

Newer antimalarials more effective than quinine against severe malaria

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Quinine should no longer be the drug of choice for treating severe malaria, according to an updated systematic review by Cochrane researchers. It is now evident that the antimalarial drug artesunate, which is derived from herbs used in Chinese medicine, is more effective at preventing death in patients with severe malaria.

Severe malaria occurs when the disease affects the function of vital organs. It is associated with rarer [cerebral malaria](#), which affects the [brain](#) and can lead to long-term disability. More than a million people die each year from severe malaria, the majority in Sub-Saharan Africa. Artesunate was recommended as the preferred treatment for adults with severe malaria by the [World Health Organization](#) (WHO) in 2006, but there was insufficient evidence at the time to recommend a change from the standard treatment of quinine in children.

The researchers updated the review of artesunate by adding a new large multicentre trial of African children published in the [Lancet](#) in 2010 to the existing 8 trials. The review now includes a total of 1664 adults and 5765 children, from a variety of settings across Africa and Asia. According to the results, taking artesunate reduces the risk of death by 39% in adults and 24% in children compared to quinine. In adults, deaths caused by severe malaria were reduced from 241 per 1000 with quinine to 147 with artesunate. In children, deaths were reduced from 108 per 1000 with quinine to 83 with artesunate.

"There is now enough evidence to be confident of these results in adults

and children," said Peter Olumese of the WHO's Global Malaria Programme. "Intravenous artesunate is now being recommended as the treatment of choice for adults and children with severe [malaria](#) anywhere in the world."

Although more children given artesunate suffered [neurological problems](#) compared to those given quinine, these were largely resolved within a month of treatment, and were outweighed by the increase in survival rates. "The balance of benefits and harms is in favour of treatment with artesunate," said David Sinclair of the Liverpool School of Tropical Medicine in Liverpool, UK, who led the review team.

Provided by Wiley

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