Objectives: At our institution, CAUTI rates were higher than the national average; therefore, various preventative protocols were implemented. Southeast Health’s Medical ICU (MICU) has taken many measures to decrease the CAUTI incidence. Methods: We conducted an observational study with a retrospective analysis of the data beginning in 2014 after a poor performance at prevention of CAUTIs as noted in the Leapfrog Hospital Survey. As part of improving prevention measures in MICU, we started a lean project in 2015 that primarily focused on systems-based practices and improvements in the existing nurse protocols. Results: We were successful in this endeavor and in August 2018 the Alabama Department of Public Health (ADPH) reported that we still lower than the national average in prevention of CAUTIs. This finding led us to tighten the protocols and to appoint 2 infection preventionists in the MICU. With the assistance of the infection preventionists, we were able to actively decrease indwelling catheter and device days with daily multidisciplinary rounds to access the necessity for catheter use. We also set monthly attainable targets and reinforced nurse driven protocols with educational in-service programs. One of the most significant additions was the introduction of female external catheters (Purewick) in December 2019 and male external catheters (Liberty) in May, 2019. Our results showed a significant reduction in the number of CAUTIs divided by number of Foley catheter days in the MICU from 32 of 7,435 in 2014 to 1 of 5,934 in 2019. We are excited to see reduction in the CAUTIs with our above measures. We will continue our measures to reach our target of 0 CAUTIs, and we plan to remain above the national average.

Funding: None

Disclosures: None

Doi: 10.1017/ice.2020.675

Presentation Type:
Poster Presentation

CAUTIs in Patients With Thoracic Epidurals
Jessica Seidelman, Duke University; Sarah Lewis, Duke University; Becky Smith, Duke University Medical Center

Background: The Surgical Care Improvement Project 9 (SCIP 9) mandates the removal of urinary catheters within 48 hours following surgery to reduce the risk of catheter-associated urinary tract infections (CAUTIs). Although patients with thoracic epidurals are not exempt from SCIP 9, these patients may be inherently different from other surgical patients. Early removal of Foley catheters may cause urinary retention and recatheterization, which in turn can lead to CAUTI or urethral trauma. Our hospital’s current policy is to allow Foley catheters to remain in place until the thoracic epidural is removed. The goal of our study was to identify and compare the rate of CAUTI in patients with thoracic epidural catheters to the rate of CAUTI in patients without thoracic epidural catheters

Methods: We performed a retrospective cohort study of patients with and without thoracic epidurals who had Foley catheters during hospitalization from July 1, 2017, to May 31, 2019. We used descriptive statistics to compare CAUTI rates based on unit between the 2 groups of patients.

Results: We identified 1,834 unique patients with thoracic epidurals and urinary catheters during the study period. We found 4 CAUTIs of 9,896 catheter days (0.4 CAUTIs per 1,000 catheter days) in patients with epidural catheters and 43 CAUTIs of 36,809 catheter days (1.17 CAUTI per 1,000 catheter days) in patients without thoracic epidurals. We conducted a sensitivity analysis on a subset of patients admitted under the cardiothoracic service and compared the patients with Foley catheters with and without thoracic epidurals. In this subset, we found 1 CAUTI in 5,890 catheter days (0.17 CAUTI per 1,000 catheter days) in patients with thoracic epidurals and 4 CAUTIs in 9,429 catheter days (0.42 CAUTIs per 1,000 catheter days) in patients without thoracic epidurals, for a rate of 0.4002 (95% CI, 0.1242–0.9639; P < .03). We conducted a sensitivity analysis on a subset of patients admitted under the cardiothoracic service and compared the patients with Foley catheters with and without thoracic epidurals. In this subset, we found 1 CAUTI in 5,890 catheter days (0.17 CAUTI per 1,000 catheter days) in patients with thoracic epidurals and 4 CAUTIs in 9,429 catheter days (0.42 CAUTIs per 1,000 catheter days) in patients without thoracic epidurals, for a rate of 0.4002 (95% CI, 0.0447–3.5808; P < .39).

In this subgroup, 7.0% of patients with thoracic epidurals required a second Foley catheter compared to 16.9% of patients without thoracic epidurals who required a second Foley catheter (P < .01).

Conclusions: Although patients with thoracic epidurals maintain Foley catheters beyond 48 hours, the CAUTI rate in these patients is lower than in patients without thoracic epidurals. Therefore, removing Foley catheters within 48 hours of surgery in patients with thoracic epidurals may not reduce the risk of CAUTI and, in fact, could be harmful. Further evaluation of confounding variables is warranted.

Funding: None

Disclosures: None

Doi: 10.1017/ice.2020.676