Aspirin and GI bleeding

In "Aspirin to prevent cardiovascular events," (Medicine in Brief, CURRENT PSYCHIATRY, February 2010, p. 55-63), the authors emphasize the risk of gastrointestinal (GI) bleeding. Because about 80% of strokes are ischemic but 20% represent a CNS bleed, shouldn't the risk of hemorrhagic stroke be considered, especially in patients without known heart disease or those who have never had a heart attack before taking daily aspirin?

Bryan D. Spader, MD
Kinston, NC

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The authors respond

We appreciate Dr. Spader's question about the risk of hemorrhagic stroke in addition to GI bleeding with daily aspirin. The Women's Health Study shows increases in hemorrhagic strokes in the aspirin group are not statistically significant (relative risk [RR] 1.24, confidence interval [CI] 0.82 to 1.87). This is confirmed by the meta-analysis that is the basis for the U.S. Preventive Services Task Force recommendations.[1] Hemorrhagic stroke was not significantly higher in women taking aspirin than controls, but was higher in men (odds ratio [OR] 1.69, [CI, 1.04 to 2.73]). However, the same study concluded, "Aspirin does not seem to affect CVD (cardiovascular disease) mortality or all-cause mortality in either men or women. Aspirin use for the primary prevention of CVD events probably provides more benefits than harms to men at increased risk for myocardial infarction and women at increased risk for ischemic stroke."[1] Recent estimates indicate that the risk of hemorrhagic stroke is small, at about 0.2 per 1,000 patient-years of aspirin exposure. For every 1 hemorrhagic stroke over 5 years, approximately 14 myocardial infarctions are prevented in individuals with moderate cardiac risks.[2]

However, we found a dearth of follow-up studies showing individuals having hemorrhagic strokes when taking aspirin. One study examined 204 hemorrhagic stroke patients who were later placed on aspirin to reduce ischemic events and showed that aspirin use is not associated with intracerebral hemorrhage recurrence in survivors of either lobar hemorrhage or deep hemorrhage.[3] Nevertheless, the median time to aspirin initiation is 5.4 months after index hemorrhagic stroke. Until more evidence emerges, use of aspirin for hemorrhagic stroke patients should be made on an individual basis after considering the benefits, controlling hypertension, and assessing other risk factors.

Glen L. Xiong, MD
Assistant clinical professor
University of California, Davis
Sacramento, CA

Christopher A. Kenedi, MD, MPH
Adjunct professor of psychiatry
Duke University Medical Center
Durham, NC

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Heroin's toxic effects

The article "Chasing the dragon" (Cases That Test Your Skills, CURRENT PSYCHIATRY, February 2010, p. 77-86) is quite interesting and informative. The first reported cases of toxic leukoencephalopathy because of heroin inhalation appeared in the early 1980s in Amsterdam.[1] This method of heroin administration became popular among drug users wanting to avoid the risks of intravenous routes.[2] The authors of the CURRENT PSYCHIATRY article do not mention reported cases of toxic leukoencephalopathy via snorting or injecting, although 1 case report describes a similar condition resulting from intravenous heroin overdose and another involving a multidrug overdose that did not include heroin.[1] Another study postulates that toxic spongiform leukoencephalopathy via heroin inhalation may be caused by a mechanism triggered by the drug leading to mitochondrial and hypoxic injury in specific white matter areas.[3] One case report describes heroin pyrolysate inhalation causing temporary parkinsonism because of reversible tetrahydrobiopterin deficiency, leading to altered dopamine metabolism.[4]

Adegboyega Oyemade, MD
Addiction psychiatrist
Decatur, IL

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