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Curcumin for the treatment of major depression: A randomised, double-blind, placebo controlled study.

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Abstract

BACKGROUND:

Curcumin, the principal curcuminoid derived from the spice turmeric, influences several biological mechanisms associated with major depression, namely those associated with monoaminergic activity, immune-inflammatory and oxidative and nitrosative stress pathways, hypothalamus-pituitary-adrenal (HPA) axis activity and neuroprogression. We hypothesised that curcumin would be effective for the treatment of depressive symptoms in individuals with major depressive disorder.

METHODS:

In a randomised, double-blind, placebo-controlled study, 56 individuals with major depressive disorder were treated with curcumin (500mg twice daily) or placebo for 8 weeks. The primary measure was the Inventory of Depressive Symptomatology self-rated version (IDS-SR30). Secondary outcomes included IDS-SR30 factor scores and the Spielberger State-Trait Anxiety Inventory (STAI).

RESULTS:

From baseline to week 4, both curcumin and placebo were associated with improvements in IDS-SR30 total score and most secondary outcome measures. From weeks 4 to 8, curcumin was significantly more effective than placebo in improving several mood-related symptoms, demonstrated by a significant group x time interaction for IDS-SR30 total score ($F_{1, 53}=4.22$, $p=.045$) and IDS-SR30 mood score ($F_{1, 53}=6.51$, $p=.014$), and a non-significant trend for STAI trait score ($F_{1, 48}=2.86$, $p=.097$). Greater efficacy from curcumin treatment was identified in a subgroup of individuals with atypical depression.

CONCLUSIONS:

Partial support is provided for the antidepressant effects of curcumin in people with major depressive disorder, evidenced by benefits occurring 4 to 8 weeks after treatment.

LIMITATIONS:

Investigations with larger sample sizes, over extended treatment periods, and with varying curcumin dosages are required.