Chamomile Reduces Mild Generalized Anxiety

BY MIRIAM E. TUCKER

BALTIMORE — Chamomile extract therapy showed 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.

Because not all patients can use psychopharmacologic treatment, "the 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 shown pharmacologic activity in animal models of anxiety. Its anxiolytic and antidepressive properties may relate to modulation of central noradrenalin, dopamine, and serotonin, and gamma-aminobutyric acid neurotransmission and hypothalamic-pituitary-adrenocortical axis activity, 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, in a session on alternative/complementary medicine at the ADAA meeting. The 57 GAD patients all had minimum baseline Hamilton Anxiety (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).

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 Center for Complementary and Alternative Medicine. The lead investigator and both presenters of the study have no relevant financial disclosures. Dr. Amsterdam has received grant support from Stanley Medical Research Institute, Lilly Research Laboratories, Sanofi-Aventis, and Novartis.

A total of 28 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 2. 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—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 vs. placebo—the primary outcome—with a mean difference of 3.17 points between the two groups.

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 greater reduction in mean total Beck Anxiety Inventory (BAI) scores with chamomile (difference of 2.09 points), a greater increase in mean Psychological General Well-Being (PGWB) scores (6.33), and a greater reduction in the Clinical Global Impressions–Severity of Illness score (0.43).

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Chamomile may provide relief for anxiety and depression.

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 the HAM-A (53% vs. 35%), the BAI (42% vs. 21%), and the PGWB (28% vs. 18%).

There was a somewhat greater reduction over time in resting pulse rate with chamomile, but no difference in resting systolic or diastolic blood pressure or weight, Dr. Amsterdam, Ms. Soeller, and their associates reported.

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 (HAM-D) 17 scores and in core HAM-D depression items (including depressed mood, guilt, and suicidal ideation) for chamomile vs. 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.

As a next step, a 36-week study is planned to see whether chamomile extract therapy can prolong the time before relapse of anxiety symptoms among 180 patients who have recovered from GAD, Ms. Soeller said in an interview. ■

Marijuana Use at Young Age Linked to Risk of Psychosis

BY MARY ANN MOON

The use of cannabis at a younger age is associated with psychosis symptoms in early adulthood, according to an Australian study.

This is the first study to show the association in a subgroup of sibling pairs, "reducing the likelihood that the association was due to unmeasured shared genetic and/or environmental influences," said Dr. John McGrath of the Queensland Brain Institute, Wacol, Australia, and his colleagues. The study also demonstrated a dose-response relationship between younger age at first use and higher risk of psychosis-related outcomes, they noted.

The researchers examined the link using data from a birth cohort of more than 7,000 mother-infant pairs who were first studied in 1981-1984 and followed 5, 14, and 21 years later.

The study comprised 3,801 of these infants and their close-in-age siblings. The latest follow-up occurred when they were aged 18-23 years. At that time, about 18% of the subjects said they had been using marijuana for 3 or fewer years, 16% said they had been using it for 4-5 years, and 14% said they had been using it for 6 or more years.

VITALS

Major Finding: A dose-response relationship was seen between younger onset age of cannabis use and greater risk of psychosis-related outcomes in sibling pairs.

Data Source: Prospective, sibling pair analysis of 3,081 adults born between 1981 and 1984.

Disclosures: None of the investigators had any financial conflicts of interest to report.

At final follow-up, 65 of these subjects had received diagnoses of nonaffective psychosis because they met the criteria for schizophrenia (53 subjects), persistent delusional disorder (3), or acute transient psychotic disorders (9). Another 233 subjects reported at least one visual or auditory hallucination.

Only subjects with the longest duration since first cannabis use (those who started using marijuana at age 15 years or younger) were at significantly increased risk for developing symptoms of nonaffective psychosis in young adulthood. Those who started using marijuana at that age were twice as likely to receive such a diagnosis than were subjects who said they had never used marijuana, the researchers said (Arch. Gen. Psychiatry 2010 March 1 [doi:10.1001/archgenpsychiatry.2010.6]).

Compared with subjects who did not use cannabis, those who used it at a younger age were 4 times more likely to score in the top quartile on the 21-item Peters et al. Delusional Inventory (PDI) and to report hallucinations on the CIDI.

Moreover, the longer the interval since first cannabis use, the higher the risk of these adverse psychosis-related outcomes. In a subsample of 218 sibling pairs, there was a significant association between earlier first use of cannabis and higher scores on the PDI. For every additional year since first exposure to marijuana, the sibling with the younger age at first use scored one item higher than the other sibling, the researchers said.

This study was not designed to determine causality. ■

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Those who began marijuana use at age 15 or younger had double the risk of psychosis.