ORIGINAL ARTICLE

Maternal Outcome in Women with Threatened Miscarriage

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ABSTRACT

Aim: To determine the maternal outcome in women with threatened miscarriage
Study Design: Descriptive study
Place and duration of study: Obstetrics & Gynecology unit, Central Park Teaching Hospital, Lahore. 1st January 2015-31st December 2015
Methodology: Pregnant women with vaginal bleeding less than 24 weeks with single viable intrauterine pregnancy on ultrasonography were included in the study. Patients with multiple pregnancies, inevitable miscarriage, incomplete miscarriage and complete miscarriage were excluded.
Results: A total of 64 cases fulfilling the inclusion/exclusion criteria were enrolled to determine the maternal outcome in cases of threatened miscarriage. Age distribution of the patients was done which shows 23(35.93%) were between 20-25 years, 26(40.63%) between 26-30 years and 15(23.44%) were between 31-35 years of age, mean and sd was calculated as 27.32+2.54 years. Gestational age of the patients (at the time of presentation) was calculated which shows 17(26.55%) were between 18-20^{+7} weeks, 22(34.38%) between 21-22^{+7} weeks and 25(39.07%) were between 23-24 weeks of gestation, mean and sd was 22.43+1.36 weeks.Frequency of maternal outcome in cases of threatened miscarriage revealed 25(25%) P/V leakage, 19(29,69%) had cesarean section and 37(57.81%) had hypertensive disorders. Some of the patients had multiple outcomes. Stratification of maternal outcome with regard to age of the patients was done, out of 16 cases of P.V leakage, 7(43.75%) were between 20-25 years, 5(31.25%) were between 26-30, 4(25%) were between 31-35 years, out of 19 cases of cesarean section 6(31.58%) were between 20-25 years, 7(36.84%) between 26-30 years and 6(31.58%) between 31-35 years while out of 37 cases of hypertensive disorders 13(35.14%) were between 20-25 years, 16(43.24%) between 26-30 years and 8(21.62%) were between 31-35 years of age.
Conclusion: We concluded that the frequency of maternal outcome is higher in patient with threatened miscarriage and among them Hypertensive disorders are more common. So, it is recommended that every patient who presents with threatened miscarriage should be sorted out for maternal outcome. However, it is also required that every setup should have their surveillance in order to know the frequency of the problem.
Keywords: Threatened miscarriage, maternal outcome, p/v bleeding, cesarean section

INTRODUCTION

Threatened miscarriage is associated with adverse pregnancy outcome[1]. It increases the rate of spontaneous preterm delivery and placental abruption and decreases the neonatal weight therefore threatened miscarriage indicates a high risk pregnancy and as such demand more prenatal care[2]. Threatened miscarriage associated with adverse pregnancy such as hypertensive disorders of pregnancy 51.2%, preterm prelabor rupture of membranes 21% and Caesarean section 26.6%[3]. Ultrasonographic findings in patients clinically diagnosed with threatened miscarriage demonstrate a viable pregnancy in nearly half of the cases[4]Subchorionic hematoma is another ultrasound finding that is associated with higher incidence of threated miscarriage and preterm deliveries[5]. Fetal loss is observed in about one quarter of pregnancies admitted with threatened miscarriage in low socioeconomic population[6]. Serum leptin level in the first trimester of pregnancy may not be the primary indicator of miscarriage in case of threatened miscarriage[7]. Supportive care may reduce miscarriage rates. Avoidance of Intercourse commonly advised but of no proven benefit[8]. There is insufficient evidence of high quality that supports a policy of bed rest in order to prevent miscarriage in women with confirmed fetal viability and vaginal bleeding in first half of pregnancy[9]. Dydrogesterone has beneficial effects on maintaining pregnancy in women with threatened miscarriage[10]. Intramuscular progesterone treatment in women with threatened miscarriage in early pregnancy is not associated with

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higher risk of pregnancy complications, preterm birth and low birth weight newborns[11]. There is no evidence that smooth muscle relaxant can prevent threatened miscarrage[12]. The rationale of my study is to collect some local data regarding maternal outcome in women with threatened miscarriage as no significant Pakistani statistics are available and this will help in comparing with international data and will guide obstetricians to have high index of suspicion and timely intervention.

METHODOLOGY

Pregnant women with vaginal bleeding less than 24 weeks with single viable intrauterine pregnancy on ultrasonography were included in the study. Patientswith multiplepregnancies, inevitable miscarriage, incomplete miscarriage and complete miscarriage were excluded from the study. Informed consent was taken from each patient included in study. All information was filled in a Proforma containing details of name, age, address, and contact no. and relevant investigation. Diagnosed cases of threatened miscarriage were included. Detail history was taken at the time of admission regarding symptoms. Their duration and severity related to present pregnancy along with previous obstetrics history from how long history of p/v bleeding and no. of episodes. Physical examination was carried out in detail Blood pressure, pulse, temperature, pallor, edema. Pelvic examination (closed cervix). The cases were investigated urine for pregnancy test and all base line investigations including complete blood count, urine examination for proteinuria, serum ALT, Serum uric acid an Ultrasonography for fetal viability. Regular follow up of diagnosed patients from OPDand emergency till delivery was done and outcome of patients was assessed. P.V leaking was examined on per speculum examination. Mode of delivery was recorded. The data was entered into SPSS (V .10) and analyzed descriptive statistics were calculated quantitative variable of study age and gestational age was presented as mean and standard deviation qualitative variable P.V leakage, mode of delivery and Hypertensive disorder of pregnancy was presented as frequency and percentages.

