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ANALYSIS OF PNEUMONIA ETIOLOGY AMONG NEWBORNS
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Relevance. Pneumonias are widely spread among newborns. Bacteriological testing has significant relevance in pneumonia detection especially checking using different cultures. It provides early detection of this infection and guidance during antibiotics therapy, to be able to know what antibiotics can reduce its growth or which can drugs this microbes are resistant to. In general it can help to reduce the spread of this infection as we know the causative agent and how it acts.

Aim: the main aim of bacteriological test is to identify bacteria and its different strains in a sample of culture and how it responds to factors that can impend or have no effect on its growth.

Materials and methods. A data about bacterial flora within 01.06.2023-18.02.2024 among newborns were undergoing treatment at 1st clinical hospital at neonatal resuscitation unit and its reaction in different cultures like blood, throat, urine, umbo. And also showing the time period in which mechanical ventilation was used to help with breathing functions as the patient has developed a respiratory disorder due to bacterial infections.

Results and their discussion. We calculated the percentage of growth and no growth microflora and antimicrobial resistance. Some of the microbes in these different cultures, had also developed some resistance to some antibiotics. Staphylococcus aureus resistant to gentamicin; Escherichia Coli, resistant to amikacin, nitrofurantoin; Stenotrophomonas maltophilia, resistant to cirpofloxacin etc. It's important to identify its etiology, because it'll be useful during the course of treatment, so as to know the drugs to be given to the patients that will lead to healing and a favourable outcome.

Mechanical Ventilation was important and very crucial role for resiparatory support. SIMV mode (Synchronised Intermittent Mechanical Ventilation) was used for 67 days , HFOV mode (High frequency oscillatory ventilation) ,Its used in more serious conditions and its found to improve short term oxygenation and Ventilation in neonates who failed SIMV and was used for a total of 10 days approximately.

Conclusion. Pneumonia is very serious in neonates and it's important to perform thorough bacteriological tests to aid early detection of the bacteria, it's also helps to differentiate its cause, if it's really a bacteria or non bacteria agent and with this tests we can know if the bacteria is resolving or persisting, to ensure proper line of treatment.