



Original Research Article

Outcome of pregnancy following previous spontaneous abortion

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ABSTRACT

Background: The objective of the present study was to study the pregnancy outcome following previous spontaneous abortion.

Materials and Methods: The present study included 140 patients admitted in the department of Obstetrics and Gynaecology Government Medical College Srinagar, LD Hospital Jammu & Kashmir India from September 2018 to February 2019. Patients with history of spontaneous abortion preceding present pregnancy irrespective of gravidity, first visit or booked or unbooked were enrolled. Detailed history regarding previous abortion was taken and examination was done focussing on information about previous abortion. All the routine investigations along with investigation for possible etiologies of previous abortions were done. The patients were observed for complications like PROM, placenta previa, preeclampsia, placental abruption, abortion, IUDF, breech, threatened abortion, still birth during the present pregnancy.

Results: Out of 140 patients 100 were booked and 40 un-booked. Majority of the patients (39.2%) were in the age group of 25-30 years. 58.5% patients belonged to urban areas. Majority of patients (67.8%) were uneducated or educated till primary level. 15.7% of the patients had threatened abortion and 11.2% had complete abortion. Further it was found out that patients with pre term delivery and PROM were 14.2% and 9.25 respectively. 50% of patients delivered by caesarean section. It was further observed that foetal outcome was good in 72% of patients with lbw 9.2% and IUGR in 7.1% patients.

Conclusion: From the study it was observed that patients with history of previous spontaneous abortion are associated with adverse pregnancy outcome. The pregnancy outcome in terms of maternal and foetal complications can be improved by giving proper antenatal care.

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1. Introduction

The term miscarriage (abortion) is used to describe a pregnancy that fails to progress, resulting in death and expulsion of embryo or foetus. The generally accepted definition speculate that the foetus or embryo should weigh 500 grams or less, a stage that corresponds to gestational age of upto 20 weeks (WHO).¹ Spontaneous pregnancy loss or miscarriage occurs in 15% of pregnancies.² In India it has been observed that occurrence of spontaneous abortion is higher in urban than rural areas.³

According to American Pregnancy Association (APA), 10-25% of all clinically recognized pregnancy end in miscarriage. The cause of miscarriage varies from person to person and often the cause is unknown.⁴

Abortion has been suggested to be related to foetal pathology, congenital abnormality, low birth weight, low APGAR score, Down's syndrome in young mother, IUGR and preterm labour in next pregnancy.^{5,6}

The main cause of recurrent abortions include anatomical disorders, hormonal abnormalities, genetic abnormalities and thrombophilias.⁷

Studies have reported a favourable outcome with 70-80% live births with counselling and supportive care in patients with previous spontaneous abortions.⁷ The present study

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aims to examine the pregnancy outcome in patients with history of previous abortions.

2. Materials and Methods

The present study included 140 patients admitted in the department of Obstetrics and Gynaecology Government Medical College Srinagar, LD Hospital Jammu & Kashmir India from September 2018 to February 2019. Patients with history of spontaneous abortion preceding present pregnancy irrespective of gravidity, first visit or booked or unbooked were enrolled. Detailed history regarding previous abortion was taken and examination was done focussing on information about previous abortion. All the routine investigations along with investigation for possible etiologies of previous abortions were done. The patients were observed for complications like PROM, placenta previa, preeclampsia, placental abruption, abortion, IUFD, breech, threatened abortion, still birth during the present pregnancy.

Their socio-demographic profile was also observed in the study.

3. Results

Out of 140 patients 100 were booked and 40 un-booked as shown in Table 1.

Table 1: Patients

Booked	Unbooked
100	40

Majority of the patients (39.2%) were in the age group of 25-30 years as shown in Table 2.

Table 2: Age groups of patients

Age	20-25	25-30	30-35	35-40
	20	55	40	25
%	14.20	39.20	28.50	17.80

58.5% patients belonged to urban areas as shown in Table 3.

