



Recurrent Pregnancy Loss: Evaluation and Treatment

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ABSTRACT

Recurrent Pregnancy Loss is a problem which is responsible for great mental trauma to a woman and with each pregnancy loss chances of successful pregnancy outcome decrease. Aim of this study was to evaluate patients with recurrent pregnancy loss and to treat them in order to have a successful pregnancy outcome. It was a prospective study conducted over a period of one and half year in the Department of Obs&Gynae, MLB Medical College, Jhansi, comprised of 50 women who had two or more consecutive pregnancy losses before 20 weeks of gestation. We found that 48% patients with RPL had identifiable cause, out of which anatomical defects were the commonest, while 52% cases had no identifiable cause. This study concluded that identification & treatment of causes of RPL will result in good outcome.

KEYWORDS : Recurrent Pregnancy Loss, miscarriage, APLA.

Introduction

Recurrent pregnancy loss is defined as 3 or more consecutive pregnancy losses prior to 20 weeks from last menstrual period. It affects 1% to 2% of women. Best available data suggest that risk of miscarriage in subsequent pregnancies is 30% after 3 losses among patients without a history of live birth. Pregnancy is a hypercoagulable state. Successful pregnancy outcome is highly dependent on placental development and placental function. Over last decade evidences have shown that some cases of recurrent pregnancy loss are due to exaggerated hemostatic response during pregnancy leading to thrombosis and infarction. There are various causes associated with recurrent pregnancy loss of which most common are: 1) *Genetic causes* -Aneuploidy, Somatic, Sex chromosome, Mendelian disorders, Parental chromosomal abnormalities, Chromosomal inversion 2) *Immunologic causes* -Autoimmune causes .Alloimmune causes 3) *Anatomic causes*-Uterine mullerian anomaly (Uterine septum ,Hemiuterus,Bicornuate uterus),Diethylstilbestrol linked conditions ,Acquired defects (e.g. Asherman syndrome) ,Incompetent cervix ,Leiomyomas, Uterine polyp 4) *Infectious cause* 5) *Environmental causes* -Smoking ,Excessive alcohol intake , Caffeine 6) *Endocrine factors*-Diabetes factors ,Antithyroid antibodies ,Leuteal phase deficiency 7) *Hematologic disorders*.

Material and methods

The present study "Recurrent Pregnancy loss-evaluation & Treatment" was conducted on 50 women admitted in the ward, attended Emergency or OPD of Department of Obstetrics and Gynecology of MaharaniLaxmi Bai Medical College, Jhansi from March 2014 to Oct 2015. Pregnant woman between 20-40 years of age who had a regular marital life with the same partner and regularly menstruating before current pregnancy, with history of at least 2 previous consecutive pregnancy losses before 20 weeks of gestation were included in the study. Women with pregnancy losses after 20 weeks of gestational age were excluded from the study.

Observation and Result

Total 50 patients were included in the study. It was found that maximum cases of RPL remain unexplained. Table I showing the causes of

RPL is at the end of this article. Most females (50%) were in the age group of 26 to 30 years. This study showed cervical incompetence as the most common anatomical cause (14%) of RPL. Antiphospholipid antibody syndrome was found positive in 12% of cases of RPL. Study showed that certain endocrinal abnormalities like Diabetes Mellitus and Hypothyroidism may lead to Recurrent Pregnancy Loss. The study showed that infection like genital tuberculosis can lead to RPL. Our study showed that appropriate treatment of cause in RPL can result in good outcome and empirical treatment with aspirin and progesterone may be beneficial in unexplained cases.

Discussion

In our study we accounted various etiological factors responsible for recurrent pregnancy loss. The identifiable causes accounted for 48% cases (as shown in Table I), out of which anatomical defects were the commonest etiology. However, 52% of cases had no identifiable cause present. A similar study conducted by SaminaMohyiddin and Syed Tousif Ahmed in 2014 revealed unidentified causes accounting for 46%. Amongst the identifiable causes endocrinal factors accounted for 17%, anatomical defect for 10-15% and chromosomal abnormalities accounting for 12%.

