

Is Echocardiogram always indicated in Bacteremia?

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BACKGROUND

- Echocardiography (ECHO) is a commonly used test and its results are a major criteria for diagnosing infective endocarditis (IE).
- Bacteremia with organisms not commonly associated with IE is commonly encountered in clinical practice.
- Clinicians often use ECHO when patients have any bacteremia.
- Guidelines for ECHO utilization in the presence of an implantable cardiac device has been developed.
- Often ECHO is done in patients with an implantable device when patients have bacteremia.

OBJECTIVES

- To analyze results of ECHO done in pts with bacteremia with organisms not typically associated with IE.
- To evaluate whether ECHO results was contributing to a diagnosis of IE in patients with bacteremia.

METHODS

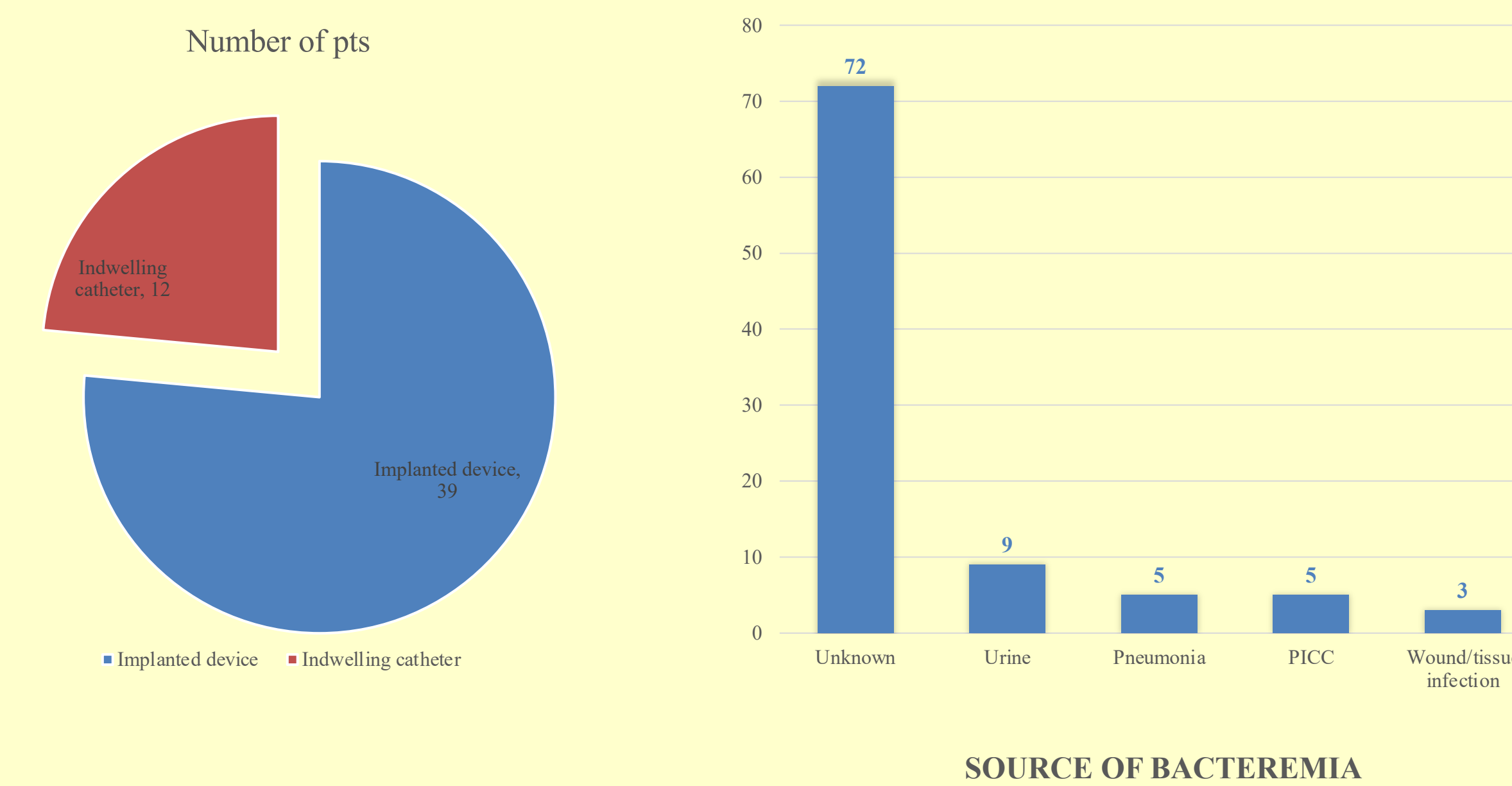
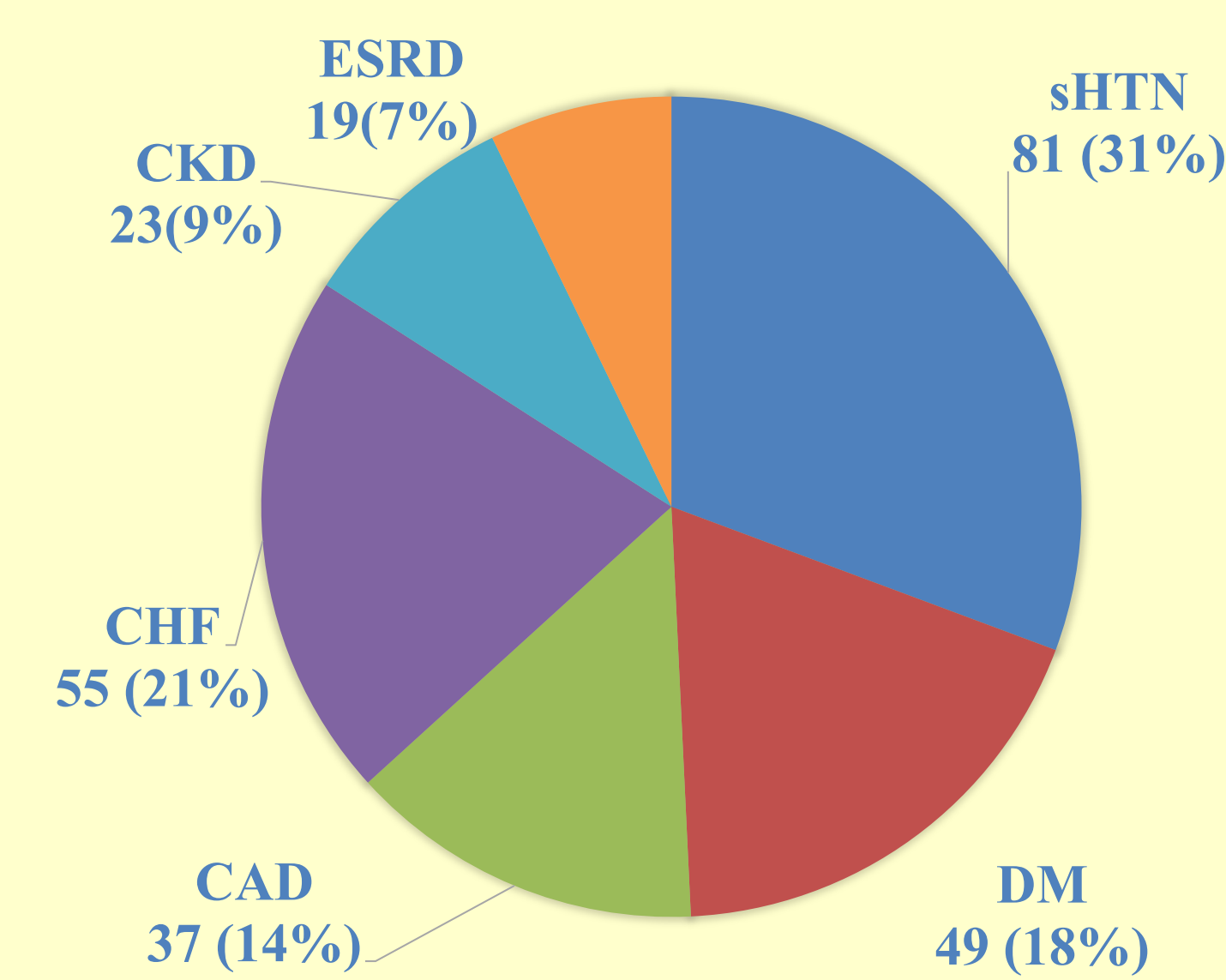
- A retrospective analysis in a tertiary care 670 bed teaching hospital.
- Study period 2013-2019.
- Adult patients >18years were included.
- Pts with at least 2 positive blood cultures for an organism not typically associated with IE who had an ECHO were analyzed.
- Data was collected for
 - Demographics
 - Blood culture (BC)
 - Bacteremia duration
 - Timing of ECHO and
 - ECHO findings

- Modified Duke's criteria was used to diagnose IE.

