for future studies to examine.

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