

Blood pressure control should be a key target for people with Lupus



Target blood pressure should be under 130/80 mmHg for all patients with Lupus.

INTRODUCTION

Systemic lupus erythematosus (often called Lupus or SLE) is an autoimmune disease. It typically starts in women between the ages of 15 and 45. Lupus symptoms can vary from patient to patient. People with Lupus are often very tired, have joint pain, and their skin may be sensitive to sunlight. Lupus is caused by hyperactive immune cells and the production of autoantibodies. An antibody is a protein that the immune system makes to attack foreign substances in the body, such as viruses or bacteria. In autoimmune diseases, the body makes antibodies that attack its own tissues. These are called autoantibodies. People with Lupus can also have heart and vascular problems earlier in life than people without the disease, and high blood pressure is common.

In 2017, the American College of Cardiology and American Heart Association published new guidelines to help decide whether people have high blood pressure (hypertension). They brought the measurement (threshold) down to 130/80 mmHg – which is a lot lower than the old limit of 140/90 mmHg. This means there are now more people who will be diagnosed with high blood pressure, and who need to be treated because they may have a significant risk of developing a heart attack or stroke in the next 10 years. This risk is calculated by adding together other risk factors such as age, sex, race/ethnicity, diabetes (high blood sugar), high cholesterol and smoking. However, the equation used was designed for people over the age of 40, and does not consider whether people have Lupus.

WHAT DID THE AUTHORS HOPE TO FIND?

The authors wanted to find out the risk of heart attacks and strokes in people with Lupus classed as having high blood pressure according to the limit in the new guidelines.

WHO WAS STUDIED?

The study looked at 1532 people with Lupus who had been treated at a clinic in Canada. Everyone was over the age of 18, and had had Lupus for an average of 6 years.

HOW WAS THE STUDY CONDUCTED?

This was an observational study. There was no treatment being studied. Everyone was seen every 2–6 months, and their blood pressure was measured at each visit. The authors calculated each person's average blood pressure over 2 years, and divided them into three groups: 155 people had blood pressure consistently above the old threshold of 140/90 mmHg, 316 people were between the old and new thresholds (130–139/80–89 mmHg), and 1061 people had normal blood pressure that came in under the new threshold (less than 130/80 mmHg). Everyone was followed until they had a first episode of heart attack or stroke, or until the last time they came to the clinic. The authors did a statistical analysis to adjust for other risk factors that might have contributed.

WHAT WERE THE MAIN FINDINGS OF THE REVIEW?

After 10 years, there had been 124 heart attacks or strokes, 20 of which were fatal. People in the middle group were more than twice as likely to have a heart attack or stroke compared to people with normal blood pressure. When the authors looked at this more closely with a statistical model, they found that people with a blood pressure of 130–139/80–89 mmHg over the first 2 years had a 73% increased risk of a heart attack or stroke independently from other risk factors.

ARE THESE FINDINGS NEW?

Yes, this is the first time that a large study for hypertension in Lupus has been published.

WHAT ARE THE LIMITATIONS OF THE STUDY?

The major limitation of this observational study was that people with high blood pressures also tended to have more other risk factors when compared to people with normal blood pressure. It is difficult to adjust for these extra risk factors without doing a randomised controlled trial, but that would be difficult.

WHAT DO THE AUTHORS PLAN ON DOING WITH THIS INFORMATION?

The authors are working to help patients reduce their blood pressure regardless of their overall cardiovascular risk (e.g. age, sex, high cholesterol, high blood sugar). They believe this will help prevent heart attack and stroke in people with Lupus. They are also doing more studies to look at whether blood pressure drugs can help.

WHAT DOES THIS MEAN FOR ME?

If you have Lupus, you might have a higher risk of heart and vascular diseases. Having high blood pressure will increase these risks even more. If you have high blood pressure, no matter what age you are, you should get treatment to try and get below the new guideline threshold of 130/80 mmHg.

If you have any concerns about your disease or its treatment, you should speak to your doctor.

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