Table 3: Residence

Place of residence	Rural	Urban
	58	82
%	41.22	58.58

Majority of patients (67.8%) were uneducated or educated till primary level areas as shown in Table 4.

15.7% of the patients had threatened abortion and 11.2% had complete abortion. Further it was found out that patients with pre term delivery and PROM were 14.2% and 9.25 respectively areas as shown in Table 5.

Table 4: Education

Education	No	Primary	High school	Graduate	Postgraduate
No.	30	65	25	15	5
%	21.4	46.4	17.8	10.7	3.50

Table 5: Maternal complications

Maternal complications	No.	%
PROM	13	9.2
Placenta Previa	4	2.8
Pre-eclampsia	8	5.7
Eclampsia	1	0.7
Plc abruption	5	3.5
Abortion	16	11.4
IUFD	3	2.1
Breech	7	5.0
Pt delivery	20	14.2
Threatened abortion	22	15.7

Mode of delivery in 42% of patients was caesarean section, followed by normal vaginal delivery in 37% and assisted vaginal delivery in 3.5% areas as shown in Table 6.

Table 6: Mode of delivery

Mode of delivery	Caesarean section	Normal vaginal delivery	Assisted vaginal delivery
Total	70	59	5
Percentage	50%	42.14%	3.5%

It was further observed that foetal outcome in 72% of patients was without any complication and low birth weight was found in 9.2% of patients and IUGR in 7.1% of patients and low APGAR in 8.5% of patients areas as shown in Table 7.

Table 7: Foetal outcome

Foetal outcome	No.	%
Still birth	3	2.1
Iugr	10	7.10
Lbw	13	9.2
Low apgar	12	8.5
No complication	88	62.8

4. Discussion

The present study is aimed to study the outcome in 140 patients with history of previous spontaneous abortions. A total of 40 patients came to hospital first time and were unbooked and 100 were booked. Maximum patients were in the age group of 25-30 years, it being the most reproductive age group similar to Sahu et al. 2014, where majority of abortions 34.3% were in the age group of 25-29.⁸

Educational status of patients showed that 95 patients out of 140 (67.8%) had no formal education or only upto primary level which is similar to Hemminki et al. 1999 who reported that spontaneous abortion is more common in patients with low educational status.⁹

Abortions were found to be more common in urban population as reported by Thapa et al. and mainly being induced abortions.¹⁰ It is well observed that risk of abortions increases with increasing number of previous pregnancy loses. The incidence of miscarriage was found to be 9.4%, 14.8%, 20% and 100% after first, second, third and fourth abortion respectively. Clifford et al. 1997 reported abortion rate after third and fourth abortion to be 29% and 27% respectively.^{7,11}

History of abortion in previous pregnancy is a risk factor, atleast for psychological aspects.¹²

In our study there was an increased risk of pre Eclampsia in patients with previous abortion. Similar findings have been reported by Kashanian et al 2005.¹³

There is a controversy regarding the role of previous abortion on placenta previa in next pregnancy. Some studies suggest there is no relation between the two as reported by Abu-Heija AT et al. 1999.¹⁴ Other studies like Hendricks MS et al.¹⁵ Macones GA et al.,¹⁶ Ananth CV et al.¹⁷ Thom DH et al.¹⁸ have reported that multiple abortions are a risk factor for placenta previa. In our study 2.8% patients had placenta plevia.

Previous abortion increases the risk of threatened abortion, pre term delivery and foetal loss. But some studies have shown otherwise.¹⁹ Sheiner E et al. in their study demonstrated higher risk of complications like abruptio placenta, hypertensive disorders and caesarean section.

Pregnancy outcome following spontaneous abortion was compared in one study showing that spontaneous miscarriage increases risk of congenital abnormalities, low APGAR at 1 minute low birth weight, threatened abortion and pre term delivery are increased.²⁰

5. Conclusion

Pregnancy with history of previous spontaneous abortion are associated with adverse pregnancy outcome, however the complications and foetal loss can be reduced by giving proper antenatal care.

6. Source of Funding

None.

7. Conflict of Interest

None.

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