

**ORGANISMS PROFILE CULTURE AND SENSITIVITY
PATTERN IN PATIENTS ADMITTED IN PEDIATRIC
INTENSIVE CARE UNIT**

ABSTRACT

Background:

Infections are one of the leading causes of morbidity and mortality in patients admitted in the Pediatric Intensive Care Unit. This accounts for a major burden on the patients and public health system of our country.

Objective:

The aim of the study is to estimate the prevalence of organisms in patients admitted in Pediatric Intensive Care Unit and to estimate the Culture and Sensitivity pattern of the organism.

Methods:

The study was conducted in the Pediatric Intensive Care Unit of a tertiary care hospital from July 2016 to June 2017, in Children between 1 month and 12 years admitted in Pediatric Intensive Care Unit for infectious diseases like empyema, abscess, meningitis etc., from whom body fluids can be collected for analysis. Depending upon the clinical suspicion laboratory samples were collected from the patients. Samples were subjected to testing and antibiotic sensitivity.

Results:

The study included 424 children who satisfied the inclusion criteria . 20% of the population included in the study showed culture positivity. Prevalence of culture positive infections were more among the under five age group. Urinary Tract Infections were more common , followed by Respiratory tract infections. Most common organism was E.coli followed by Klebsiella. E.coli was more sensitive to Amikacin. Klebsiella was more sensitive to Aminoglycosides and third generation cephalosporins. Resistance was more to cotrimoxazole and Amoxycillin. Staphylococcus aureus was common in pus , skin and soft tissue infections.

Conclusion:

Gram negative sepsis was more common in the Pediatric Intensive Care Unit. Sensitivity was high to Aminoglycosides and third generation cephalosporins. Resistance was more to Cotrimoxazole and Amoxycillin. In a nutshell “ Right Indication , Right Antibiotic , Right Dose and Right Duration” are the key pillars of a rational antibiotic therapy. Antimicrobial resistance is a ticking bomb.

Keywords: Infection, Pediatric Intensive Care Unit, Drug sensitivity, Resistance.