

Stopping meth helps reverse drug-induced heart failure

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Heart failure is more severe when it stems from using methamphetamine, but heart failure patients who get proper medical treatment and are able to stop using meth can improve just as much as patients who never used meth, according to preliminary research to be presented at the American Heart Association's Scientific Sessions 2019—November 16-18 in Philadelphia.

"Methamphetamine abuse and the heart failure it can cause are growing public health concerns. Interventions directed at treating addiction are vital, in addition to optimal medical therapy for heart failure in general," said Harpreet S. Bhatia, M.D., lead study author and a fellow in [cardiovascular disease](#) at the University of California, San Diego.

Researchers compared the medical records of 74 patients with meth-associated heart failure to 83 heart failure patients treated at the same hospital around the same time who had not used meth. Although patients with meth-associated heart failure were younger (average age 51 rather than average age of 61 years), their [heart problems](#) were more severe. Their hearts' main pumping chamber was more likely to be enlarged and pumped less blood. Over the course of one year, those with meth-associated heart failure were hospitalized four times more for heart failure treatment than heart failure patients who had not used the drug. In addition to their [meth use](#), those with meth-associated heart failure were eight times more likely to abuse alcohol and five times more likely to use opioids.

Patients in both groups were assessed at baseline, six months and 12 months, and urine tests were used to determine ongoing meth use.

Of the 46 meth-associated [heart failure patients](#) followed for long enough to determine if they had ceased using the drug, researchers compared changes in heart function in 27 patients who stopped using meth to 19 who continued to use at

one year. They found the patients who stopped using meth:

- had a 43% improvement in their heart's pumping ability, compared to a 4% worsening in continued meth users;
- had significantly lower blood levels of a protein that is produced when there is increased pressure in the heart, usually due to fluid retention from heart failure;
- and were significantly less likely to be hospitalized and improved just as much as patients who had heart failure unrelated to meth use.

"We were surprised to see the positive effects of meth cessation in such a short time. Our study provides hope that heart failure can be improved if meth abuse can be addressed along with prescribing optimal therapy for heart failure," Bhatia said.

Study results may have been influenced by some factors beyond the researchers' control, such as whether patients took their prescribed [heart failure](#) medications.

Provided by American Heart Association

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