

Outcome of pregnancy following previous spontaneous abortion

¹Dr. Abhilasha Ramachandran, 2nd year resident, Dept. of Obgyn, SBKSMI & RC, Vadodara

²Dr. Kavita Chandnani, Professor, Dept. of Obgyn, SBKSMI & RC, Vadodara

Corresponding Author: Dr. Kavita Chandnani, Professor, Dept. of Obgyn, SBKSMI & RC, Vadodara

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Abstract

Background: WHO defines pregnancy as pregnancy termination or loss before 20 weeks of gestational age or when fetus delivered weighing <500g.¹ Abortion maybe threatened, incomplete, complete, inevitable, recurrent.² In pregnancy of 5 weeks to 12 weeks the incidence of abortion ranges from 11-22% and is higher in the earlier weeks.³ Abortion has been suggested to be related to fetal pathology, congenital abnormality, low birth weight, low APGAR score, Downs syndrome, intrauterine growth retardation and preterm labour in next pregnancy.⁴ The purpose of the study is to determine the effect of a spontaneous abortion on the outcome of next pregnancy including spontaneous abortion, placenta previa, preeclampsia, eclampsia, premature rupture of membranes, preterm labour, caesarean delivery, instrumental delivery etc.

Aim: To study the pregnancy outcome following previous spontaneous abortion.

Materials And Methods: A retrospective study of the ANC patients with full term pregnancy with singleton pregnancy with history of previous spontaneous abortion

admitted at Dhiraj Hospital in the department of obstetrics and gynecology during the period of January 2020 to May 2020 was considered. A total of 70 patients were taken into the study out of which 40 were booked and 30 were unbooked. The detailed history about previous abortions was taken and routine as well investigations for possible etiologies of previous abortions were done. All the patients were observed for complications during present pregnancy like threatened abortion, preeclampsia, preterm labour, premature rupture of membranes, intrauterine fetal death, breech etc.

Result: Out of 70 patients 40 were booked and 30 unbooked. Majority of the patients (57.1%) were in the age group of 21-30 years. 58.5% patients belonged to rural areas. Majority of patients (61.4%) were uneducated or educated till primary level. Maximum patients (45.7%) were with history of previous one abortion followed by history of previous 2 abortions (38.6%). The final results were majority term live birth (74.3%), complete abortion (11.42%), threatened abortion (15.7%). Further it was found out that patients with preterm delivery and PROM were 10% and 14.2% respectively. 28.5% of

patients delivered by caesarean section. It was further observed that foetal outcome was good in 62.8% of patients with lbw 9.8% and IUGR in 6% patients.

Conclusion: From the study it was observed that patients with history of previous spontaneous abortion are associated with adverse pregnancy outcome. there is increased risk of abortion , preterm delivery, caesarean sections and fetal loss in cases of previous spontaneous abortions. The pregnancy outcome in terms of maternal and foetal complications can be improved by giving proper antenatal care.

Keywords: Pregnancy, PROM, Spontaneous abortion, Placenta previa, Preeclampsia, Placental abruption, Abortion, IUFD, Breech, Threatened abortion, Still birth

Introduction

The word 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 Abortion maybe threatened, incomplete, complete, inevitable, recurrent.² Spontaneous pregnancy loss or miscarriage .occurs in 11-22% of pregnancies in early gestational age of 5weeks-12weeks.³ In India it has been observed that occurrence of .spontaneous abortion is higher in rural than urban areas.⁵ 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.⁶Abortion is 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.⁴The main cause of recurrent .abortions include anatomical defects, hormonal abnormalities, genetic abnormalities

and.thrombophilias.⁷.Studies have reported. a good outcome with 70-80% live births with. counseling and supportive care in patients with previous spontaneous abortions.⁷ The present study aim is to know the pregnancy outcome in patients with. History of previous abortions.

Methodology

This was a retrospective study and was conducted in the Department of Obstetrics and Gynecology of Dhiraj Hospital, Vadodara, Gujarat.

Sample size: 70 patients

Duration: 1st January 2020 to 1st May 2020.

The present study included 70 patients admitted in the department of Obstetrics and Gynecology during January 2020 to May 2020. Patients with history of spontaneous abortion preceding present.pregnancy irrespective of gravidity, first visit or booked.or unbooked were enrolled. Detailed history about 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 looked for complications like PROM, placenta previa, preeclampsia, placental abruption, abortion, IUFD, breech, threatened abortion, still birth during the present pregnancy.

