Curcumin: New Use for an Old Spice?

By James Phelps, MD
Accumulating evidence implicates inflammation as a critical mediator in the pathophysiology of mood disorders.\textsuperscript{1,2}

Recent reviews have cautioned against overenthusiasm,\textsuperscript{3} but if a simple, inexpensive, and extremely low-risk anti-inflammatory was at hand, many would be tempted to use it without waiting for further evidence of efficacy.
You may have had patients who asked about curcumin and turmeric already. What is known about curcumin for use in psychiatric disorders, particularly bipolar depression?
Curcumin is a compound found within the spice turmeric, which is made by grinding the root of the turmeric plant. The root itself, which is golden, contributes to the color and flavor of delicious Indian curry dishes.

Ground turmeric has been used as an anti-inflammatory in Ayurvedic and Chinese medicine for centuries. Western clinical research has largely but not entirely supported the value of curcumin for inflammatory conditions, particularly arthritis.
Mechanisms of action of curcumin do fall in line with research on the pathways of mood disorders. It decreases levels of inflammatory cytokines interleukin 1β and tumor necrosis factor α, increases plasma brain-derived neurotrophic factor levels, and decreases salivary cortisol concentrations compared with placebo.⁶
But to support using it for our patients, we’d want to see randomized trial data. A masterful review by Andrade in 2014 found clinical trial data insufficient to justify regular use. But in the following 2 years, more data have accumulated, including a recent randomized trial by Lopresti and colleagues.
In this new trial, both depression and anxiety scores were reduced by curcumin extracts, relative to placebo. As in previous trials, the effect on anxiety was greater than the effect on depression.

The research team is still investigating dosages, but in this study both a low-dose and a high-dose preparation showed efficacy in patients with depression.
WHAT ABOUT BIPOLAR DEPRESSION?

Interestingly, in this study, greater efficacy was found in patients with atypical depression, which you will recall is a weak bipolar marker. Otherwise, once again, use in bipolar depression is an extrapolation from (very limited) research in major depression.
Turmeric extracts are not entirely without risk. They can aggravate cholelithiasis. Because they have an inherent anticoagulant effect, the extracts should be discontinued before elective surgeries, and monitoring is necessary if they are used with anticoagulants. They can lower blood glucose levels, so caution is warranted in patients with diabetes who are taking hypoglycemic agents. Thus, consider a patient’s concurrent medical conditions and medications before suggesting turmeric extracts.
Used alone, very little curcumin is systemically absorbed; however, simple table pepper, or the extract piperine, dramatically increases GI absorption of curcumin.¹⁰

But as with many dietary supplements, commercially available turmeric extracts differ widely in exactly how much curcumin they deliver. Some integrate piperine (in the form of bioperine), but most do not.

Thus, many patients who set out to take curcumin, from turmeric, will be taking a placebo. They would do as well to make a good pot of curry!
Practitioners who advocate the use of turmeric extracts should monitor their patients’ medical conditions and medications, and suggest specific commercial products that they have investigated.
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REFERENCES


