Similar complication rate for transvenous, subcutaneous ICDs

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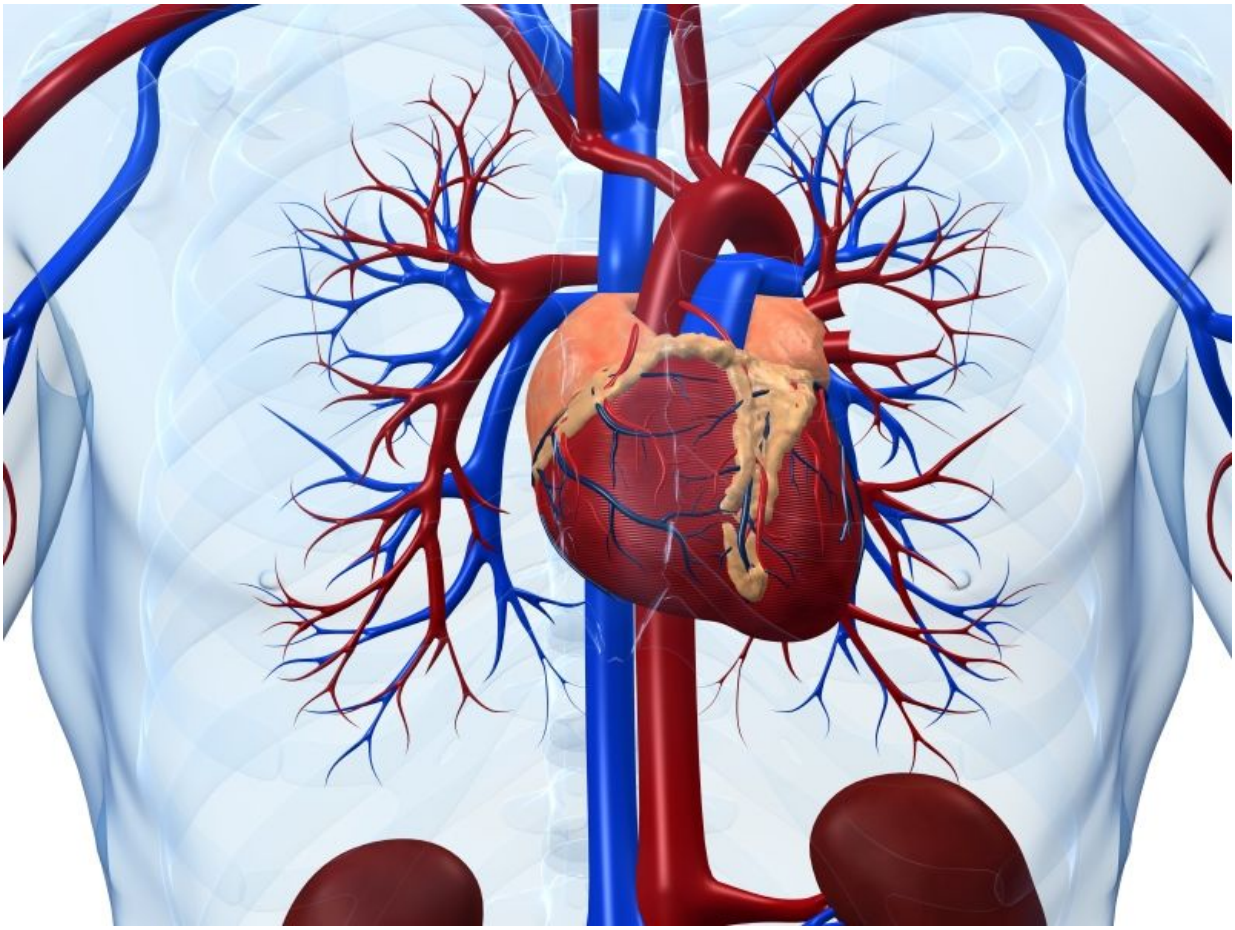

(HealthDay)—For patients at risk for sudden cardiac death, the rate of

complications is similar with transvenous implantable cardioverter-defibrillators (TV-ICDs) and subcutaneous ICDs (S-ICDs), although the nature of complications differs, according to a study published in the Nov. 8 issue of the *Journal of the American College of Cardiology*.

Tom F. Brouwer, M.D., from the Amsterdam Medical Center, and colleagues conducted a retrospective study to compare long-term clinical outcomes of S-ICD and TV-ICD therapy in a propensity-matched cohort. Data were reviewed for 1,160 patients in two high-volume hospitals; after propensity matching for 16 baseline characteristics, 140 matched pairs were identified and included in analyses.

The researchers found that the complication rates were 13.7 and 18.0 percent, respectively, in the S-ICD and TV-ICD groups (P = 0.80), and the infection rates were 4.1 versus 3.6 percent, respectively (P = 0.36). Lead complication rates were 0.8 and 11.5 percent, respectively, in the S-ICD and TV-ICD arms (P = 0.03). More nonlead-related complications were seen in S-ICD versus TV-ICD patients (9.9 versus 2.2 percent, respectively; P = 0.047). The TV-ICD group more often had appropriate ICD intervention (antitachycardia pacing and shocks; hazard ratio, 2.42; P = 0.01). The incidence of appropriate and inappropriate shocks was similar between the groups (hazard ratios, 1.46 [P = 0.36] and 0.85; [P = 0.64], respectively).

"The complication rate in patients implanted with an S-ICD or TV-ICD was similar, but their nature differed," the authors write. "The S-ICD reduced lead-related complications significantly, at the cost of nonlead-related complications."

Several authors disclosed financial ties to the medical device and medical technology industries.

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