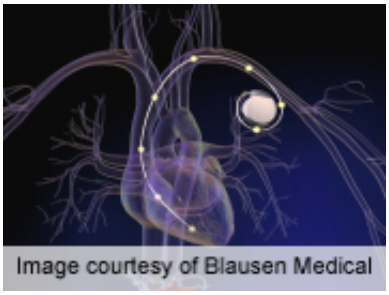
Model predicts risk of adverse events for ICD implantation

December 12 2013



(HealthDay)—A simple model may be used to predict risk for in-hospital adverse events among patients receiving an implantable cardioverter defibrillator (ICD), according to research published online Dec. 11 in the *Journal of the American College of Cardiology*.

John A. Dodson, M.D., of Harvard University in Boston, and colleagues used data from the National Cardiovascular Data Registry's ICD Registry to develop and validate a risk model for adverse events after ICD implantation.

The researchers found that 1.8 percent of patients undergoing ICD placement experienced at least one in-hospital complication or died. A prudent risk score, derived from 12 variables, characterized patients as low-risk (risk score of 10 or below; risk of complications, 0.3 percent)

or high-risk (risk score of 30 or above; risk of complications, 4.2 percent). The risk-standardized complication rates for ICD placement varied significantly across hospitals (median, 1.77; fifth percentile, 1.16; 95th percentile, 3.15).

"In light of their carefully constructed and well-performing risk model, Dodson and colleagues should be applauded for advancing our understanding of ICD procedural outcomes," write the authors of an accompanying editorial.

More information: Full Text (subscription or payment may be required)
Editorial (subscription or payment may be required)