Chamomile May Reduce Anxiety, Depression

BY MIRIAM E. TUCKER

BALTIMORE — Chamomile extract therapy demonstrated both anxiolytic and antidepressive effects in a two-part randomized, controlled, blinded study of 57 patients with mild to moderate generalized anxiety disorder.

The initial study, published in 2009, is thought to be the first controlled clinical trial of oral chamomile (*Matricaria recutita*) extract for GAD. A substudy presented in a poster at the annual meeting of the Anxiety Disorders Association of America (ADAA) investigated the effect of chamomile on depressive symptoms in GAD patients who had comorbid depression, a history of depression, or no depression.

VITALS

Major Finding: At 8 weeks, the mean total HAM-A score for 28 patients given chamomile extract was 3.17 points lower than the score for 29 patients given placebo.

Data Source: A randomized, blinded, placebo-controlled clinical trial in 57 patients with mild to moderate generalized anxiety disorder, with and without depression.

Disclosures: The study was funded by the National Institute of Mental Health. The lead investigator and both presenters of the study have no relevant financial disclosures.

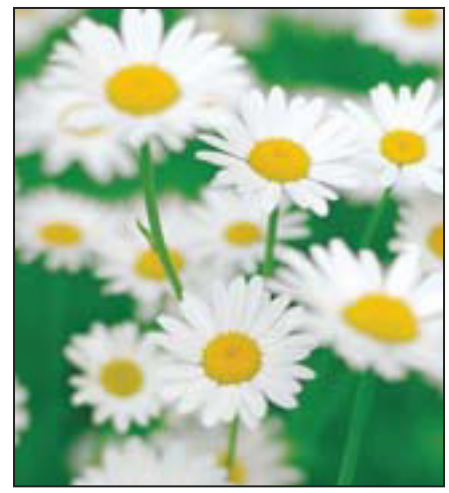
Since not all patients are willing or able to use psychopharmacologic treatment, "identification of a safe and effective herbal remedy for treating anxious and depressive symptoms would be of public health relevance," Matthew A. Shore and his associates said in their poster.

Chamomile has long been used as a traditional remedy for its calming effect, and has demonstrated pharmacologic activity in animal models of anxiety, said Mr. Shore and his associates of the University of Pennsylvania, Philadelphia.

The original study, led by Dr. Jay D. Amsterdam, was summarized by coauthor Irene Soeller, a nurse practitioner, at the ADAA meeting. The 57 GAD patients all had minimum baseline Hamilton Anxiety Rating (HAM-A) scores of 9 or more. Patients with other DSM-IV axis 1 disorders, such as minor depression, were not excluded as long as the comorbid condition was not the primary diagnosis. Those with major depressive disorder, bipolar disorder, or other serious psychiatric diagnoses were excluded (J. Clin. Psychopharmacol. 2009;29:378-82).

Twenty-eight of the patients were randomized to chamomile extract and 29 to placebo for 8 weeks. Identically appearing and smelling capsules contained either pharmaceutical-grade chamomile extract or placebo. Initial dose was one capsule (220 mg for the chamomile) daily for the first week, increasing to two capsules daily for week two. After that, patients with a 50% or less reduction in HAM-A scores at each week were increased to three capsules at week 3 and four at week 4, and then up to five capsules at weeks 5-8 if response was still less than 50%.

At 8 weeks, there was a significantly greater reduction in the mean total HAM-A score for chamomile versus placebo—the primary outcome—with a mean difference of 3.17 points between the two groups.



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Chamomile has been used for its calming effect in traditional medicine.

The study was not powered to detect statistically significant group differences in secondary outcome measures. However, there were clinically meaningful changes in the same direction as the primary measure, including a somewhat greater reduction in mean total Beck Anxiety Inventory (BAI) scores with chamomile (difference of 2.09 points), a somewhat greater increase in mean Psychological General Well-Being (PGWB) scores (6.33) and a somewhat greater reduction in the Clinical Global Impression-Severity score (0.43).

