No significant association found for ADHD meds, CVD risk

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There seems to be no statistically significant association between

attention-deficit/hyperactivity disorder (ADHD) medications and cardiovascular disease (CVD) risk, according to a systematic review and meta-analysis published online Nov. 23 in *JAMA Network Open*.

Le Zhang, M.P.H., from the Karolinska Institutet in Stockholm, and colleagues reviewed observational studies examining the association between ADHD medications and risk for CVD. Data were included from 19 studies with 3,931,532 children, adolescents, and adults; 14 of these studies were cohort studies and were included in the meta-analysis.

The researchers found that the pooled adjusted relative risk (RR) did not indicate a statistically significant association between ADHD medication use and any CVD among children and adolescents, young or middle-aged adults, or older adults (RRs [95 percent confidence intervals (CIs)], 1.18 [0.91 to 1.53], 1.04 [0.43 to 2.48], and 1.59 [0.62 to 4.05], respectively). No significant associations were observed for stimulants or nonstimulants (RRs [95 percent CIs], 1.24 [0.84 to 1.83] and 1.22 [0.25 to 5.97], respectively).

No statistically significant association was found for cardiac arrest or arrhythmias (RR, 1.60; 95 percent CI, 0.94 to 2.72), cerebrovascular diseases (RR, 0.91; 95 percent CI, 0.72 to 1.15), or myocardial infarction (RR, 1.06; 95 percent CI, 0.68 to 1.65). In female patients and those with preexisting CVD, no associations were observed (RRs [95 percent CIs], 1.88 [0.43 to 8.24] and 1.31 [0.80 to 2.16], respectively).

"Health care professionals must exercise caution and not slavishly adhere to consensus guidelines or follow conclusions from meta-analyses when treating individual patients," writes the author of an accompanying editorial. "Every treatment decision is a balance of potential harm and potential benefit, and that balance is different for every individual patient."

Two authors disclosed financial ties to the pharmaceutical industry.

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