Multiple dosing mitigates ASA hyporesponsiveness after CABG

March 22 2017

(HealthDay)—Acetylsalicylic acid (ASA) hyporesponsiveness after

coronary artery bypass graft (CABG) surgery can be overcome by multiple dosing, according to a study published online March 7 in the *Journal of Thrombosis and Haemostasis*.

Jeremy S. Paikin, M.D., from McMaster University in Hamilton, Canada, and colleagues randomized 68 adults undergoing CABG surgery to receive ASA 81 mg once-daily, 325 mg once-daily, or 162 mg twice-daily. Median serum thromboxane B_2 (TXB_2) level was measured on postoperative day four. The results were pooled with those of an earlier study to better assess the effect of ASA 325 mg once-daily or divided doses.

The researchers found that patients randomized to ASA 81 mg once-daily had a median day four TXB_2 level of 4.2 ng/mL, compared with 1.1 ng/mL among those randomized to ASA 162 mg twice-daily and 1.9 ng/mL among those randomized to 325 mg once-daily. In pooled data, groups receiving ASA 162 mg twice-daily or 81 mg four times-daily had a median TXB_2 level of 1.1 ng/mL compared with 2.2 ng/mL among those receiving ASA 325 mg once-daily.

"Multiple daily dosing of ASA is more effective than ASA 81 mg once-daily or 325 mg once-daily at suppressing serum TXB_2 formation after CABG surgery," the authors write. "A twice-daily treatment regimen needs to be tested in a clinical outcome study."

The study was funded by research grants from pharmaceutical companies.

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