

Risk for acute myocardial infarction increased for patients with pneumonia

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Patients with invasive pneumococcal disease (IPD) have an increased

risk for acute myocardial infarction (AMI), with the elevated risk persisting for one year, according to a study published online Feb. 8 in *Clinical Infectious Diseases*.

Andrew D. Wiese, M.P.H., Ph.D., from the Vanderbilt University Medical Center in Nashville, Tennessee, and colleagues conducted a self-controlled case series analysis among 324 adults with evidence of an AMI hospitalization between 2003 and 2019 to examine whether laboratory-confirmed IPD was associated with the risk for AMI.

Patients were followed starting one year before the earliest AMI and continued through the date of death, one year after AMI, or December 2019. Periods for AMI assessment included days 7 to 1 before IPD specimen collection, day 0 through 7 after IPD specimen collection, and days 8 to 28 after IPD specimen collection (pre-IPD detection, current IPD, and post-IPD, respectively), as well as a control period. Using within-person comparisons, the incidence rate ratios were calculated for each risk period compared to control periods.

The researchers found that compared with control periods, the incidence of AMI was significantly higher during the pre-IPD detection and current IPD periods (incidence rate ratios, 10.29 and 92.95, respectively) and was nonsignificantly elevated during the post-IPD risk period. The incidence of AMI was higher in the post-IPD control period (29 to 365 days after IPD; incidence rate ratio, 2.95).

"Our findings highlight the potential that the ongoing routine administration of pneumococcal conjugate vaccines to [older adults](#), as currently recommended by the Centers for Disease Control and Prevention, could reduce the burden of cardiovascular events, including [heart attack](#), in the populations," a coauthor said in a statement.

One author disclosed financial ties to the pharmaceutical industry.

More information: Andrew D Wiese et al, Risk of Acute Myocardial Infarction Among Patients With Laboratory-Confirmed Invasive Pneumococcal Disease: A Self-Controlled Case Series Study, *Clinical Infectious Diseases* (2023). [DOI: 10.1093/cid/ciad065](https://doi.org/10.1093/cid/ciad065)

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