



MICROBES AND ANTIBIOTICS SENSITIVITY IN PRETERM PRELABOUR RUPTURE OF MEMBRANES: RETROSPECTIVE ANALYSIS

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INTRODUCTION:

Preterm Prelabour rupture of membrane (PPROM) is associated with preterm deliveries and can result in significant neonatal morbidity and mortality. An understanding of the various causative organisms and antibiotics sensitivity pattern in our setting will not only help inform maternal and neonatal management thereby improving maternal and foetal outcomes but also ensure rational use of antibiotics.

OBJECTIVES:

To determine the prevalence of preterm prelabour rupture of membranes (PPROM), identify the prevalent microbes in the genital tract of pregnant women with PPRM and determine the antibiotics sensitivity pattern at the Federal Medical Centre Abeokuta (FMCA).

METHODS: This was a retrospective study of all women who presented with PPRM between January 2018 and December 2020. The patient admission records were checked for all cases of PPRM and the results of High Vagina Swab Microscopy Culture and Sensitivity (HVS M/C/S) were retrieved. The data were inputted in a proforma designed for the study and analysed using SPSS 25.

RESULTS: A total of 99 cases of PPRM were managed within the period of study, given an annual live delivery rate of 1200 in our centre, the incidence of PPRM in this study was 2.75%. The study also showed that, out of the 99 cases of PPRM during the period, 73(73.7%) of the HVS M/C/S revealed no microorganism, while the remaining 26(26.3%) showed presence and growth of microorganism. *Trichomonas vaginalis* was observed in one of the cases mixed with *Euscherichia coli*.

MICROBE	Number(N)	Percentage
Euscherichia coli	6	23.1%
Klebsiella specie	2	7.7%
Staphylococcus aureus	1	3.8%
Candida albicans	17	65.4%
Total Microbes Isolated	26	100

TABLE 1: MICROBES ISOLATED

Antibiotics	E. coli N=6(%)	Klebsiella Sp. N=2(%)	Staph. Aureus. N=1(%)	Total number 9(100%)
Amoxycillin-clavulanic acid	2(33.3%)	2(100%)	1(100%)	5(55.6%)
Ceftriaxone	4(66.7%)	2(100%)	1(100%)	7(77.8%)
Ceftazidime	4(66.7%)	2(100%)	0(0)	6(66.7%)
Cefuroxime	1(16.7%)	1(50%)	0(0)	2(22.2%)
Cefepime	2(33.3%)	0(0)	0(0)	2(22.2%)
Ciprofloxacin	0(0)	0(0)	0(0)	0(0)
Erythromycin	0(0)	0(0)	0(0)	0(0)
Gentamicin	3(50%)	0(0)	0(0)	3(33.3%)
Ofloxacin	1(16.7%)	2(100%)	0(0)	3(33.3%)

TABLE 2 : ANTIBIOTICS SENSITIVITY PATTERN.

CONCLUSION: Majority of the HVS M/C/S showed no presence or growth of microbes which emphasised the fact that, the cause of PPRM is not always infective. The most prevalent bacteria isolated in this study was *Euscherichia coli*. The most sensitive antibiotics was ceftriaxone.