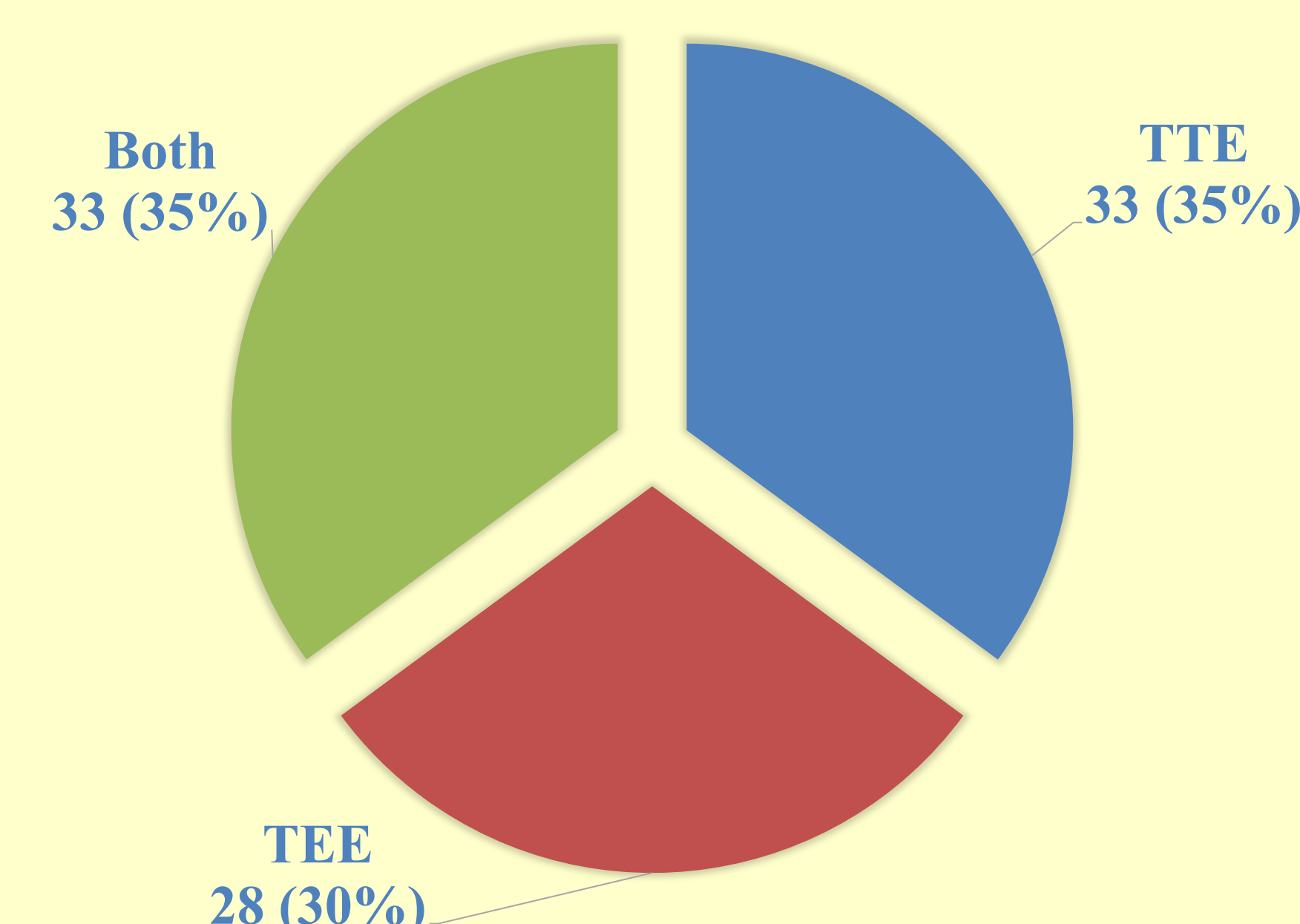
RESULTS

- Ninety four pts (N=94) were included.
- Mean age 62 yrs. (range 23-91).

