Survey

Please circle one answer for each question.

1. **Have you participated in this survey before?**
   Yes No
2. **What is your clinical profession?**
   RN MD NP PA Other
3. **Which statement best describes your experience applying a DiskCover to your stethoscope?**
   Very hard Hard Not hard or easy Easy Very easy
4. **Compared to a disposable stethoscope, your stethoscope with a DiskCover performs?**
   Much worse Slightly worse No difference Slightly better Much better
5. **How often do you clean your stethoscope with alcohol for 60 secs (per CDC recommendations)?**
   After each pt. After a few pts. Daily Weekly Monthly Never
6. **Does the DiskCover System impact your workflow?**
   Significantly disrupt Slightly disrupt No impact Slightly improve Significantly improve
7. **As an alternative to cleaning between patients, how do you think the DiskCover System will impact STETHOSCOPE HYGIENE COMPLIANCE among the medical staff?**
   Significantly worsen Slightly worsen No impact Slightly improve Significantly improve
8. **How do you think the DiskCover system will impact PATIENT SAFETY?**
   Significantly worsen Slightly worsen No impact Slightly improve Significantly improve
9. **Where is the DiskCover System best placed for optimum workflow and stethoscope hygiene compliance?**
   As close to the patient as possible
   Outside the patient's room
   In the same place as the hand hygiene
   At the nursing station
10. **Based on your experience with the DiskCover System, and as compared to your current practice, do you see applicability of touch-free dispensing as valuable for other infection vectors (ultrasound probes, hands, etc.)?**
    Absolutely not No Maybe Yes Absolutely yes
11. **Additional comments and feedback:**

    _____

Thank you!

Fig. 1.

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Other
Changing the use of isolated urine-culture testing with diagnostic testing stewardship
Jessica Penney; Angie Rodday; Paola Sebastiani; David Snydman and Shira Doron

Background: Urine testing is one of the more frequently ordered diagnostic tests among hospitalized patients. Many hospitals have implemented urinalysis with reflex culture (UARC) as a method of diagnostic testing stewardship to guide appropriate use of urine testing. Isolated urine culture, or urine culture without preceding urinalysis, is the most appropriate diagnostic test for patients who are neutropenic, pregnant, or those about to undergo an invasive urologic procedures. This testing is often used beyond these indications in hospitals though, potentially leading to overdiagnosis of UTI and overtreatment of asymptomatic bacteriuria. **Methods:** We compared outcomes in the preimplementation period (December 2018–November 2019) to those in the postintervention period (December 2019–October 2020) at an academic medical center. The intervention was the addition of an indication selection (ie pregnancy, neutropenia, etc) to the isolated urine-culture order in the electronic medical record (EMR). The primary outcomes were isolated urine culture rate per 1,000 patient days and urine-culture positivity. Our exploratory analysis included a review of selected indications after the intervention was implemented and a chart review of a subset of these tests for appropriateness. The primary analysis was performed using interrupted time-series negative binomial regression. **Results:** There was no significant change in isolated urine-culture rates after the intervention (11.18 cultures per 1,000 patient days before the intervention versus to 7.75 cultures per 1,000 patient days after the intervention; $P > .90$), and there were as no significant pre- or postintervention trends. We detected no significant change in isolated urine-culture positivity: 26.9% before the intervention versus 26.7% after the intervention ($P > .90$). These results are shown graphically in Fig. 1. In the exploratory analysis, of 661 isolated urine-culture tests ordered in the postintervention period, the indication for testing was left blank in 71.9% of tests. The other most common reasons for testing included other (16%), pregnancy (5.7%), and neutropenia (4.4%). In the 100 tests reviewed for appropriateness, only 8% had a documented diagnosis corresponding with the selected indication for testing. **Discussion:** The addition of an indication selection for isolated urine culture testing did not change the rates of culture ordering or the culture's subsequent likelihood of positivity. In the exploratory analysis, most providers were incorrectly selecting this testing rather than UARC as prompted. Next steps could potentially be removing the "other" category and requiring a selected answer or requiring approval from stewardship team prior to ordering. Continued education of providers is paramount to the appropriate use of diagnostic testing.
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Disclosures: None

