

Information paper on Mefloquine and Suicide
Megan Dwyer M.S. and Jetta Hanson M.A. for the
Military Suicide Research Consortium
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Statement of the Problem

Is there relevant literature linking the side effect of the drug mefloquine, used to prevent and treat malaria, to suicide and suicide attempts?

Summary of the relevant literature

Mefloquine is a synthetic variation of quinolone, introduced in the late 1970s for the prevention and treatment of malaria. Beginning as early as the 1980's, reports have been published linking a wide range of adverse cardiovascular, gastrointestinal, and neuropsychiatric effects to the drug (Mawson, 2013; Toovey 2009). Of particular concern are reports of an association between mefloquine use and nausea, dizziness, sleep disturbances, anxiety and depression, cognitive disturbances and, more worryingly, psychosis and violence (Van Riemsdijk et. al, 2002; Potasman, Beny, & Seligmann, 2000; Mawson, 2013; Rønn, et. al., 1998). In the FDA's Medication Guide for mefloquine (Lariam®) neuropsychiatric effects are noted. In more severe cases suicidal ideation and behavior has also been reported. The FDA also reports that individual who have taken mefloquine have died by suicide but it is unknown if mefloquine was responsible.

In September of 2009 the Office of the Assistant Secretary of Defense issued a memorandum regulating the use of mefloquine in certain patient populations. Patients with a history of TBI or PTSD, aircrew members, and divers should use mefloquine with caution and use alternative treatments if possible. The memo stated that although mefloquine has been successfully used in the past to protect against malaria, there had been reports of negative psychiatric symptoms associated with its use. According to the DoD memorandum these symptoms have included anxiety, paranoia, hallucinations, and in rare cases suicidal ideation. Suicide has been reported, though no relationship to drug administration has been confirmed.

Gaps in the literature

While there is limited support for a direct link to suicide there are documented links to adverse events relating to mental health. In July of 2013 the FDA added a black box warning to the Lariam® label, the most serious kind of warning, detailing these potential problems. Due to these adverse neuropsychiatric effects further research is not recommended.

References

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