Ayahuasca aka the vine of the soul as a potential new treatment for depression

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Introduction: Ayahuasca, a plant mixture from the Amazon rainforest, has been used by indigenous peoples for thousands of years. The brew is prepared by boiling a mixture of two or more plants for hours until only a concentrated liquid remains. The plants used most often are Banisteriopsis caapi, which contains β-carboline alkaloids with monoamine oxidase inhibitor (MAOI) properties, and Psychotria viridis, which contains the serotonin agonist N,N-dimethyltryptamine (DMT). In indigenous cultures, this medicine is utilized to facilitate healing, prophesy, and divination. More recently, the use of ayahuasca has spread to non-indigenous cultures, where it has been reported to produce rapid improvement in depression after only a single dose. We review the literature on the use of ayahuasca as a treatment for depression, examining the potential risks and benefits of this medicine, as well as potential mechanisms of action.

Methodology: We conducted a PubMed literature search using the search terms “ayahuasca” and “depression.” The final studies selected for inclusion consisted of articles that examined the effects of ayahuasca on depression.

Findings: HAM-D (Hamilton Depression Scale) and MADRS (Montgomery-Asberg Depression Rating Scale) scores decrease rapidly following a single dose of ayahuasca, and remain decreased for up to 21 days. Scores are reduced by as much as 82%. Prior reviews have found ayahuasca is well tolerated, increases introspection and positive mood, activates frontal and paralimbic regions, and decreases default mode network activity. Long-term ayahuasca use is associated with increased cortical thickness in the anterior cingulate gyrus and thinning of the posterior cingulate cortex.

Conclusions: Ayahuasca exhibits rapid antidepressant effects. Potential mechanisms of action include: biochemical, physiological, psychological, and transcendent pathways. Other potential uses of ayahuasca in the treatment of psychiatric disorders are discussed. Further research is recommended to investigate the potential benefits and risks of ayahuasca as a treatment for psychiatric disorders.

Recent Publications:

Biography
Maya is a student at Palmer Ridge High School in Monument, Colorado in the USA. She is a percussionist in her school’s Wind Ensemble and plays center field for her school’s softball team. She will attend university after graduating from high school in 2019 and plans to pursue a career in medicine. She is co-author of the article: “A Review of Psychiatric Disorders Associated with Celiac Disease,” which was published in 2017, and is the lead author on a current investigation entitled: “Potential Effects of Drought on Celiac Disease.”.