降圧目標を見直す時期 (LBCT 05)

SPRINT：試験の結果、強化降圧管理が有意に有益であることが示された

SPRINT : Study shows significant benefits of intensive blood pressure management

降圧目標を収縮期血圧120mmHg未満の達成とした患者は心筋梗塞（MI）、心不全または脳卒中のリスクが24%低く死亡リスクは27%低かった、とのSystolic Blood Pressure Intervention Trial（SPRINT）試験の結果がAmerican Heart Association学会で発表され、*New England Journal of Medicine*オンライン版に掲載された。SPRINTでは9,300人超の人々を、2つの降圧目標（120mmHg未満または140mmHg未満）のいずれかにランダムに割り付けた。参加者は50歳以上、心血管系疾患リスクが高く、収縮期血圧が130mmHg以上、糖尿病や脳卒中歴は有していなかった。特に最初の1年間に、スタディ中の血圧は降圧薬で調整された。その結果、降圧目標120mmHg未満に割り付けられた群において主要評価項目である心血管イベントが25%、総死亡が27%減少したと報告された。積極的治療は75歳以上の高齢者においても50～74歳の成人と同様に有効な様であった。このトライアルは1年早く終了された。

Full Text

Patients whose blood pressure target was lowered to reach a systolic goal of less than 120 mmHg had their risk for myocardial infarction (MI), heart failure or stroke reduced by 24 percent, and their risk for death lowered by 27 percent. Compared to a systolic blood pressure goal of less than 140 mmHg, aggressive treatment appeared to be as effective for adults age 75 and older as for adults age 50-74, according to results from the Systolic Blood Pressure Intervention Trial (SPRINT) presented at the American Heart Association (AHA) Scientific Sessions and published online in the *New England Journal of Medicine* (*NEJM*) on Nov. 9.

Intensive blood pressure management, however, was also associated with an increased risk for some serious adverse events, such as hypotension, fainting, and acute kidney abnormalities, although there was no evidence for permanent kidney damage so far. Future data analysis and studies will investigate effects of blood pressure treatment to this lower goal on kidney function in more detail.

"The positive results of this trial have taken most investigators by surprise, and the strong benefits of treatment seem to outweigh the risks," says Alfred Cheung, M.D., chief of nephrology & hypertension at University of Utah Health Care, and co-author on the study. He cautioned, however, that, "before deciding to treat blood pressure aggressively, it may be prudent to wait until additional questions are answered."

Cheung, who led a network of 17 out of approximately 100 participating clinical sites in the U.S. and Puerto Rico, notes that results are still pending on how intensive treatment might impact dementia, cognition, and kidney disease. Additionally, nothing is known about long-term effects of sustained treatment, nor cost effectiveness. On average, SPRINT trial participants were followed for just over three years.

In September 2015, the National Institutes of Health announced that the SPRINT trial was stopped one year early due to the marked cardiovascular and survival benefits of lowering systolic blood pressure to 120 mmHg, well below the current guidelines of 140, or 150 for those over age 60 years. Researchers reported a 25 percent reduction in the primary cardiovascular outcome and 27 percent reduction of all-cause mortality in those randomized to the lower 120 mm blood pressure target.

These results may have implications for the 1 billion adults worldwide with hypertension, the leading cause of heart disease and stroke. Adults age 75 and older could potentially benefit the most from interventions based on positive SPRINT results because this age group carries the greatest burden of hypertension: over 75 percent have the condition. At the same time, they would be predicted to be most at risk for any potential side effects that are still under investigation.

SPRINT randomly assigned over 9,300 participants to one of two blood pressure targets: less than 120 mmHg or less than 140 mmHg. Participants were age 50 years or older, at increased risk for cardiovascular disease, had a systolic blood pressure of at least 130 mmHg, and did not have diabetes or history of stroke. Blood pressure was adjusted with antihypertensive medications over the course of the study, especially during the first year. Healthy life styles were encouraged in all participants, who were monitored for a total of slightly more than three additional years.

The results from SPRINT differ from a previous large blood pressure trial on people with diabetes, which demonstrated that a blood pressure target of 120 mmHg did not significantly reduce the risk for cardiovascular events. Cheung says the difference in outcomes between these two trials may stem from SPRINT's large sample size as well as its inclusion of more older adults and individuals with kidney disease, while excluding patients with diabetes.

"We saw great cardiovascular health improvements in just three years, but it could be even a lot more over the course of 10 or 30 years, if intense blood pressure treatment continues. Therefore, these results are very exciting and could have profound implications on blood pressure treatment in years to come." says Cheung.
Nonetheless, he cautions that it remains to be determined how SPRINT results will influence official medical guidelines for treating hypertension.

Tulane University Epidemiology professor Dr. Paul Whelton, who is chair of the national steering committee for the study, says, "Individual patients should consult with their primary healthcare provider to determine how our results should influence their treatment. Some healthcare providers may recommend more intensive blood pressure reduction at this time, but others may wish to see more details."

The research was supported by the National Heart, Lung, and Blood Institute, National Institute of Diabetes and Digestive and Kidney Diseases, National Institute on Aging and National Institute of Neurological Disorders and Stroke. Many centers in the Department of Veterans Affairs also participated in this trial.

トピックス一覧