TO DETERMINE THE FREQUENCY OF PYREXIA IN WOMEN WITH PRELABORRUPTURE OF MEMBRANES

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ABSTRACT

OBJECTIVE

To determine the frequency of pyrexia in patients with prelabor rupture of membranes

METHODOLOGY

This descriptive (cross sectional) study was conducted in Department of Gynecology and Obstetrics, Khyber Teaching Hospital, Peshawar from 12th January 2016 to 13th July 2016.Sample size was 369,keeping 4% proportion of pyrexia among women with PROM,95% confidence interval and 2%margin of error under WHO sample size calculation. All women with any age or parity who presented with prelabor rupture of membranes were included in the study.

RESULTS

In this study, 369 women with PROM were observed.41(11.1%) patients were less than 20 years,139(37.7%) were in 21-30years age range,179(48.5%) were in age group 31-40years and only 10(2.7%) were more than 41 years age. Average age was 29.53±6.3SD.The pyrexia among women with PROM was observed in 39(10.57%)women, being more common in 31-40 years age group where it was noticed in 20(11.2%),followed by 21-30years age where 14(10.1%)patients were pyrexial.

CONCLUSION

Pyrexia is an enormous public health problem, accounting for the majority of cases of PROM in this part of the country.

KEY WORDS

Frequency, pyrexia, pregnancy, premature ruptures of membranes.

INTRODUCTION

Prelabor rupture of membranes or PROM is defined as the rupture of fetal membranes before the onset of labor[1].PROM complicates 8-10% of pregnancies [2] and is associated with increased risk of perinatal complications[3]Approximately 90% of women with PROM go into labor within one week[4]. Preterm PROM, while affecting about 5% of all pregnancies accounts for upto30% of all preterm deliveries[5].Intrauterine infection or chorioamnionitis which could be clinical or subclinical, remains the single most important factor implicated in the aetiology and pathophysiology of PROM. Other factors being nutritional deficiency, poor socioeconomic factors, lack of antenatal care, placentaprevia, use of tobacco and drugs of abuse[6,7]. The diagnosis of PROM is based on clinical evaluation such as observing fluid discharge during speculum examination, observing fern pattern in microscopic tests,and biochemical tests[8] like detection of nitrazine, vaginal di-amine oxidase, prolactin, alphafetoprotein, human chorionic gonadotrophin, fibronectin and amni Sure(placental alpha macroglobulin)[9].

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However, inability to diagnose PROM can lead to complications such as chorioamnionitis and labor[10]. The present study is designed to determine the frequency of pyrexia among women presenting with PROM. This study will help us to highlight the magnitude of pyrexia among women with PROM and the results of this study will be a useful guide for us to draw future research and management strategies for women with PROM.

METHODOLOGY

This descriptive(cross sectional) study was conducted at Department of Gynaecology and Obstetrics, Khyber Teaching Hospital, Peshawar from 12th January 2016 to 13th July 2016.Sample size was 369,keeping 4% proportion of pyrexia among women with PROM,95% confidence interval and 2% margin of error under WHO sample size calculation. Sampling technique was non probability (consecutive) sampling. Inclusion criteria was all women of any age or parity,at term gestation (37-42 weeks), presenting with PROM. Exclusion criteria were women with any other infectious site on history or physical examination and those less than 37 weeks gestation.

The study was conducted after approval from hospital ethical committee. All women meeting the inclusion criteria were enrolled in the study through OPD and labor room. Written informed consent was obtained from all patients. All women were subjected to complete history taking and detailed physical and gynecological examination including sterile speculum examination which is the first diagnostic tool for women presenting with PROM. A standard thermometer was used to measure the rectal temperature of the woman. Three separate readings were obtained five minutes apart and an average of three was taken as body temperature of woman and to label her as having pyrexia or not. All the above mentioned information including name, age and address were recorded in a predesigned proforma. Exclusion criteria were strictly followed to control confounders and bias in study results. All data was stored and analyzed in SPSS version 17.0.Mean and standard deviation was calculated for quantitative variables like age. Frequencies and percentages were calculated for categorical variables like pyrexia. All results were presented in the form of tables and charts.

