CYP2C19-genotype guided antiplatelet tx may be beneficial

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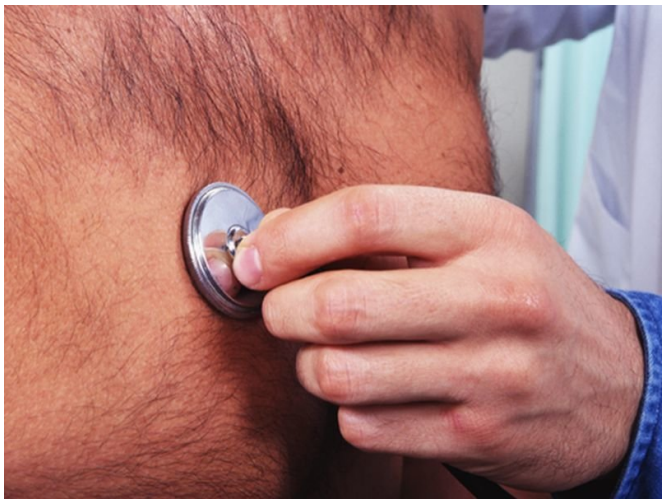

(HealthDay)—Patients with a *CYP2C19* loss-of-function allele have increased risk of major adverse cardiovascular events (MACE) with clopidogrel versus alternative antiplatelet therapy after percutaneous coronary intervention (PCI), according to a study published online Nov. 1 in *JACC: Cardiovascular Interventions*.

Larisa H. Cavallari, Pharm.D., from the University of Florida in Gainesville, and colleagues examined outcomes following clinical implementation of *CYP2C19* genotype-guided antiplatelet therapy after PCI. The authors compared MACE within 12 months of PCI for patients with a loss-of-function allele prescribed clopidogrel versus alternative therapy.

The researchers found that 31.5 percent of the 1,815 patients had a loss-of-function allele. Patients with a loss-of-function allele prescribed clopidogrel had a significantly higher risk for MACE versus those prescribed alternative therapy (23.4 versus 8.7 per 100 patient-years; adjusted hazard ratio, 2.26; 95 percent confidence interval, 1.18 to 4.32; P = 0.013). Among the 1,210 patients with an acute coronary syndrome at the time of PCI, the results were similar (adjusted hazard ratio, 2.87; 95 percent confidence interval, 1.35 to 6.09; P = 0.013). Patients without a loss-of-function allele and loss-of-function allele carriers prescribed alternative therapy had no difference in MACE (adjusted hazard ratio, 1.14; 95 percent confidence interval, 0.69 to 1.88; P = 0.6).

"A future randomized study of genotype-guided antiplatelet therapy may be of value," the authors write.

Two authors disclosed ties to the pharmaceutical industry.

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