Observations and Results

Out of 70, 40 patients were booked and 30 patients were unbooked.

Majority of the patients were in the age group of 25-30years, and were from rural areas and had no education or only primary education.

Table.1: Distribution of patients as per age, area of residence and educational level

Age	20-25	25-30	30-35	30-40
	14	26	18	12
%	20	37.1	25.7	17.1

Table 2: Spontaneous abortion associated with curettage and without curettage

Socioeconomic class	Urban			Rural	
		29			41
%	41.22			58.58	
Education	None	Primary	Highschool	Graduate	Postgraduate
No	28	15	13	10	5
%	40	21.4	18.5	14.28	7.1

Spontaneous abortions followed by curettage was more common than those without. Complications like PROM, preterm delivery, placenta previa, abruption placentae and others were looked for. The rate of abortion was noted

wherein 15.7% patients had threatened abortion and 11.4% had complete abortion. The maternal complications were stated as per

Table 3: Maternal complications

Complications	No.	%	With curettage(46)	Without curettage(24)
• PROM	7	10	5	2
• Placenta Previa	2	2.8	2	0
• Pre eclampsia	2	2.8	2	0
• Eclampsia	1	1.4	1	0
• Abruption Placenta	2	2.8	2	0
• IUFD	2	2.8	2	0
• Breech	5	7.1	4	1
• Preterm delivery	10	14.2	7	3
• Threatened abortion	11	15.7	11	0
• Complete abortion	8	11.42	7	1
Booked	3	4.28	2	1
Unbooked	5	7.14	5	0
• Without complications	20	28.5	15	5

Curettage in previous abortion has no significant effect on the next pregnancy outcome as the p value >0.05. The number of abortion, was 3 (4.28%) in booked patients and

5(7.14%) in unbooked patients, though not significant, complete abortion was more in the unbooked category than the booked.

Table 4: Mode of delivery

Mode of delivery	Caesarean section	Normal vaginal delivery	Assisted vaginal delivery
No.	20	34	8
%	28.5	48.5	11.4

Mode of delivery was caesarean section in 20 (28.5%) and 42(59.9%) were normal delivery out of which 8(11.4%) were assisted vaginal delivery and 2 (2.8%) were IUFD. 8 (11.4%) patients had complete abortion. The fetal outcome in 72% of patients was without any complication and low birth weight was seen 9.2% and IUGR in 7.1% and low APGAR score in 8.5%

Table 5: Fetal outcome

Fetal outcome	No.	%
• Still birth	2	2.8
• IUGR	4	6
• Low birth weight	7	9.8
• Low APGAR	5	7.1
• No complication	44	62.8

Discussion

The study aimed to study the outcome of 70 [atients who had history of spontaneous abortion, Out of 70, 30 patients were unbooked and came to our centre for the first time and the rest 40 patients were booked. Majority patients(37.1%) were of age group 25-30years, it being the most reproductive age group as per Sahu et al., 2014, where majority.of.abortions 34.3% were in the age group of 25-29.8⁸Patients out of 70 (61.4%) had no formal education or only primary level which is similar to Hemminki et al. 1999.who reported that spontaneous abortion is more common in patients with low educational status⁹Spontaneous abortions were found to be more

common in rural population as compared to the report by Thapa et al. wherein the abortions were more common in urban population 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 aspects¹². In our study, The number of abortion was more in unbooked patients (as compared to booked patients In our study there was no increase in risk of pre eclampsia.in patients with previous abortion in contrast to findings that have been reported by Kashanian et al 2005.¹³Some studies suggest there is no relation between abortion and placenta previa as reported by.Abu-Heija AT et al. 1999-¹⁴Other studies like Hendricks.MS et al.¹⁵ Macones GA et al,¹⁶ Ananth CV et al¹⁷ ThomDH et al¹⁸ have reported that multiple abortions are a risk.factor for placenta previa. In our study 2.8% patients had.placenta pervia which was not statistically significant.Previous abortion increases the risk of threatened abortion, pre term delivery and foetal loss. But some studies.have shown otherwise¹⁹ Sheiner E et al. in their study.demonstrated higher risk of complications like

abruption.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 increased²⁰

Conclusion

Pregnancy with history of previous spontaneous abortion is associated with adverse pregnancy outcomes. There is increased risk of abortion, preterm delivery, need for caesarean sections and fetal loss in cases of previous spontaneous abortions The complications can be reduced with good antenatal care and counseling.

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