Early use of empiric antibacterial therapy common in COVID-19
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Valerie M. Vaughn, M.D., from the University of Michigan in Ann Arbor, and colleagues examined the prevalence and predictors of empiric antibacterial therapy and community-onset bacterial coinfections in hospitalized patients with COVID-19. Data were included for 1,705 patients hospitalized with COVID-19 in 38 Michigan hospitals between March 13, 2020, and June 18, 2020.

The researchers found that 56.6 percent of 1,705 patients with COVID-19 were prescribed early empiric antibacterial therapy; 3.5 percent had a confirmed community-onset bacterial infection. Early empiric antibacterial use varied from 27 to 84 percent across hospitals. The likelihood of receiving early empiric antibacterial therapy was increased if patients were older (adjusted rate ratio [aRR], 1.04 per 10 years; 95 percent confidence interval, 1.00 to 1.08), had a lower body mass index (aRR, 0.99 per kg/m²; 95 percent CI, 0.99 to 1.00), had more severe illness (e.g., severe sepsis: aRR, 1.16; 95 percent CI, 1.07 to 1.27), had a lobar infiltrate (aRR, 1.21; 95 percent CI, 1.04 to 1.42), or were admitted to a for-profit hospital (aRR, 1.30; 95 percent CI, 1.15 to 1.47). There was a decrease noted in COVID-19 test turnaround time and empiric antibacterial use over time.

"Given the potential harms to patients and society from unnecessary antibacterial use—plus the additional burden on staff use and protective personal equipment required for antibacterial administration—it is imperative that we develop strategies to help clinicians prescribe antibacterials judiciously to hospitalized patients with COVID-19," the authors write.

One author disclosed financial ties to the publishing and health insurance industries.

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