10(20%) patients had Anatomical abnormalities, out of which 7 were suspected of cervical incompetence and cervical encrclage was done. Among the treated patients live birth rate was 71.4% (5/7 patients). This was comparable to the study by MeenalPatvekar et al in which 23.33%(7/30) had anatomical abnormalities out of which 4 had cervical incompetence. Drakeley AJ et al. in 2003 found that cervical insufficiency was diagnosed in 4.6 per 1000 women, and it is estimated to occur in 8% of women with recurrent mid-trimester losses.

7(14%) patients had endocrinal factors responsible for pregnancy losses, out of these 3 had Diabetes mellitus and were treated with hypoglycaemic drugs giving 100% live births, and 4 had Hypothyroidism, who were treated with Thyroxin which led to live births in all 4 patients. In a similar study by MeenalPatvekar et al 10% patients with RPL had endocrinal abnormalities.

6(12%) patients were tested positive for Antiphospholipid antibodies and were treated with Low dose Aspirin(75 mg) and LMWH this resulted in 66.6% (4/6 patients) live births. Similar results were seen in the study by MeenalPatvekar et al which showed that 6.67% patients with RPL were APLA positive. In a study conducted by Luis S. Noble et al. in 2005 found that 16% of cases of RPL were APLA positive.

1(2%) patient had endometrial TB and had successful pregnancy after Anti tubercular treatment. Study by MeenalPatvekar found 10% cases of RPL had endometrial TB.

No cause could be identified in 26(52%) patients, these patients were given empirical treatment with Low dose aspirin and Progesterone, out of these 57.6% (15/26) patients had successful pregnancies with live births. A similar study conducted by SaminaMohyiddin and Syed Tousif Ahmed in 2014 revealed unidentified causes accounting for 46%.

Conclusion

In our study we found that 48% patients with RPL had identifiable cause, out of which anatomical defects were the commonest etiology. While 52% cases had no identifiable cause.

10(20%) patients had anatomical abnormalities, out of which 7 were suspected of cervical incompetence and had undergone cervical cerclage & resulted in live birth rate of 71.4%(5/7 patients)

7(14%) patients had endocrinal factors, out of these 3 had Diabetes Mellitus who resulted in successful pregnancy after treatment with hypoglycemic drugs, and 4 had Hypothyroidism who were treated with thyroxin which led to successful outcome.

6(12%) patients were positive for Antiphospholipid antibodies and on treatment with Aspirin and LMWH resulted in 66.6% (4/6 patients) live births.

1(2%) patient had endometrial TB & had successful pregnancy outcome after Antitubercular treatment.

No cause could be identified in 26(52%) patients who were given treatment with low dose aspirin & progesterone, out of these 57.6%(15/26) patients resulted in successful pregnancies.

Abbreviations

RPL-Recurrent Pregnancy Loss, APLA-Antiphospholipid antibody, LMWH-Low molecular weight heparin, ATT-Antitubercular treatment

TABLE I: ETIOLOGICAL FACTORS IN ASSOCIATION WITH RPL

Etiology	Number of cases	Percentage
Anatomical defects	10	20
Endocrine	7	14
Immunological	6	12
Others	1	2
Unknown	26	52
Total	50	100

TABLE II: ANATOMICAL DEFECTS

Anatomical defects	No. of cases(50)	Percentage
Normal	40	80
Cervical incompetence	7	14
Septate uterus	2	4
Unicornuate uterus	1	2
Total	50	100

TABLE III: OUTCOME OF TREATMENT

Causes	Treatment	Outcome	
		Successful	Unsuccessful
Cervical Incompetence	Encerclage	5	2
Septate uterus	Resection	2	0
	Metformin	3	0
Endocrinal	DM	3	0
	Hypothyroidism	Thyroxin	4
APLA	Low dose aspirin + LMWH	4	2
Other causes (Endometrial TB)	ATT	1	0
Unexplained	Low dose aspirin + progesterone	15	11

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