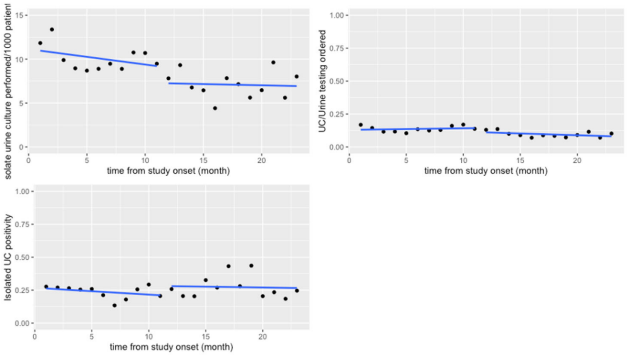

Fig. 1.

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Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Other
Risk factors for candidemia: A case–control study
Serin Edwin Erayil; Katelyn Tessier and Susan Kline

Background: *Candida* bloodstream infections (candidemia) have significant mortality and morbidity rates, as well as healthcare cost implications. Emerging multidrug-resistant *Candida* spp such as *Candida auris*, as well as increasing resistance among non–*albicans* species, which are becoming more prevalent, also raise concern. Understanding the epidemiology of this infection could enhance prevention and management efforts. We studied risk factors for candidemia. **Methods:** This matched case–control study was conducted at a university hospital from December 2019 through May 2021. Cases of candidemia were identified using positive blood-culture results. Controls were matched 5:1 to cases by age, sex, and month and year of admission. Risk factors of interest included total parenteral nutrition (TPN), central venous access (CVA), neutropenia, *Clostridium difficile*, pancreatic disease, *Candida* in urine culture, cancer, invasive procedures, H_2 blockers, chemotherapy,

Table 1. Summary of multivariable conditional logistic regression model with significant bivariate factors.

Variable	OR (95% CI)	P-value
Total parenteral nutrition[1]	-	-
Central venous access	6.85 (3.17, 14.83)	<0.001
Pancreatic disease	2.47 (1.16, 5.24)	0.019
Invasive procedure	1.33 (0.70, 2.53)	0.386
H2 blockers	1.89 (0.87, 4.11)	0.106
Antibiotic use	5.56 (1.46, 21.12)	0.012
Antifungal use	7.02 (3.57, 13.84)	<0.001

[1]TPN was excluded from the multivariable analysis due to independent correlation with CVA

antibiotic use, immunosuppression, and antifungal use. Bivariate conditional logistic regression models were used to study the association of individual factors with candidemia. Multivariable conditional logistic regression models were performed using factors with a P **Results:** Overall, 101 patients with candidemia and 505 matched controls were included. In the bivariate analysis, associations were detected between candidemia and TPN, CVA, pancreatic disease, invasive procedures, H_2 blocker use, antibiotic use, and antifungal use (all Ps **Conclusions:** Associations of candidemia with recent antifungal use and pancreatic disease were relatively novel findings. Neutropenia was not an independent risk factor for candidemia in this study. Future directions include further evaluations of previous antifungal use in patients with candidemia to identify opportunities for possible intervention and antifungal stewardship.

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Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Outbreaks

Management of a large tuberculosis contact investigation related to a contaminated bone graft product used in spinal surgery

Marci Drees; Lija Gireesh; Carol Briody; Charlotte Miller; Emily Hanlin; Ruoran Li; William Wilson; Noah Schwartz; Isaac Benowitz; Janet Glowicz and Tabe Mase

