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Enhancing SSRI Treatment Outcomes: Curcumin as an Adjunct to Fluoxetine for Major Depressive Disorder

CONFERENCE ABSTRACT

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Abstract

Major Depressive Disorder (MDD) is a multifaceted psychiatric condition linked to neurochemical discrepancies and biological elements such as persistent inflammation and diminished neuroplasticity (Miller & Raison, 2016). MDD is often managed with selective serotonin reuptake inhibitors (SSRIs) like fluoxetine; nonetheless, delayed effects and incomplete responses continue to be notable challenges for patients, and a considerable number of MDD patients do not attain complete remission (Rush et al., 2006). This research investigated curcumin, a natural substance derived from turmeric, as a supplementary treatment to enhance fluoxetine treatment results by utilizing complementary mechanisms. Curcumin shows anti-inflammatory and neuroprotective properties that could improve the effectiveness of antidepressants like SSRIs. The suggested approach entails merging curcumin with fluoxetine to enhance the effectiveness of antidepressants. Merging curcumin with fluoxetine might enhance treatment results by addressing both serotonin signaling and inflammation. Fluoxetine boosts serotonin levels by blocking the serotonin transporter, whereas curcumin

decreases inflammation and promotes neuroplasticity by elevating BDNF expression. This combination affects several biological pathways related to depression, and could enhance MDD treatment response when compared to SSRI therapy alone.

Keywords: Major Depressive Disorder, selective serotonin reuptake inhibitors, neuroplasticity

References

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