Treatment for mild hypertension is ineffective

**Bottom Line:**
Dogma dashed? The treatment of mild hypertension (defined as 140–159/90–99mmHg) in patients without cardiovascular disease does not decrease mortality, coronary heart disease, stroke or total cardiovascular events. We can stop worrying about patients who have these mildly elevated numbers without symptoms or signs of heart disease. (LOE = 1a)

**Reference:**

**Study Design:** Meta-analysis (randomised controlled trials)
**Funding:** Self-funded or unfunded
**Setting:** Various (meta-analysis)
**Allocation:** Unknown

**Synopsis:**
This Cochrane Review was conducted in, well, the usual Cochrane Review manner, which assures good search, review and data-analysis techniques. The process does not control all decisions regarding study inclusion, though it requires authors to explain how they selected and used data.

In this analysis, the authors selected studies evaluating active treatment of mild hypertension (defined as systolic blood pressure 140–159mmHg, diastolic blood pressure 90–99mmHg, or both) compared with placebo, in patients without overt cardiovascular disease. The authors excluded three big studies that did not include a placebo group and excluded three more for which they were unable to obtain the primary data to tease out patients with mild hypertension from other patients.

The final analysis included four studies with a total of 8912 participants. Most of the patients were from a single study (the Medical Research Council Study of mild hypertension), which treated half the patients with a diuretic and half with a beta-blocker. Risk of bias was high for most of the studies, which makes any difference between treatment and placebo suspect — but there wasn’t any difference.

Treatment for four to five years did not reduce total mortality, coronary heart disease, stroke or total cardiovascular events. The problem? It’s a good one to have: low rates of death, heart disease or stroke in untreated patients, making it hard to show further benefit of diuresing or beta-blocking. The glass half-full crowd will point out a nonsignificant decrease in stroke (relative risk – RR = 0.51; 95% CI, 0.24–1.08) and mortality (RR = 0.85; 0.63–1.15); the glass-half-empty response is to point out a nonsignificant increase in heart disease (RR = 1.12; 0.8–1.57).

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