How safe and effective is amodiaquine compared to chloroquine or sulfadoxine-pyrimethamine for treating uncomplicated malaria?

The evidence supports the continued use of amodiaquine to treat uncomplicated malaria, although local drug resistance patterns need to be considered. Monitoring for adverse events should continue.

Inclusion criteria

Types of studies: Randomized and quasi-randomized controlled trials conducted during and after 1980.

Types of participants: Individuals with uncomplicated falciparum malaria infection.


Types of outcome measures: Primary: Parasitological conversion at day 7, 14, or 28. Secondary: Time to sustained parasite clearance.

Adverse events that are Fatal, life threatening, or require hospitalization; or result in the discontinuation of treatment.

Results

• 56 studies included, mostly from Africa. Allocation was adequately concealed in three trials.

• In comparisons with chloroquine, amodiaquine was associated with higher cure on day 14 (Peto OR 6.44; 95% CI 5.09 to 8.15); and day 28 (Peto OR 3.62; 95% CI 2.49 to 5.29).

• No difference was shown between amodiaquine and sulfadoxine-pyrimethamine on day 14 (0.86; 95% CI 0.64 to 1.14). Cure was higher with sulfadoxine-pyrimethamine on day 28 (Peto OR 0.41; 95% CI 0.28 to 0.61).

• The time to parasite clearance was significantly shorter for amodiaquine than chloroquine but not different for amodiaquine and sulfadoxine-pyrimethamine.

• No difference in adverse events was seen between amodiaquine and chloroquine and between amodiaquine and sulfadoxine-pyrimethamine.


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Reviewer's conclusions

Implications for practice:
This review has collected convincing evidence of amodiaquine superiority over chloroquine, even in areas with considerable chloroquine resistance. This review has not identified a problem with adverse events.

Implications for research:
The review supports the continued use of amodiaquine in the treatment of uncomplicated malaria.