Intensive blood pressure lowering treatment may harm people with diabetes
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In the study, published in the *BMJ (British Medical Journal)*, researchers Mattias Brunström and Bo Carlberg from Umeå University, have carried out a systematic review and meta-analyses of the medical literature. By analysing all published studies, together with a number of unpublished patient data, the researchers have been able to investigate the effects of blood pressure-lowering drugs in diabetes patients.

The study shows that the effects of antihypertensive treatment depend on the blood pressure level of the patient before treatment. If the systolic blood pressure before treatment was higher than 140 mm Hg, treatment was associated with a decreased risk of death, stroke, heart attack and heart failure. If the systolic blood pressure before treatment was less than 140 mm Hg, however, the risk of cardiovascular death increased. The results are nearly exclusively based upon data from patients with type 2 diabetes and previous antihypertensive treatment. Therefore, no conclusions can be made on patients with type 1 diabetes or patients with diabetes and normal blood pressure levels.

"In practice, it is important to remember that undertreatment of high blood pressure is a bigger problem than overtreatment," emphasises Mattias Brunström.

"Many treatment guidelines, both Swedish and international, will be redrawn in the next few years. It has been discussed to recommend even lower blood pressure levels for people with diabetes - maybe as low as 130. We are hoping that our study, which shows potential risks of such aggressive blood pressure lowering treatment, will come to influence these guidelines."

About the study:

In a comprehensive study, Mattias Brunström and Bo Carlberg analysed all randomised controlled
trials that compared any antihypertensive agents against placebo. Apart from published studies, they also managed to collect a large amount of previously unpublished data. The results were compiled in separate meta-analyses depending on what blood pressure patients had at the start of each respective study.

More information: British Medical Journal, http://dx.doi.org/10.1136/bmj.i717

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