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More research needed for vitamin D's cardiac effect in PCI

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(HealthDay)—More research is needed to assess the role of vitamin D in

the prevention of periprocedural myocardial injury, according to a study published online Aug. 25 in the *Journal of Clinical Pharmacology*.

Naser Aslanabadi, M.D., from Tabriz University of Medical Sciences in Iran, and colleagues randomized 99 patients admitted for elective percutaneous coronary intervention (PCI) into vitamin D (52 patients) and control (47 patients) groups. Twelve hours before PCI, the intervention group received 300,000 IU vitamin D orally.

The researchers found that 42 percent of patients in the control group and 34.6 percent in the intervention group had an increase in creatine kinase-MB (CK-MB) (P = 0.417). The increase in cardiac troponin I occurred in 8 percent of patients in the control group and 3.3 percent in the intervention group (P = 0419). There were no significant changes in the level of cardiac biomarkers. The mean difference in CK-MB between eight and 24 hours was significantly lower in the vitamin D group (P = 0.048). The vitamin D group also had significantly lower mean difference in high-sensitivity C-reactive protein (P = 0.045).

"This study could not show a clear effect of vitamin D in the prevention of cardiac injury during elective PCI," the authors write. "Based on the results of the present study, larger
outcome-based, double-blind, placebo-controlled trials with a longer duration of vitamin D administration
to correct the level of vitamin D above 30 ng/mL are recommended to demonstrate a clear effect of vitamin D supplementation in the prevention of cardiac injury following elective PCI."

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