



## Methyldopa has moderate efficacy in primary hypertension

Clinical question	How effective is methyldopa in primary hypertension?
Bottom line	Based on the limited number of published randomised controlled trials, the blood pressure (BP) lowering effect of methyldopa, given at doses of 500Đ2250mg daily, was moderate (-18/-18mmHg), compared with placebo. The most commonly studied daily dose of methyldopa was 750mg daily. Most studies followed patients for 4 to 6 weeks of therapy. Overall, reporting of adverse effects was poor, so no conclusions can be drawn about the adverse effect profile. Despite this, clinicians must weigh the risks of potential serious side effects with use of methyldopa that include haemolytic anaemia, hepatotoxicity and lupus-like syndrome, against the benefits of BP reduction, with no proven beneficial effect on adverse cardiovascular outcomes. None of the studies reported on mortality or morbidity outcomes.
Caveat	Overall, the quality of evidence was compromised, secondary to the unclear nature of random sequence generation and allocation concealment procedures of almost all trials. Moreover, many of the trials did not report complete outcomes data (all cause mortality, cardiovascular mortality, non-cardiovascular mortality, serious adverse events, fatal and non-fatal myocardial infarction, and fatal and non-fatal stroke) for all randomised patients. Thus, the estimation of the true effect of methyldopa on outcomes, such as BP effects, is likely an overestimate.
Context	Methyldopa is a centrally acting antihypertensive agent, which was commonly used in the 1970s and 1980s for BP control. It has largely been replaced by antihypertensive drug classes with fewer side effects, but it is still used in developing countries due to its low cost.
Cochrane Systematic Review	Mah GT et al. Methyldopa for primary hypertension. Cochrane Reviews 2009, Issue 4. Article No. CD003893. DOI: 10.1002/14651858.CD003893.pub3. This review contains 12 studies involving 595 participants.
PEARLS No. 229, February 2010, written by Brian R McAvoy	

## [References]

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