50(53%) males

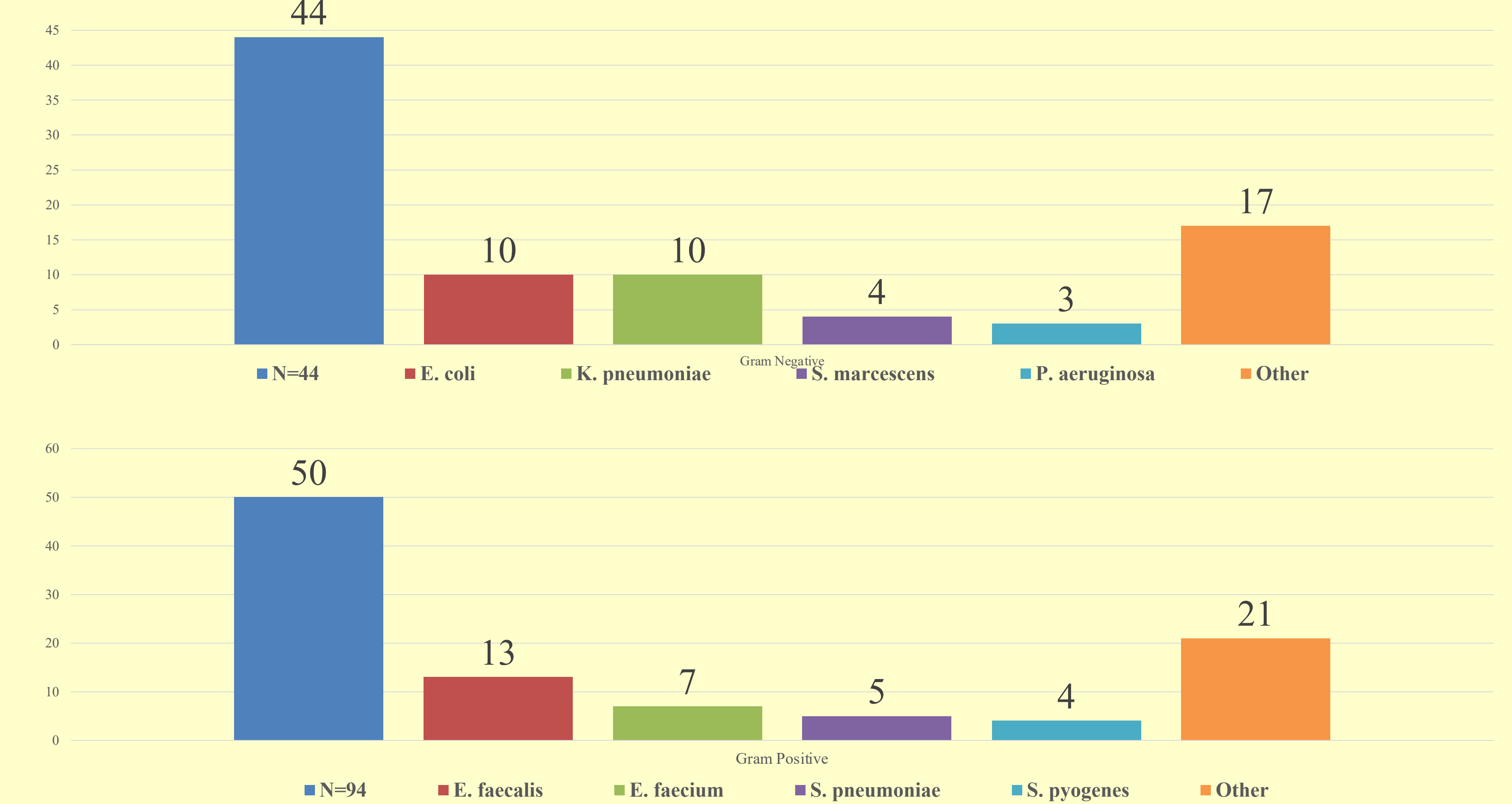


- Echocardiographic finding of vegetation/thrombus found in 11 (12%) pts
- Bacteremia was community acquired in n=70 (74%)
- Mean days of positive BC 5.6 days (range 1-34)

