



HEALTH AFFAIRS

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

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MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (M&RA)
ASSISTANT SECRETARY OF THE NAVY (M&RA)
ASSISTANT SECRETARY OF THE AIR FORCE (M&RA)
DIRECTOR OF THE JOINT STAFF

SUBJECT: Policy Memorandum on the Use of Mefloquine (Lariam[®]) in Malaria
Prophylaxis

- References:
- (a) Memorandum, MCPO-NCR, November 20, 2003, Subject: Additional Patient Information to Accompany Each Prescription of Mefloquine (Lariam[®]).
 - (b) Mefloquine (Lariam[®]) package insert <http://www.rocneusa.com/products/lariam/pi.pdf>
 - (c) Mefloquine (Lariam[®]) medication guide http://rocneusa.com/products/lariam/lariam_medguide.pdf
 - (d) DoD Medical Material Quality Control (MMQC) Message October 31, 2008, Subject: MMQC-08-1525, Mefloquine (Lariam[®])/Important Drug Information
 - (e) DoD Medical Material Quality Control Message 161253SEO02, Subject: MMQC-02-1302, Important Label Changes/Lariam (Mefloquine Hydrochloride)/Update Information Bulletin.
 - (f) MOD Nine to USCENCOM Individual Protection and Individual Unit Deployment Policy.
 - (g) Memorandum CJTF-76-SURG, July 3, 2004, Subject: Malaria Chemoprophylaxis Program for U.S. Forces, CJTF-76.
 - (h) Memorandum FICI-SURG, December 28, 2004, MNC-I Policy on Malaria Prevention.

This policy establishes requirements for the use of mefloquine in malaria prophylaxis throughout the Department of Defense and applies to all health care providers and personnel. Mefloquine use has been associated with severe neurobehavioral disorders, and when used for prophylaxis, mefloquine may cause psychiatric symptoms. In many areas of the world where chloroquine-resistant malaria is found, doxycycline, 100 milligram per day or mefloquine (Lariam[®]) 250 milligram per week provides safe and effective prophylaxis against susceptible strains of malaria. The Centers for Disease Control and Prevention (CDC), the World Health Organization and command guidelines should be followed in determining the best prophylactic agent against malaria.

In chloroquine-resistant areas in which doxycycline and mefloquine are equally efficacious in preventing malaria, doxycycline is the drug of choice for malarial prophylaxis in personnel with a history of neurobehavioral disorder(s). Those personnel with a history of neurobehavioral disorder(s) who cannot take doxycycline should be prescribed Malarone® for travel to chloroquine-resistant areas. In personnel with a history of neurobehavioral disorder(s) who cannot take either doxycycline or Malarone®, but must travel to chloroquine-resistant malarious areas, mefloquine should be used very cautiously and with adequate clinical follow-up.

Mefloquine should only be used for personnel with contraindications to doxycycline and who do not have any contraindications to the use of mefloquine.

- Mefloquine should be used cautiously in patients with history of TBI or PTSD.
- Mefloquine is not approved for aircrew members and cannot be waived.
- Mefloquine should be used with caution in divers.
- Malarone® is the treatment of choice for those personnel who cannot take doxycycline or mefloquine.

Mefloquine has been used successfully to protect thousands of individuals against malaria. It is well tolerated by most people and has been a preferred alternative to doxycycline because it has the advantage of a weekly dosing regimen. However, mefloquine usage has been associated with the following:

Mefloquine may cause psychiatric symptoms in a number of patients, ranging from anxiety, paranoia, and depression to hallucinations and psychotic behavior. On occasions, these symptoms have been reported to continue long after mefloquine has been stopped. Rare cases of suicidal ideation and suicide have been reported though no relationship to drug administration has been confirmed. To minimize the chances of these adverse events, mefloquine should not be taken for prophylaxis in patients with active depression or with a recent history of depression, generalized anxiety disorder, psychosis, or schizophrenia or other major psychiatric disorders. Mefloquine should be used with caution in patients with a previous history of depression. During prophylactic use, if psychiatric symptoms such as acute anxiety, depression, restlessness or confusion occur, these may be considered prodromal to a more serious event. In these cases, the drug must be discontinued and an alternative medication should

be substituted. Concomitant administration of mefloquine and quinine or quinidine may produce electrocardiographic abnormalities. Concomitant administration of mefloquine and quinine or chloroquine may increase the risk of convulsions.

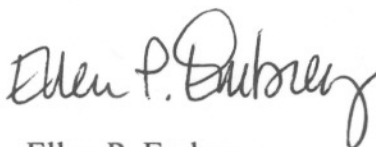
Providers should ask patients to identify all medications they are taking including prescriptions and non-prescription medicines, vitamins, and herbal supplements. Some medications may give patients a higher chance of having serious side effects from mefloquine.

It is critically important that all DoD health care providers be familiar with the proper use, contraindications, warnings, and precautions for prescribing mefloquine, especially with respect neurobehavioral effects.

- Providers must refer to the package insert for complete prescribing information and the full clinical profile of this medication.
- Patients should be advised that if they experience psychiatric symptoms such as excessive acute anxiety, depression, restlessness, or confusion, these may be considered prodromal to a more serious event related to mefloquine and should contact their provider immediately. In these cases, the drug must be discontinued and an alternative medication substituted.
- Female personnel of child-bearing potential should be counseled on the need for birth control while taking mefloquine and for 3 months afterwards due to potential adverse effects on the developing fetus. While clinical experience with mefloquine has not revealed any adverse human fetal effects, there is a theoretical risk, and mefloquine should be used in pregnancy only when the potential benefit outweighs the potential risk to the fetus.
- Doxycycline is not indicated for use during pregnancy.
- Doxycycline is poorly tolerated in some individuals and daily dosing may lead to noncompliance. Additional studies are needed to investigate alternatives to doxycycline, which would be better tolerated and have a longer half-life allowing weekly instead of daily dosing

- As required by law, a mefloquine medication guide (reference c) must be supplied to patients each time mefloquine is dispensed. The guide provides important information that patients should know about the drug. It contains a wallet card, which addresses the need to take the medication and provides information on serious side effects and what to do if they develop.

The point of contact for this policy memorandum is Colonel John Kugler, Deputy Chief Medical Officer, TRICARE Management Activity. He may be reached at (703) 681-0064 or at John.Kugler@tma.osd.mil.



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cc: Surgeon General of the Army
Surgeon General of the Navy
Surgeon General of the Air Force
Joint Staff Surgeon
Commander, Joint Task Force National Capitol Region Medical