There was also a somewhat greater proportion of overall HAM-A responders to chamomile vs. placebo (57% vs. 38%), and the overall percentage change was numerically greater for chamomile than placebo on both the HAM-A (53% vs. 35%), the BAI (42% vs. 21%) and the PGWB (28% vs. 18%).

Two patients discontinued treatment because of adverse events. One had an allergic reaction to the placebo, and one had abdominal discomfort while taking chamomile. There were a total of 33 reported adverse events, 11 on chamomile and 22 on placebo. The proportions of patients reporting one, two, or three adverse events did not differ significantly, and there was actually a lower incidence of adverse event rates at higher chamomile doses, they said.

The follow-up study divided the 57 GAD patients into three groups: 19 with comorbid depression, 16 with a past history of depression, and 22 with no current or previous depression.

In all three groups combined, there was a significantly greater reduction over time in total Hamilton Depression Rating (HAM-D) 17 scores and in core HAM-D depression items (including depressed mood, guilt, and suicidal ideation) for chamomile versus placebo, with a *P* value of less than .05 on both measures.

Nonsignificant yet clinically meaningful reductions were seen with chamomile vs. placebo in HAM-D 17 score in the group with current comorbid depression ($P = .062$) and in core HAM-D depression items in the patients without current or past depression ($P = .06$).

No significant changes over time for chamomile vs. placebo were seen in core HAM-D anxiety items, including agitation, somatic anxiety, and psychic anxiety, Mr. Shore and his associates reported. ■

Moderate or Worse Depression Seen in Quarter of Interns

BY JANE ANDERSON

More than 25% of medical interns have depression during their internships, and depressed interns are more likely to make medical errors, according to the largest prospective study of depression during medical internship to date.

In addition, interns who commit frequent medical errors may be more likely to become depressed than their colleagues who commit fewer, Dr. Srijan Sen of the University of Michigan, Ann Arbor, and colleagues wrote (Arch. Gen. Psychiatry 2010;67[doi:10.1001/archgenpsychiatry.2010.41]).

"Depressive symptoms that are present before internship predicted reported errors during internship, indicating that depression results in increased medical errors," they said. "Controlling for the baseline level of depressive symptoms, a strong correlation between errors and depression persisted, indicating that errors may also cause depression and that the association between depression and reported medical errors is bidirectional."

The authors assessed 740 interns for depressive symptoms and genetic risk prior to internship and then for symptoms and potential stressors at 3-month intervals throughout their internships.

There was a dramatic increase—from less than 4% prior to internship to an average of more than 25% during the internship year, according to Dr. Sen and associates.

Most subjects who met the criteria for depression were moderately depressed, and few subjects met the standards for moderately severe or severe depression, the investigators noted.

Women, and interns of either gender with history of depression, neuroticism, and a difficult early family environment, were more likely to suffer from depression, they found.

The study was funded by grants from the Donaghue Foundation, the Department of Veterans Affairs, the American Foundation for Suicide Prevention, and the Substance Abuse and Mental Health Services Administration. Two study authors reported consulting arrangements with a variety of pharmaceutical manufacturers, and one of these reported he also is a cosponsor on pending patents related to new drugs for psychiatric disorders, including depression. ■

MY TAKE

System Needs to Build Resilience

This issue of depression among medical interns is not an individual problem, but a system one. If the 25% prevalence of depression among medical interns reported by Dr. Srijan Sen and colleagues is correct, there is something about our medical education system that is imbalanced. Medical training will always be stressful, which is why there needs to be a corresponding emphasis on building resilience and mental stability in the face of that distress.

One way to build resilience is to help physicians develop mindfulness skills. These skills fall into two categories. The first set emphasizes the development of self-awareness, so that the individual learns to be more attuned to the early stages of stress and so can attenuate the effects of that stress before it gets out of hand.

The second set of skills focuses on interpersonal mindfulness, that is, one's ability to read others, sense when they are in stress or reacting during the heat of the moment. This interpersonal mindfulness is at the heart of being able to be supportive.

In a before-after study, our mindful practice research group at the University of Rochester demonstrated that an intervention aimed at strengthening that sense of mindfulness among 70 primary care physicians successfully produced sustained improvements in well-being (JAMA 2009;302:1284-93).

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