Background: In March–April 2021, 23 patients at a 906-bed hospital in Delaware had surgical implantation of a bone graft product contaminated with *Mycobacterium tuberculosis*; 17 patients were rehospitalized for surgical site infections and 6 developed pulmonary tuberculosis. In May 2021, we investigated this tuberculosis outbreak and conducted a large, multidisciplinary, contact investigation among healthcare personnel (HCP) and patients potentially exposed over an extended period in multiple departments. **Methods:** Exposed HCP were those identified by their managers as present, without the use of airborne precautions, in operating rooms (ORs) during index spine surgeries or subsequent procedures, the postanesthesia care unit (PACU) when patients had draining wounds, inpatient rooms when wound care was performed, and the sterile processing department (SPD) on the days repeated surgeries were performed. We created and assigned an online education module and symptom screening questionnaire to exposed HCP. Employee health services (EHS) instituted a dedicated phlebotomy station to provide interferon-γ release assay (IGRA) testing for HCP at ≥8 weeks after last known exposure. EHS managed all exposed HCP, including nonemployees (eg, private surgeons) via automated e-mail reminders, which were escalated through supervisory chains as needed until follow-up completion. The infection prevention team notified exposed patients, defined as those who shared semiprivate rooms with case patients with transmissible tuberculosis. The Delaware Division of Public Health performed IGRA testing. **Results:** There were 506 exposed HCP in ORs (n = 100), the PACU (n = 87), inpatient units (n = 140), the SPD (n = 54), and other locations (n = 122); 83% were employed by the health system. Surgical masks and eye protection were routinely used during patient care. All exposed HCP completed screening by December 17, 2021. Furthermore, 2 HCP had positive IGRAs without symptoms or chest radiograph abnormalities, indicating latent tuberculosis infection, but after further review of records and interviews, we discovered that they had previously tested positive and had been treated for latent tuberculosis infection. In addition, 5 exposed patients tested negative and 2 remain pending. **Conclusions:** This large investigation demonstrated the need for a systematic process that encompassed all exposed HCP including nonemployees and incorporated administrative controls to ensure complete follow-up. We did not identify any conversions related to this outbreak despite high burden of disease in case patients and multiple exposures to contaminated bone-graft material and infectious bodily fluids without respirator use. Transmission risk was likely reduced by baseline surgical mask use and rapid institution of airborne precautions after outbreak recognition.

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Presentation Type:
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Subject Category: Outbreaks

Learnings from a *Cutibacterium acnes* pseudo-outbreak in pediatric neurosurgical patients

Felicia Scaggs Huang; Andrea Ankrum; Cincinnati Hospital; Zheyi Teoh; Joshua Courter; ; Mangano and Karin Bierbrauer, Josh

Background: *Cutibacterium acnes* is normal skin flora as well as a common culture contaminant. It can cause infections in the setting of sterile implants, although clinical presentations can be subtle. Differentiating true infection from sample contamination is challenging and has implications for patient care. We describe an investigation of a cluster of 7 hospitalized pediatric patients with *C. acnes* isolated from anaerobic cultures of cerebrospinal fluid (CSF) over 3 weeks at a quaternary-care children's hospital. **Methods:** An outbreak response was coordinated between the infection prevention and control (IPC), microbiology, and neurosurgery teams. We defined a case as a hospitalized patient with *C. acnes* isolated from a CSF culture beginning in November 2020. We reviewed charts of all cases and CSF culture collection on all case units, transport to and processing at the microbiology laboratory, and the IPC team measured adherence for all processes. **Results:** There were 8 positive cultures in 7 cases from November 10 to 27, 2020. The median case age was 2 months (range, 0–119). Cases occurred on 4 different units. All positive patients had at least 1 implanted neurosurgical device used for CSF drainage. There were no clear commonalities in surgeon responsible for device placement, hardware type placed, or staff collecting CSF samples. A standard protocol for CSF collection was followed for all cases. Overall, 3 patients cleared cultures without intervention, 2 received oral antibiotics, and 2 underwent surgical removal of their device. Specimen processing was unchanged, although due to supply issues, an alternative anaerobic culture media (Anaerobic Systems, Morgan Hills, CA) was used for 6 weeks, during which all cases were identified. Compared to routine media, the alternative is known to enhance organism detection. The company reported no concerns for media contamination or *C. acnes* outbreaks. Once routine media

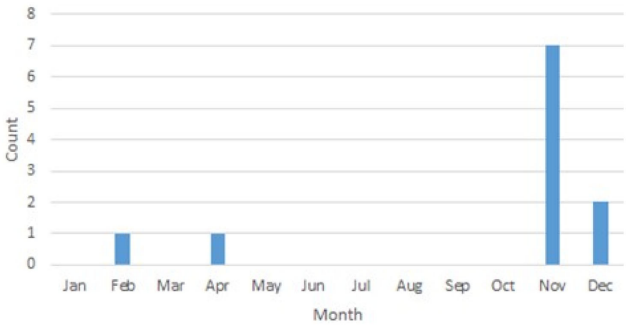

Fig. 1.