

Table 2: Baseline Demographic and Characteristics of Patients with and without the Skip Phenomenon (n = 495)

Characteristic	w/ Skip (n = 25)	w/o Skip (n = 470)	p-value
Age, years, median [IQR]	61.2 [56.7-71.8]	66.6 [54.9-75.8]	0.021
Female, n (%)	5 (20.0)	181 (38.5)	0.063
Body mass index, kg/m ² , median [IQR]	27.0 [24.7-29.4]	28 [23.4-35.3]	0.648
Charlson comorbidity index, median [IQR]	4 [2.0-6.0]	5 [3.0-7.0]	0.027
Comorbidities, n (%)			
Intravenous drug use	6 (24.0)	20 (4.3)	<0.001
Myocardial infarction	5 (20.0)	138 (29.4)	0.314
Congestive heart failure	7 (28.0)	151 (32.1)	0.666
Peripheral vascular disease	1 (4.0)	63 (13.4)	0.172
Chronic obstructive pulmonary disease	2 (8.0)	57 (12.1)	0.535
Connective tissue disease	3 (12.0)	50 (10.6)	0.830
Liver disease	1 (4.0)	44 (9.4)	0.364
Diabetes mellitus	9 (36.0)	169 (36.0)	0.997
Moderate to severe chronic kidney disease [†]	6 (24.0)	107 (22.8)	0.886
Malignancy	4 (16.0)	122 (26.0)	0.265
Cardiac prosthetic device	7 (28.0)	66 (14.0)	0.055
Prosthetic valve	3 (12.0)	20 (4.3)	0.075
Permanent pacemaker	1 (4.0)	36 (7.7)	0.498
AICD	4 (16.0)	11 (2.3)	<0.001
CRT	0 (0.0)	4 (0.9)	0.643
VAD	1 (4.0)	5 (1.1)	0.191
MRSA	7 (28.0)	131 (27.9)	0.989
Community onset infection, n (%)	16 (64.0)	165 (35.1)	0.003
ICU admission	11 (44.0)	116 (24.8)	0.061
Duration of symptoms, > 7 days, n (%)	17 (68.0)	193 (41.1)	0.008
Duration of BSI, median	3.2 [2.3-5.4]	1.9 [1.2-2.9]	0.002
High grade BSI, n (%)	22 (88.0)	276 (58.7)	0.004
Time to positivity, median hours [IQR]	11.0 [9.0-16.0]	15.0 [12.0-18.0]	0.014
PREDICT score day 1	2.0 [2.0-2.0]	1.0 [1.0-2.0]	<0.001
PREDICT score day 5	3.0 [2.0-4.0]	2.0 [1.0-3.0]	<0.001
Complicated bacteremia, n (%)	23 (92.0)	318 (67.9)	0.011
Infective endocarditis	7 (28.0)	53 (11.3)	0.013
Osteomyelitis	5 (20.0)	74 (15.7)	0.571
Inpatient IV antimicrobial duration, median days [IQR]	13.0 [10.0-17.0]	8.0 [5.0-13.0]	0.002
Outpatient IV antimicrobial duration, median days [IQR]	35 [24.0-57.0]	23.0 [11.0-36.0]	0.036
Total antibiotic duration, median days [IQR]	45.0 [28.0-51.0]	27.0 [14.0-43.0]	0.002

Values represent median [interquartile range] for continuous variables and frequency (%) for categorical variables. Abbreviations: BSI, bloodstream infection; IR, interventional radiology; IV, intravenous; MIC, minimal inhibitory concentration; n, number. [†]Moderate = creatinine >3 mg/dL (0.27 mmol/L). Severe = on dialysis, status post kidney transplant, uremia.

Table 3. Association of Skip Phenomenon with Clinical Outcomes

Outcome	Skip: No Skip Hazard Ratio (95% Confidence Interval)	p-value
Hospital stay	1.19 (0.74-1.92)	0.466 ¹
In-hospital mortality	2.35 (0.98-5.64)	0.055 ¹
Post-discharge 1-year mortality	0.69 (0.25-1.87)	0.463
Post-discharge 90-day relapse	—	0.172 ²

¹ Results obtained from a Cox PH regression model with the skip measure incorporated as a time-dependent covariate.

² P-value based on a likelihood ratio test from Cox model due to the paucity of data in the skip group (no relapses within 90 days).

Conclusion. Findings of the current investigation demonstrates an increased risk of SAB complications in patients with the SP and support the notion that serial negative blood cultures are needed to document clearance of SAB.

Disclosures. Larry M. Baddour, MD, Boston Scientific (Individual(s) Involved: Self): Consultant; Botanix Pharmaceuticals (Individual(s) Involved: Self): Consultant; Roivant Sciences (Individual(s) Involved: Self): Consultant **Muhammad R. Sohail, MD, Medtronic** (Consultant) **Philips** (Consultant)

10. Impact of Infectious Disease Consultation and Theoretical Management Bundle in Patients with Candidemia

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Session: O-02. Blood Stream Infections and Sepsis

Background. Candidemia is associated with significant morbidity and mortality. The impact of infectious diseases consultation (IDC) on clinical outcomes in patients with candidemia is not well established. We evaluated the impact of IDC and a management bundle on clinical outcomes in patients with candidemia.