RESULTS

A total of 64 cases fulfilling the inclusion/exclusion criteria were enrolled to determine the maternal outcome in cases of threatened miscarriage.Age distribution of the patients was done which shows 23(35.93%) were between 20-25 years, 26(40.63%) between 26-30 years and 15(23.44%) were between 31-35 years of age, mean and SD was calculated as 27.32+2.54 years.Gestational age of the patients (at the time of presentation) was calculated and presented in Table 2, which shows 17(26.55%) were between 18-20^{+7} weeks, 22(34.38%) between 21-22^{+7} weeks and 25(39.07%) were between 23-24 weeks of gestation, mean and sd was 22.43+1.36 weeks.Frequency of maternal outcome in cases of threatened miscarriage revealed 25(25%) P/V leakage, 19(69%) had cesarean section and 37(57.81%) had hypertensive disorders. Some of the patients had multiple outcome (Table 3). Stratification of maternal outcome with regard to age of the patients was done, out of 16 cases of P.V leakage, 7(43.75%) were between 20-25 years, 5(31.25%) were between 26-30, 4(25%) were between 31-35 years, out of 19 cases of cesarean section 6(31.58%) were between 20-25 years, 7(36.84%) between 26-30 years and 6(31.58%) between31-35 years while out of 37 cases of hypertensive disorders 13(35.14%) were between 20-25 years, 16(43.24%) between 26-30 years and 8(21.62%) were between 31-35 years of age (Table 4).

Table 1: Age distribution of the patients (n=64)

Age(in years)	**n**	**%age**
20-25	23	35.93
26-30	26	40.63
31-35	15	23.44
Total	64	100
Mean and SD	27.32±2.54	

Table 2: Gestational age of the patients (at the time of presentation) (n=64)

Gestational (weeks)	**n**	**%age**
18-20^{+7}	17	26.55
21-22^{+7}	22	34.38
23-24	25	39.07
Total	64	100
Mean and sd	22.43±1.36	

Table 3: Frequency of maternal outcomes in cases of threatened miscarriage (n=64)

Maternal outcome	**n**	**%age**
P/V leakage	16	25
Cesarean section	19	29.69
Hypertensive Disorders	37	57.81

Note: Some patent had maternal outcome

Table 4: Stratification of maternal outcome with regards to age of the patients (n=64)

Regards to age of pts 20-25	**7(43.75%)**	**6(31.58%)**	**13(35.14%)**
26-30	5(31.25%)	7(36.84%)	16(43.24%)
31-35	4(25%)	6(31.58%)	8(21.62%)
Total	16(100%)	19(100%)	37(100%)

DISCUSSION

The literature regarding threatened abortion is relatively limited on the subject of outcomes and viability at term. Small number of patients and significantly biased data collection has limited previous studies of pregnancies that were complicated by threatened abortion.[80-81]Knowledge about the outcome of ongoing pregnancies following first trimester bleeding will be helpful in order to plan antenatal care and consider clinical intervention in pregnancy. In our institute a large number of patients are with threatened miscarriage with vaginal bleeding. No study in our institute was conducted to determine whether first trimester vaginal bleeding is an independent risk factor for adverse obstetric outcome or not, therefore, the current was planned which will be helpful for the patients with threatened miscarriage and obstetricians to decide antenatal surveillance and management of these pregnancies.

We recorded frequency of maternal outcomes in cases of threatened miscarriage revealed 16(25%) P/V leakage, 19(29.69%) had cesarean section and 37(57.81%) had hypertensive disorders. Some of the patients had multiple outcomes. The findings of the study are in agreement with WIjesirwardana A and colleagues who demonstrated that outcomes such as Hypertensive disorders of pregnancy 51.2%, preterm prelabor rupture of membranes 21% and Caesarean section 26.6%[3]. It is hypothesized that first-trimester bleeding may indicate an underlying placental dysfunction, which may manifest later in pregnancy causing adverse outcomes I.e. increased risk of preterm delivery, preterm prelabour rupture of membranes (PPROM), placental abruption and intrauterine growth restriction (IUGR).

The association between vaginal bleeding and preterm delivery has also been noted by others. Batzofin *et al* and Williams *et al* reported that patients with bleeding had double the risk of preterm delivery compared with patients without bleeding. The study of Williams *et al.* was limited to first trimester bleeding; [86] Batzofin *et al* included patients with bleeding up to 20 weeks. Strobino and pantel – Silverman failed to show an association between preterm delivery before 36 of gestation with mild vaginal bleeding in the first or second trimester of pregnancy. Davari –Tanha F is also of the view that first-trimester vaginal bleeding is an independent risk factor for adverse obstetric outcomes and showed statistically significant difference in patients with first trimester vaginal bleeding, PPROM, 16 %(24/150) these findings are highly in agreement with results of the current study. The results of the current with support of other studies are helpful for the patients with threatened miscarriage with vaginal bleeding and obstetricians to decide antenatal surveillance and management of these pregnancies.

CONCLUSION

We concluded that the frequency of maternal outcome is higher in patient with threatened miscarriage and among them. Hypertensive disorders are more common. So, it is recommended that every patent who patient who present with threatened miscarriage, should be sort out for maternal outcome. However, it is also required that every setup should have their surveillance in order to know the frequency of the problem. That every patient who present who present with threatened miscarriage, should be sort out for maternal outcome, however, it is also required that every setup should have their surveillance in order to know the frequency of the problem.

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