

**Table 3: Likelihood of Bacteremia by Recent Chemotherapy**

Count Total % Col % Row %	Other Source of Positive Culture	Blood Culture	Total
No Recent Chemotherapy	15 33.33 100.00 41.67	21 46.67 70.00 58.33	36 80.00
Recent Chemotherapy	0 0.00 0.00 0.00	9 20.00 30.00 100.00	9 20.00
Total	15 33.33	30 66.67	45

  

Test	Chi Square	P - value
Likelihood Ratio	8.384	0.0038*
Pearson	5.625	0.0177*

**Table 4: Summary of Published Case Reports**

Case No.	Year	Author(s)	Journal	Age (years)	Sex	Location of IE	Organism	Immunosuppression	Outcome
1	1972	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
2	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
3	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
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8	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
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11	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
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17	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
18	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death
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100	1973	Wright et al.	Am J Med	45	M	Tricuspid	<i>S. aureus</i>	No	Death

**Disclosures.** All authors: No reported disclosures.

**153. A Review of Ten Cases of Pulmonic Valve Infective Endocarditis**

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**Session:** 37. Bacteremia, CLABSI, and Endovascular Infections  
**Thursday, October 3, 2019: 12:15 PM**

**Background.** Pulmonic valve (PV) infective endocarditis (IE) is a rare entity, accounting for ~1.5–2% of all cases of IE. As a result, published literature describing the diagnosis and management of patients with PVIE is limited.

**Methods.** A retrospective review of patients ≥18 years old admitted to Wake Forest Baptist Medical Center from 2012 to 2017 with a diagnosis of PVIE based on the modified Duke criteria was performed.

**Results.** Ten patients were identified as having PVIE, 9 of whom had isolated PV involvement and 1 of whom had concurrent aortic valve involvement. The diagnosis of IE was definite per the modified Duke criteria in 8 patients. The median age was 41 years and 30% were female. Two patients had pacemakers, 1 had a prosthetic PV, and 1 had congenital heart disease. Six patients were identified as persons who inject drugs (PWID). On admission, 5 patients manifested fever and 5 had a documented murmur. Seven patients had septic pulmonary emboli with 4 of 7 patients manifesting pulmonary hypertension. Transthoracic echocardiography (TTE) revealed vegetations in 4 of 10 patients whereas PV vegetations were demonstrated in all 8 patients undergoing transesophageal echocardiography (TEE). *S. aureus* was the most common causative organism, accounting for 5 of the cases of PVIE with four of the five isolates being methicillin-resistant. Bacteremia persisted for a median of 3 days. One patient underwent PV replacement. The planned median duration of antimicrobial therapy was 6 weeks. The median length of stay was 18 days. Three patients died during the index hospitalization, 1 of whom was a PWID. No episodes of repeat PVIE occurred within 1 year.

**Conclusion.** PVIE is a rare disease. Only 40% of our patients had vegetations on TTE in contrast to a reported diagnostic yield of >90% in the literature. As such, PVIE may be underdiagnosed. *S. aureus* was the most common organism isolated, which is

in keeping with prior reports. PWID appear to be at high risk for PVIE. In view of the worsening opioid epidemic, more research on PVIE is warranted.

**Disclosures.** All authors: No reported disclosures.

**154. Do I Really Need a Transesophageal Echo? Comparing Echocardiographic Modalities in Native Valve Infective Endocarditis due to Methicillin-Resistant Staphylococcus aureus**

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**Session:** 37. Bacteremia, CLABSI, and Endovascular Infections  
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**Background.** Methicillin-resistant *Staphylococcus aureus* (MRSA) infective endocarditis (IE) is associated with high morbidity and mortality. Management commonly includes six-weeks of antibiotics and surgical intervention, if the patient has complications. Current guidelines recommend obtaining an echocardiogram. Transesophageal echocardiogram (TEE) is preferred over transthoracic echocardiogram (TTE). We wanted to evaluate the role of a TEE in changing management of MRSA IE.

**Methods.** A retrospective cohort of patients with MRSA IE was analyzed between January 2013 and July 2017 at a tertiary care facility in East Tennessee. Patients with prosthetic valves or cardiac devices were excluded. Demographic, echocardiographic, antibiotic, blood culture, mortality, and intravenous drug use data were collected (Figure 1).

**Results.** Seventy-eight patients met the inclusion criteria. TTE was performed on 73 patients while five patients proceeded directly to TEE. Of the 73 patients that had a TTE, 33 (45.2%) detected the presence of vegetation and 40 (54.8%) did not. Of the 33 patients with a positive TTE, 15 subsequently underwent TEE, confirming IE. Out of the 40 patients with a negative TTE, 34 underwent TEE, of which 22 (64.7%) showed a vegetation. (Figure 2). A total of ten patients (12.8%) from the study underwent surgery. Of these ten, three (30%) had a positive TTE only, with no subsequent TEE. Five (50%) had both a positive TTE and TEE, and two (20%) had a negative TTE but positive TEE.

**Conclusion.** Transthoracic echocardiogram was adequate to visualize vegetations in 45.2% of patients. Completing a TEE increased the sensitivity of visualizing a vegetation, but management was most often not altered. Only two patients (5%) with a negative TTE, but positive TEE proceeded to surgery because of the findings. This causes us to question whether a subsequent TEE needs to be pursued when a TTE is negative in the setting of definite or possible IE by the modified Duke criteria. Even if a vegetation is seen on TEE the patient would most likely receive the same treatment, 6 weeks of intravenous antibiotics, as if no vegetation was seen. Forgoing a TEE reduces risk to the patient of undergoing a procedure, and reduces costs to the healthcare system.

Figure 1. Demographic Data

<b>Age</b>	Mean= 38 years	Range= 20-74 years	
<b>Race</b>	White= 72 (92.3%)	Black= 3 (3.9%)	Unable to Determine= 3 (3.9%)
<b>Intravenous Drug Use</b>	Yes= 63 (80.8%)	No= 15 (19.2%)	
<b>Hepatitis C Infection</b>	Yes= 39 (50%)	No= 39 (50%)	
<b>Disposition</b>	Discharged= 58 (74.4%)	Left Against Medical Advice= 10 (12.8%)	