

RESEARCH HIGHLIGHTS

STROKE

Patients on statins have better outcome of intracerebral hemorrhage

Patients receiving statin therapy at the time they have an intracerebral hemorrhage (ICH) have a better chance of survival and are less likely to be disabled after recovery than patients who are not taking these drugs, according to research from Hebrew University-Hadassah Medical Center, Jerusalem, Israel. “This suggests that statins may be protective in the setting of ICH,” comments lead author Ronen Leker.

“No therapy has yet been found that can effectively reduce the mortality rate [after ICH]...”

ICH is a particularly dangerous form of stroke—it carries a 40–50% mortality rate and is often associated with poor outcomes. “No therapy has yet been found that can effectively reduce the mortality rate or the high level of post-stroke complications that occur,” explains Leker. Previous studies had shown that patients taking statins before experiencing an ischemic stroke had smaller strokes, lower mortality and a better outcome than patients not receiving these drugs. The small number of reports

that focused specifically on the impact of statin therapy on the outcome of ICH, however, produced inconclusive results. “A recent study from our group suggests that statins had no effect, but its statistical power was limited because a relatively high number of study patients were lost to follow up,” reports Leker.

Further research was, therefore, necessary to determine the influence of prior statin therapy on the outcome of a large number of cases of ICH. Leker *et al.* studied prospective data from the National Acute Stroke Israeli Surveys (NASIS) on all patients with acute stroke admitted to 28 hospitals throughout Israel over a 4-year period to April 2007. Of the 3,212 patients identified, 312 were diagnosed with ICH, 89 of whom were taking statins up to the point of their stroke. A comparison of the two groups showed that patients taking statins at the time of their ICH generally had a less severe stroke, were less likely to die and suffered fewer systemic complications than those not taking these drugs. As a result, these patients were more likely to experience a good outcome and be discharged home or sent to a rehabilitation facility for further recovery.



“Use of the Israeli multicenter national prospective database demonstrates prospectively that these drugs could have protective effects when taken before ICH,” notes Leker. He stresses, however, that the current study should be viewed as a hypothesis-generating case series that opens the way for a randomized blinded study of statins versus placebo in high-risk hypertensive patients. “Although it is difficult to predict who will suffer an ICH, the most common predisposing factors include hypertension and amyloid angiopathy; we do not know whether statins might have a differential effect on these two causes—only randomized trials can provide the answer,” he says.

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Original article Leker, R. R. *et al.* Prior use of statins improves outcome in patients with intracerebral hemorrhage. Prospective data from the National Acute Stroke Israeli Surveys (NASIS). *Stroke* doi:10.1161/STROKEAHA.108.546259