Methods. A retrospective chart review of adult (age ≥ 18 years) patients with at least 1 blood culture growing *Candida* species identified at Alberta Precision Laboratories between December 1, 2019 to November 30, 2020 and hospitalized at the University of Alberta Hospital, Edmonton, Canada were included. Patients who died within 48 hours and those who left against medical advice within 24 hours of initial positive blood culture result were excluded. Demographics, management, and outcome data were collected. A complete management bundle was defined as having all the following elements performed: IDC, repeat blood cultures, empiric echinocandin therapy, ophthalmology consult, and echocardiogram.

Results. Thirty-one patients were included for study; mean age was 56 ± 17 years and 65% were male. 14 (45%) cases were admitted under critical care, 7 (23%) surgery, and 10 (32%) medicine. 3/17 (18%) required intensive care unit admission following

candidemia diagnosis. *Candida albicans* was identified in more than half the cases. The primary source was intra-abdominal in 12 (39%), central-line associated in 8 (26%), and urinary in 6 (19%). IDC occurred in 27 cases (87%), echocardiogram in 22 (71%), ophthalmology consult in 10 (32%), and follow-up blood cultures in 30 (97%). 20 (65%) patients received empiric echinocandin. Of the remainder who received empiric fluconazole, 4 (36%) grew non *albicans Candida* species.

Higher in-hospital mortality was observed in cases without IDC than those with IDC (4/4, 100% vs 8/27, 29.6%, p=0.016) and in those that did not have a complete bundle (12/25, 48% vs 0/6, p=0.059). However, IDC was not associated with the receipt of individual bundle components nor the complete bundle (p=NS).

Conclusion. In patients with candidemia, lower in-hospital mortality was observed in patients who received IDC. Larger studies are required to confirm our findings and assess whether the implementation of a candidemia management bundle is beneficial.

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11. Electronic Surveillance Criteria for Non-Ventilator HAP: Empiric testing and Chart Review at Veterans Affairs Facilities

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Session: O-03. Building Your Toolkit for HAI Surveillance and Stewardship

Background. Surveillance of Non-Ventilator Hospital-Acquired Pneumonia (NV-HAP) is limited by the ambiguity in diagnosing pneumonia. We implemented electronic surveillance criteria for NV-HAP across the VA healthcare system and tested for reliability, validity and meaning of the electronic criteria vs manual chart review.

Methods. We defined NV-HAP surveillance criteria as oxygen deterioration concurrent with fever or abnormal WBC count, ≥3 days of antibiotics, and orders for chest imaging. We applied these criteria to EHR data from all patients hospitalized ≥3 days at all VA acute care facilities from 1/1/2015-12/31/2020 and calculated NV-HAP incidence and inpatient mortality. Clinician reviewers used a consensus review guide to independently review and adjudicate 47 cases meeting NV-HAP surveillance criteria for 1) clinical deterioration, 2) CDC-NHSN pneumonia criteria, 3) treating clinicians' assessment, and 4) reviewer's diagnosis. All reviewers subsequently adjudicated all cases and conducted an error analysis to identify sources of discordance.

Results. Among 2.3M hospitalizations, 14,023 met NV-HAP surveillance criteria (0.6 per 100 admissions). Inpatient mortality was 26% (vs 2% for non-flagged hospitalizations). Among 47 hospitalizations flagged by surveillance criteria, 45 (97%) had a confirmed clinical deterioration, (the other 2 were immediate post-operative cases), 20 (43%) met CDC-NHSN pneumonia criteria, 21 (47%) had possible pneumonia per treating clinicians, and 25 (53%) had possible or probable NV-HAP per reviewers. Agreement among the 3 reviewers before adjudication was 51% (Fleiss' κ 0.43) for CDC-NHSN and 58% (Fleiss' κ 0.33) for NV-HAP. The most common source of discordance between reviewers was chest imaging classification (15/19 discordant cases).

Conclusion. NV-HAP electronic surveillance criteria demonstrated high precision for identifying clinical deterioration and moderate concordance with CDC-NHSN pneumonia criteria or reviewer diagnosis. Agreement between electronic surveillance criteria vs manual chart review was low but similar to agreement amongst manual reviewers applying NHSN criteria. Electronic surveillance may provide greater consistency than human review while facilitating wide-scale automated surveillance.

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12. Development of Provider-Specific Antibiotic Prescribing Feedback for Inpatient Antibiotic Stewardship Programs in Veterans Affairs (VA) Facilities (ASP)

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Session: O-03. Building Your Toolkit for HAI Surveillance and Stewardship

Background. Provision of provider-specific outpatient antibiotic prescribing data has resulted in significant decreases in antibiotic use. We describe the development of