A COMPARATIVE STUDY ON THE LABORATORY PARAMETERS AND CLINICAL OUTCOMES OF CULTURE-PROVEN AND CULTURE-NEGATIVE NEONATAL SEPSIS IN A TERTIARY GOVERNMENT HOSPITAL: A 5-YEAR RETROSPECTIVE REVIEW

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INTRODUCTION

Neonatal sepsis is one of the leading causes of neonatal mortality and its diagnosis remains to be a challenge to clinicians.

OBJECTIVES

This study compared the laboratory parameters and clinical outcome of culture-proven and culture-negative sepsis in neonates admitted at Philippine Children's Medical Center (PCMC) from January 2017 to December 2021.

METHOD

It is a retrospective analytical study comprising of 250 neonates diagnosed with neonatal sepsis with a blood culture taken within 72 hours from admission.

KEYWORDS

neonatal sepsis, culture-positive, culture-negative, laboratory parameters, clinical outcomes

RESULTS

3 patients (1%) had a positive culture growth, all of which showed growth of *Staphylococcus coagulase negative*, while 247 patients (99%) had a negative culture growth. Laboratory parameters compared between the two groups all had no statistical differences. Ampicillin and gentamicin was the first-line antibiotic therapy used in 177 (72%) culture-negative patients and 2 (67%) culture-positive patients; for which treatment was completed for 152 (86%) culture-negative patients and 1 (33%) culture-positive patient. There was 1 mortality in the study and this belonged to the culture-negative group.

CONCLUSION

Initiation of treatment for neonatal sepsis should still be based mainly on clinical signs and symptoms, regardless of laboratory parameters and culture results.