

Study: CLABSI, CAUTI Rates Higher for COVID Patients

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Patients with coronavirus disease 2019 (COVID-19) are more at risk of contracting central line-associated bloodstream infections (CLABSIs) and catheter-associated urinary tract infections (CAUTIs) than patients not afflicted with the novel coronavirus, according to a study by investigators with Denver Health Medical Center which was unveiled at [ID Week](#). The retrospective cohort study was conducted at a 555-bed safety net hospital where infection rates from urinary catheters and central venous catheters were measured. Investigators compared infection rates from 6 months before the COVID-19 pandemic (October 2019 to March 2020) with infection rates during the initial pandemic phase. The hospital received its first patient infected with SARS-CoV-2 in late March 2020.

Hospital administrators sectioned off a part of the facility (4 units, 125 beds) to be used for patients who had been confirmed to have COVID-19. The other units in the hospital only accepted patients who tested negative for the coronavirus (except for a labor and delivery and a designated mixed unit).

The study states: “Patients hospitalized for suspected or confirmed COVID-19 often require high levels of support, including supplemental oxygen or ventilation, intravenous fluids and pressors, prone positioning, and strict input/output monitoring.

Increased utilization of invasive devices such as indwelling urinary catheters and central venous catheters may be needed in this population.” In addition, healthcare providers minimized contact time with patients in the COVID units.

The use of indwelling urinary catheters increased during the initial pandemic stage by 36%, while use of central venous catheters increase by 25% in the same time period. CAUTI rates were 83% higher and CLABSI rates were 65% higher in the COVID-19 units compared to the non-COVID-19 units. In addition, rates for urine cultures were 69% higher and rates for blood cultures 73% higher in the COVID areas.

“Patient care protocols, device utilization and culture ordering all require further investigation,” the study concludes.

In September, Maya Gossman, RN, a vascular nurse and member of *Infection Control Today*’s Editorial Advisory Board, [wrote](#) about how important working with infection preventionists can be when it comes to containing CLASBIs and CSUTIs.

“Although both vascular access and infection prevention have their own focus, our commonality is in ensuring patients get the care they need while minimizing their chances of nosocomial infections,” Gossman wrote. “Infection preventionists have a wide scope, as infections can be caused by many factors while in the hospital, from medical devices to the hands of the healthcare workers caring for them. Vascular access specialists focus on the devices placed into the bloodstream of patients in order to deliver needed medications, allow access for dialysis, or accurately monitor blood pressure. It is because we know that these devices can be a conduit for life-threatening infectious agents that infection preventionists are vital to our specialty.”

Gossman relates how she and the IP at Stillwater Medical Center, in Stillwater, Oklahoma, worked together when the first COVID-19 patient arrived. The IP oversaw how Gossman inserted a vascular access line while wearing personal protective equipment. It turned out to be a success, but Gossman knew that there would be other COVID-19 patients.

“Less than 24 hours after placing that PICC line I met with our infection control nurse to discuss how the COVID-19 team was going to interact with the vascular access team,” Gossman wrote. “We collaborated to create a plan for best protecting our team of 2 from exposure while also ensuring that our patients were protected from further infection caused by a vascular access device. In addition, the infection control nurse and I met with the directors of the lab, the medical floor, and the intensive care unit to discuss ways to minimize exposure of their staff to the patients with confirmed COVID-19 infection.”