ORIGINAL RESEARCH PAPER

Gynaecology

EARLY RUPTURE OF MEMBRANE.OBSTETRIC AND NEONATAL OUTCOME.

KEY WORDS: Prom, polyhydroamnious, chorioamnionitis, rds, sepsis

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ABSTRACT

BACKGROUND: Spontaneous rupture of membrane anytime beyond 28 weeks of pregnancy but before the onset of labour is called pre labour rupture of membrane.These pregnant ladies present with watery discharge per vaginum , pelvic pressure without labour pain.Incidence is 10% of all pregnancies.It is one of the most common cause preterm labour and prematurity.This also leads to significant perinatal complecations like pulmonary hypoplasia,neonatal sepsis,RDS,IVH and NEC in preterm premature rupture of membrane.Even CP rate is high.There is increased rate of maternal complecations also. Therefore appropriate evaluation and management are important for better maternal and fetal outcome.Evidence suggest that induction of labour as opposed to expectant management are important for decreasing the fetomaternal risk of without increasing cesarean delivery rate.

METHOD: The present prospective study was conducted in the dept of OG in KIMS.BBSR.This is a tertiary care centre with a good neonatal unit.The study period was from Jan to Dec 2017.All cases presented diagnosed with PROM attending ante natal clinic and labour waard are included in this study.Following a detailed history taking general,systemic ,obstetric examination done.All investigations were done as per protocol.Diagnosis confirmed.Continuous monitoring of both fetus and mother condition done.Antibiotic theraphy.corticostreroid theraphy given.Maternal and fetal outcome noted.

RESULT: More number of unbooked cases found to be presented with PROM. Most of the cases had pregnancy beyond 34 weeks Babies were underweight.Fetal outcome were proportional to gestational age.

CONCLUSION: From the above study it was concluded that PROM is related with poor fetomaternal outcome. Early diagnosis and timely adequate management is needed for better outcome.

INTRODUCTION

PROM Defined as spontaneous rupture of membrane anytime beyond 28 weeks of pregnancy but before the onset of labour.When rupture of membrane occurs beyond 37 week but before onset of labour it is called term PROM.When it occurs before 37 week called preterm PROM.Rupture of membrane for more than 24 hrs before delivery is called prolonged rupture of membrane.Mojority cases causes are not known.Possible causes are infections like UTI,lower genital tract infections.Other obsretric conditions like polyhydramnious,cervical incompetence are also lead to early rupture of membrane.These pregnant ladies presents with only subjective symptom like escape of watery discharge from vagina.

Under all aseptic condition per speculum is done to confirm diagnosis.These cases were investigated according to protocol.CBC, urine culture and sensitivity,c-reactive protein,high vaginal swab for culture and USG for fetal BPP and AFI.The major maternal risk at this gestational age is intra uterine infection.This increased with duration of PROM.With this background the study was conducted to evaluate the maternal and fetal outcome.

METHOD

The present prospective study was conducted in dept of OBGY. Of KIMS.from jan to dec 2017.During this period total no of ante natal cases admitted were about 1618.Those cases diagnosed as PROM were included in studies.Pregnant ladies with watery discharge per vaginum attending antenatal clinic and labour ward were subjects of our study.

On admission detail history was taken.Those who were not sure about their LMP gestational age was confirmed by USG.General,systemic and obstetric examination were done meticulously.Per speculam examination confirmed the diagnosis by demonstrating the leaking.Continuous maternal fetal condition monitored meticulously.According to our hospital protocol routine corticosteroid theraphy given to those pregnant ladies of gestational age was less than 36 weeks.Antibiotic course of seven days both parental and oral given.Most common antibiotics used are erythromycin,amoxicillin and ampicillin.Per vaginum examination was restricted.Decission for termination of pregnancy was taken depending upon the maternal and fetal parameters.Statistical analysis were done on MS Excel.All categorical data were represented as number and percent.

RESULT

Total number of cases registered were 1618.Among them PROM cases diagnosed were 220.

TABLE 1

BOOKED CASES	98	44.5%
UNBOOKED CASES	132	60%

So more number of unbooked cases were presented with such complaints.

TABLE 2
DISTRIBUTION OF CASES ACCORDING AGE.

<20 YRS	2	9%
20 TO25	56	25.45%
>25 TO 30	82	37.22%
>30 TO 35	56	25%
>35 TO 40	4	1.8%

TABLE 3.
DISTRIBUTION OF CASES ACCORDING TO GESTATIONAL AGE.

AGE IN WEEKS	NUMBER	%
28 TO 32	42	19
>32—35	110	50
>35—37	40	18.18
>37-40	28	12.72

TABLE 4
DISTRIBUTION OF CASES ACCORDING TO AFI.

1 TO 2	9	4.095
>2 TO 5	116	52.72%
>5 TO 8	95	43.18%

TABLE 5
DISTRIBUTION OF CASES ACCORDING TO MODE OF DELIVERY

VAGINAL	138	62.72%
LSCS	84	38.18%

TABKE 6
DISTRIBUTION OF CASES ACCORDING TO INDUCTION DELIVERY INTERVAL.

<6 hrs	29	8.6%
>6 TO12 hrs	36	16.36%
>12 to 18hrs	119	54.090%
>18 to 24 hrs	42	10.90 %

TABLE 7
FETAL OUTCOME IN LSCS.(n=84)

	APGAR		
<35 WKS	0 T03	4 TO 7	8 TO 10
52	7	35	10
>35 wks			
32	3	11	18

TABLE 8
FETAL OUTCOME IN VAGINAL DELIVERIES(n=138).

Gestational age	APGAR		
<35 WKS	0 TO 3	4 TO 7	8 TO 10
53	9	25	19
>35 WKS			
85	3	23	59

TABLE 9
MATERNAL COMPLECATIONS.

FEVER	26	11.8
WOUND GAPING	6	2.73%
SEPSIS	3	1.5%

DISCUSSION

There are many studies on this PROM.Total number of cases admitted with confirmed PROM were 220.Among them 132 cases were unbooked.So we found that booked cases were well monitored and factos responsible for early rupture of membrane like UTI,lower genital tract infections were taken care in time .So incidence of PROM were less.In unbooked cases when the leaking detected early prompt obstetric care,corticosteroid and antibiotic theraphy helped in improving feto maternal outcome.50% cases were found in the age group 25 to 30.most of them were primi.Gestational age in most of the study group were between 32 wks to35 wks.Rate of spontaneous delivery 62.7%.LSCS was 38%.

Indications for LSCS were abnormal presentations,fetal distress,sepsis.In our study best fetal outcome in term of APGAR score were found in most of the cases where gestational age more than 35 wks. This also established that there is a definitive relationship between timing of delivery with fetal outcome.Maternal complecatins were not significant.Out of 220 cases only 25 cases developed some fome of symptoms like fever,wound gap and sepsis.Those were taken care properly discharged with good condition.

CONCLUSION

Neonatal complecations are are inversely proportional to Gestational age at the time of PROM and delivery interval. Antenatal corticosteroid theraphy after PROM reduces the risk of RDS.IVH and NEC.It does not increase the maternal and neonatal sepsis.Antenatal antibiotic theraphy helps in prolonging the pregnancy and preventing chorioamnionitis and endometritis.It also helps in preventing neonatal sepsis.Both obstetrician and neonatologists should work as a unit to ensure optimal card for both mother and child.

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