

A critical enquiry on the safety and efficacy of Artemisinin-based Combination Therapy (ACT) in the treatment of Malaria in pregnancy.

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Background:

Malaria in pregnancy is known to increase the risks of maternal anaemia, stillbirths, miscarriage, low birth weight and infant mortality. Thus, it is crucial that a safe and effective treatment is implemented for successful case management.

Pregnant women are usually excluded from clinical trials, consequently it is difficult to decide which effective treatment regimens they can be exposed to safely.

Review aim:

The aim of this review is to determine the safety and efficacy of ACT for treatment of Malaria in pregnancy.

Method & results:

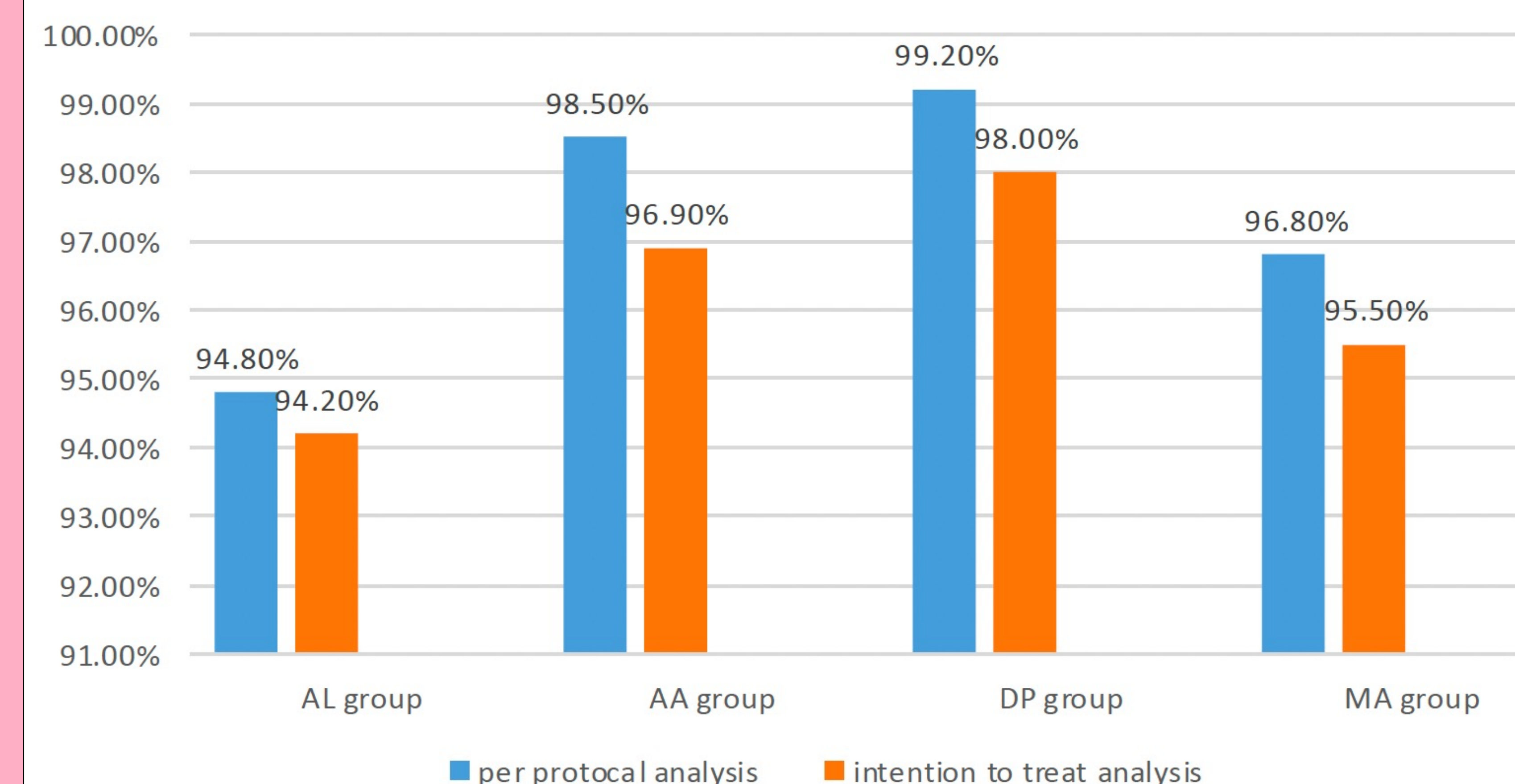
16 studies are analysed and interpreted with the most recent trial published in 2017. The studies included trials, observational studies, systematic reviews and meta-analyses using PubMed and Science direct.

The most effective drug analysed was dihydroartemisinin-piperaquine (DP) with a PCR-adjusted cure rate of 99.2%.

However, few studies noted low concentrations of the drugs in the body which implies a change in dosage is required. Apart from two studies, the results all displayed a cure rate greater than the WHO recommended rate of 90%.

In addition, treatment with ACT was not associated with an increased risk of congenital abnormalities, miscarriage or stillbirths compared to quinine treatment.

PCR-adjusted cure rates



Conclusion:

The results displaying the efficacy and safety of ACTs are promising. However, limitations of the findings include heterogeneous study designs, observer bias and attrition bias, effects of confounders in the observational studies conducted and small sample sizes in the trials.

Therefore, larger randomised control trials are needed and further pharmacokinetic studies conducted to calculate the effective dosage to administer to pregnant women.

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