ICD-9 codes underestimate statin-linked rhabdomyolysis

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(HealthDay) -- Use of diagnostic codes, such as *International Classification of Diseases -- Ninth Revision* (*ICD-9*) codes, may result in misclassification of rare, adverse drug reactions (ADRs), including the risk of rhabdomyolysis from high-dose simvastatin, according to a research letter published in the April 18 issue of the *Journal of the American Medical Association*, a theme issue on comparative effectiveness research.

To assess the use of diagnostic codes as a method of estimating statin-related rhabdomyolysis and myopathy, James S. Floyd, M.D., of the University of Washington in Seattle, and colleagues reviewed the full electronic medical records for patients from the Group Health Cooperative who had a statin prescription within three months of an

ICD-9 code for rhabdomyolysis or an ADR.

The researchers found that among the 292 statin users with an *ICD-9* code for rhabdomyolysis, 29 cases were identified and validated. None of the 29 cases died; 90 percent were hospitalized and 29 percent had at least a doubling of serum creatinine levels. Using the *ICD-9* code, the rhabdomyolysis incidence rate ratio (IRR) for simvastatin versus other statins was 2.61 versus 1.03. For a dose of simvastatin of 80 mg per day or greater versus 20 to 39 mg per day, the IRR was 12.2 for validated cases and 1.77 using the *ICD-9* code for rhabdomyolysis.

"These results confirm in a community setting findings from a recent clinical trial that prompted the U.S. Food and Drug Administration to issue a warning about the use of high-dose simvastatin," the authors write. "The *ICD-9* code for rhabdomyolysis was nonspecific for this ADR, and the resulting misclassification markedly attenuated the estimated relative risk for high-dose versus low-dose simvastatin."

One of the authors disclosed financial ties to the medical device/technology industries.

More information: Abstract
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