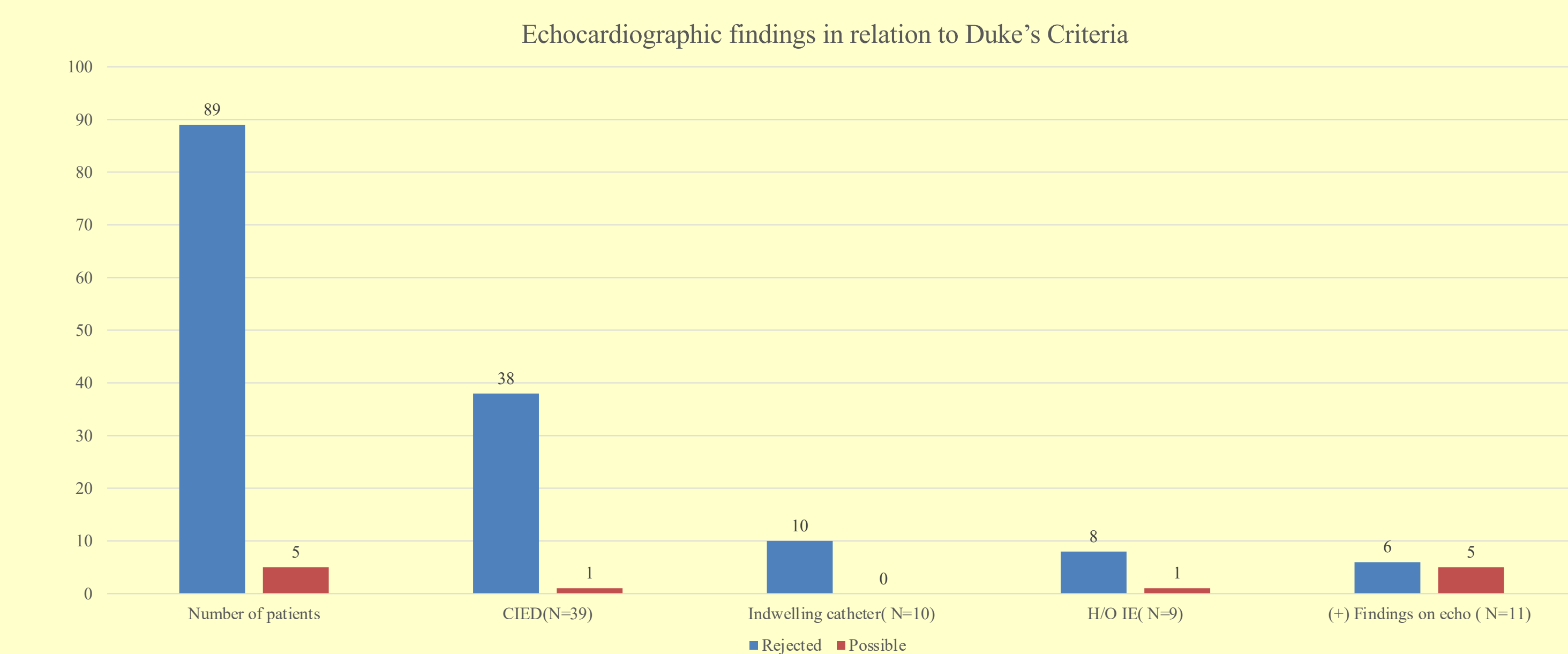


RESULTS

Echocardiogram based on organism



- None of the cases met definite Duke's criteria for the diagnosis of IE.



CONCLUSIONS

- The yield of ECHO in patients with bacteremia with organisms not typically associated with IE was low in our hospital.
- ECHO findings was not associated with a definite Dukes criteria for IE in our patients
- Presence of CIED or indwelling catheter or previous H/O IE did not show increased incidence of IE requiring ECHO in these patients.
- Clinicians should follow guidelines when doing an ECHO in patients with bacteremia with organisms not typically associated with IE.