RESULTS

In this study, 369 women with PROM presenting to Gynaecology and Obstetrics ward, Khyber Teaching Hospital, Peshawar were observed for pyrexia. Patient's age was divided in four categories, out of which most common age group for PROM was 31-40 years in our study, where 179(48.5%) patients fell. The average age of our study population was 29.53+6.3SD with maximum age of 45 years and minimum age was found to be 15 years. Age wise distribution of patients presenting with PROM is presented in Table No.1. The pyrexia among women presenting with PROM was observed in 39(10.57%) while 330(89.43%) women were free of pyrexia having PROM (Figure No. 1) Age wise distribution of pyrexia was a little high in older ages as compared to that of younger age group although it was statistically insignificant with p-value=0.987.The patients falling in 31-40 years age groups gave 11.2% and patients having more than 41 years age have 10% risk of pyrexia with PROM.(Table No. 2)

TABLE NO.1: AGE WISE DISTRIBUTION OF PATIENTS.(n=369)

Age(years)	Frequency	Percentage %
≤ 20	41	11.1
21 - 30	139	37.7
31 - 40	179	48.5
41 +	10	2.7
Total	369	100

Mean age was 29.53 years with standard deviation of ±6.3

FIGURE NO.1: DISTRIBUTION OF PYREXIA AMONG WOMEN PRESENTING WITH PREMATURE RUPTURE OF MEMBRANES. (n=369)

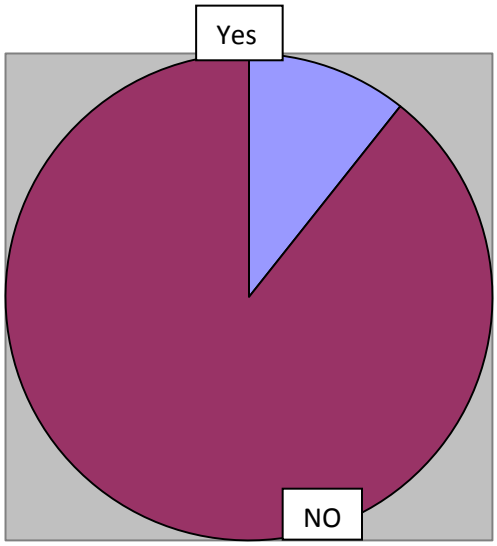

TABLE NO. 2: AGE WISE DISTRIBUTION OF PYREXIA. (n=369)

	Pyrexia		Total	p-value
	Yes	No		
Age(in years) ≤ 20	4 (9.8%)	37 (90.2%)	41(100%)	0.987
21 – 30	14(10.1%)	125(89.9%)	139(100%)	
31 – 40	20(11.2%)	159(88.8%)	179(100%)	
41+	1 (10%)	9 (90%)	10(100%)	
Total	39(10.6%)	330(89.4%)	369(100%)	

DISCUSSION

Prelabor rupture of fetal membranes occur in 5-10% of all pregnancies. Preterm PROM has received considerable attention in the recent obstetrical literature, and deservedly so, for it is directly responsible for approximately a third of all preterm deliveries. At least 60% of PROM occurin term patients, and even at this gestational age, clinical management can be surprisingly complicalted[11].

Alam MM et all conducted a study at Karachi, Pakistan where 564 womenwith PROM were enrolled, andthe commonest age group was 31-40 years in 46% women followed by 35% women who fell into age group of 21-30 years[12].Almost similar results were obtained in a comparative study done at Nepal by Giri. A et all were out of 180 women included in the study,50% were in age group of 35-40 years[13].

Noor. S et all in a study done at Abbotabad in 2006, recruited 170 antenatal cases out of which 85 had PROM and out of those presenting with PROM,12% were febrile[14].Close results were seen in a study done in Karachi in 2014 where 13% women with PROM had pyrexia[14]. This was in accordance with our study where 10.57% women with PROM presented with pyrexia. Frennete P et all analyzed the commonest age groups for the development of pyrexia in PROM patients and found that 12% patients with PROM in 25-30 years age group developed fever[3], compared with our study where 11.2%women with PROM developed fever in same age group. Expectant management or induction of labor was the main dilemma faced while managing a patient with term PROM. But once these patients develop pyrexia, delivery should be expedited to avoid the dreadful complication of chorioamnionitis.

CONCLUSION

Irrespective of its etiology, maternalintrapartum fever carries risks both for the mother and the unborn baby. Its prevention will be a main step in reducing maternal and perinatal mortality and morbidity. Putting more efforts into the care of these patients can timely diagnose and treat the cause and therefore reduce the complications associated with it.

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