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Stroke in Young Adults Who Abuse Amphetamines or Cocaine**A Population-Based Study of Hospitalized Patients**

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Context The abuse of stimulant drugs is increasing in the western United States. Although numerous case reports and animal studies suggest a link with stroke, epidemiologic studies have yielded conflicting results.

Objective To test the hypothesis that young adults who abuse amphetamines or cocaine are at a higher risk of stroke.

Design, Setting, and Participants Using a cross-sectional design and from a quality indicators' database of 3 148 165 discharges from Texas hospitals, we estimated the secular trends from January 1, 2000, to December 31, 2003, in the abuse of various drugs and of strokes. We developed separate logistic regression models of risk factors for hemorrhagic (n = 937) and ischemic (n = 998) stroke discharges of persons aged 18 to 44 years in 2003, and for mortality risk in patients with stroke.

Main Outcome Measure Incidence of stroke using definitions from the Agency for Healthcare Research and Quality's stroke mortality Inpatient Quality Indicator.

Results From 2000 to 2003, the rate of increase was greatest for abuse of amphetamines, followed by cannabis and cocaine. The rate of strokes also increased, particularly among amphetamine abusers. In 812 247 discharges in 2003, amphetamine abuse was associated with hemorrhagic stroke (adjusted odds ratio [OR], 4.95; 95% confidence interval [CI], 3.24-7.55), but not with ischemic stroke; cocaine abuse was associated with hemorrhagic (OR, 2.33; 95% CI, 1.74-3.11) and ischemic (OR, 2.03; 95% CI, 1.48-2.79) stroke. Amphetamine, but not cocaine, abuse was associated with a higher risk of death after hemorrhagic stroke (OR, 2.63; 95% CI, 1.07-6.50).

Conclusion Increases in stimulant drug abuse may increase the rate of hospital admissions for strokes and stroke-related mortality.

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