

Untreated high blood pressure significantly increases risk of bleeding stroke

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Left untreated, high blood pressure may significantly increase your risk of developing a brain bleed, according to research presented at the American Stroke Association's International Stroke Conference 2016.

Intracerebral hemorrhage is a type of stroke caused by a weakened blood vessel that ruptures and bleeds into [brain tissue](#). High blood pressure is a powerful determinant of risk for intracerebral hemorrhage.

Researchers examined six-years of data from 4,646 patients who were white, black or Hispanic. Half of them had an intracerebral hemorrhage.

They found:

- Compared to people without high blood pressure, untreated high blood pressure increased the odds of a brain bleed by 9.5 times in whites, 9.7 times in Hispanics, and 11.1 times in blacks.
- For people with high blood pressure, untreated high blood pressure was linked to a 3.7 to 5.5 higher odds of brain bleed compared to when it's treated.
- For patients with brain bleed and a previous diagnosis of high blood pressure, high blood pressure was more likely to not be treated in blacks (43.3 percent untreated) and Hispanics (48.3 percent) compared to whites (33.2 percent).
- Even when high blood pressure was treated, blacks still had a 75 percent higher odds and Hispanics had a 50 percent higher odds of brain bleed, compared to whites.

"The average age for a [brain hemorrhage](#) is much younger in minorities, especially in African-Americans, so they may suffer more disability earlier in life than others," said Kyle Walsh, M.D., study author and an assistant professor of

Emergency Medicine at the University of Cincinnati in Ohio.

Although it's not completely clear why racial minorities have higher rates of untreated high blood pressure, a possible reason is access to medical care, Walsh said.

The study analyzed data from the Ethnic/Racial Variations of ICH (ERICH) study, which followed people from 42 different sites. Each of the 2,323 people with bleeding stroke was matched with another person similar in age, gender, race/ethnicity, and geographic area, but who did not have a history of this type of stroke.

Researchers gathered blood pressure information based on participants' medical history. They analyzed the number of cases with high blood pressure, including treated vs. untreated high [blood pressure](#), and the associated risk of bleeding stroke. The researchers also controlled for the effects of several factors including alcohol, cholesterol, education, insurance status, and blood thinning medications.

"It's important to be aware of having [high blood pressure](#) in the first place, and once diagnosed, to have it treated appropriately," Walsh said.

Provided by American Heart Association

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