CYP2C19 polymorphism impacts response to PPI Tx in GERD

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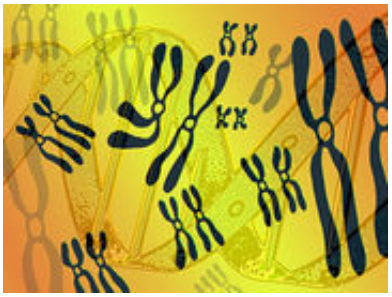

(HealthDay)—CYP2C19 polymorphism impacts response to proton pump inhibitor (PPI) treatment in gastroesophageal reflux disease (GERD), with lower efficacy rates for rapid metabolizer (RM) genotypes, according to a study published online Nov. 18 in the *Journal of Gastroenterology and Hepatology*.

Hitomi Ichikawa, M.D., from the Hamamatsu University School of Medicine in Japan, and colleagues conducted a meta-analysis to examine whether the CYP2C19 RM genotype is a risk factor for GERD patients who are refractory to PPI therapy.

The researchers found that in intention-to-treat (ITT) and per-protocol analyses, the total efficacy rate of PPIs was 56.4 and 63.8 percent, respectively, for GERD, including reflux esophagitis (RE) and non-

erosive reflux disease. Between the CYP2C19 genotypes, there was significant variation in efficacy rates (ITT analysis: RMs, 52.2 percent; intermediate metabolizers, 56.7 percent; and poor metabolizers [PMs], 61.3 percent; P = 0.047). Compared with CYP2C19 PMs, RMs had an increased risk of being refractory to PPI therapy among RE patients (odds ratio, 1.661; P = 0.040).

"Individualized dosing regimen with PPIs based on CYP2C19 genotype might be a valid therapeutic strategy for overcoming insufficient gastric acid inhibition," the authors write.

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