EVALUATION OF CASES REPORTING WITH BLEEDING PER VAGINA DURING FIRST 20 WEEKS OF GESTATION

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ABSTRACT

A descriptive study was carried out to determine prevalence of vaginal bleeding in pregnancy till 20 weeks of gestation to find out the causes and management of such cases. Out of the total 13200 pregnant patients admitted in the gynecology ward from January 1999 to December 2000, 1494 patients (11.3%) presented with bleeding in early pregnancy. The prevalence of bleeding before 20 weeks was calculated to be 11.3%. Amongst these cases, 1434 (95.9%) were abortions, 28 (1.87%) ectopic, 22 (1.47%) molar and 10 (0.66%) were due to local causes and trauma. The highest frequency of bleeding was in the first trimester, 81.7% as compared to 18.2% in the second trimester. The prevalence of abortion was 10.8% in this period. Women between 26-35 years of age experienced more abortions. The percentage of abortion increased as the parity increased. 42.5% and 30.3% abortions in fourth and fifth pregnancies respectively. The previous history of abortion 632 (44%) and the last pregnancy abortion 591 (41.2%) were the significant factors in the past obstetric performance of the patients. The main maternal risk factors were medical problems in 307 cases (21.4%), treatment for infertility in 265 cases (18.47%) and use of contraception in 266 patients (18.5%). No cause was found in 200(13.9%) patients. The bleeding was conservatively managed in 345 cases and the pregnancy progressed in 108 patients. 101 women underwent dilatation and curettage for missed abortion and 695 evacuation and curettage for incomplete abortion. Laparotomy for ectopic was done in 28 females and suction curettage was carried out for molar pregnancy in 22 patients.

Keywords: Early pregnancy, bleeding, abortion, prevalence, risk factors

INTRODUCTION

The majority of the complications occur in the first trimester of the pregnancy leading to its loss due to spontaneous miscarriage and to a lesser extent, ectopic pregnancy. Failure to make accurate diagnosis may cause unnecessary pain and distress and may compromise women's reproductive future. This problem is particularly more distressing if the condition is recurring. As the diagnostic tests in early pregnancy are improving, it is pertinent to focus more attention to provision of advanced care and support at this important time in pregnancy [1].

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The differential diagnoses of bleeding in early pregnancy include miscarriages, ectopic pregnancy, gestational trophoblastic disease, dysfunctional uterine bleeding, and benign and malignant tumors of the reproductive tract. Vaginal bleeding occurs in a quarter of clinically recognized pregnancies. In the first trimester pregnancy complicated by bleeding, less than 50% will progress normally beyond 20 weeks of gestation, 10-15% will be ectopic pregnancy, 0.2% will be hydatiform mole and over 30% will miscarry. Approximately 5% women will elect to terminate the pregnancy [2].

According the WHO definition, abortion or miscarriage is defined as the loss of fetus or

embryo weighing less than 500 grams equivalent to approximately 20-22 weeks of gestation [3]. It is estimated that abortion complications are responsible for 14% of the approximately 500,000 maternal deaths that occur each year, 99% of these in the developing world. It is one of the major causes of maternal deaths in Pakistan contributing 11% to the maternal mortality ratio [4]. Consequent maternal morbidity is high with immediate complications including blood loss, sepsis, damage to viscera and renal failure. Chronic illnesses subsequent to abortion are anemia, chronic pelvic pain, pelvic inflammatory disease, dysparenia, sub fertility and ectopic pregnancy [5,6,7]. The purpose of this study was to determine the prevalence of bleeding in pregnancy till 20th week of gestation. Evaluation of the maternal risk factors and past reproductive performance was done and treatment outcome seen in each patient.

MATERIALS AND METHODS

This was a descriptive study carried out in the Obstetric and Gynecology Department of Military Hospital, Rawalpindi from January 1999 to December 2000. The sampling of the patients was temporal. All the patients with vaginal bleeding till 20th week of pregnancy were recruited for the study. Detailed history was taken and the clinical examination was done. The laboratory workup was carried out according to the presentation of patients. It included blood complete picture, blood group and RH factor, blood sugar level, serum beta HCG, urine analysis, urine pregnancy test and a pelvic ultrasound. Data was endorsed in a Proforma designed for the study. Previous obstetric history and the maternal risk factors leading to early pregnancy bleeding were noted in each case. All cases with abortion were sub classified as spontaneous, induced, threatened, incomplete and complete. Treatment given to each patient was recorded.

Since the data was categorical therefore, percentages were calculated using SPSS (version 10.0)

RESULTS

During the period under study, 13200 females were admitted in the gynecology ward. Out of these 1494 (11.3%) were admitted with early pregnancy bleeding. Amongst these 1434 (95.9%) cases were of abortion, 28 (1.87%) ectopic pregnancy, 22 (1.47%) molar pregnancies and 10 (0.69%) were secondary to maternal trauma and local causes. This is shown in table-1.

Highest frequency of early pregnancy bleeding was seen between 8-12 weeks of pregnancy. Maximum complications were seen in the first trimester than in the second trimester of the pregnancy, 81.7% as compared to 18.2%.

Prevalence of abortion was calculated to be 10.8% in this period. Spontaneous abortion occurred in 990 (69.0%) and induced abortion in 444 (30.9%) of the total cases (table-2). It was seen that prevalence of abortion increased with the increasing age of the mother. Females in their fourth and fifth pregnancies suffered a higher frequency of abortion. History of previous abortions and the last pregnancy abortion were found to be the major contributory factors in the past obstetric history of the patients presenting with abortions. Anemia, low health, pre-existing diabetes mellitus and hypertension and conception after treatment for infertility were the main maternal risk factors leading to abortion. IUCD users had a higher miscarriage rate (72.9%) than those using other contraceptive measures. No obvious cause for abortion was found in 200 out of 1434 cases. The data is shown in table-3.

The treatment for early pregnancy bleeding was carried out according to the cause. Laparotomy for ectopic pregnancy was done in 28 (1.8%) females. 22 (1.47%) women underwent suction curettage for molar

pregnancy. Abortion was conservatively managed in 345 (23%) cases. Pregnancy progressed in 108 (7.2%) females and their bleeding got settled later on. Dilatation and curettage for missed abortion was done in 101 (6.7%) cases. 695(46.5%) patients with incomplete abortion had evacuation and curettage and 195 (13%) required no evacuation following spontaneous complete abortion.

DISCUSSION

Bleeding in early pregnancy leads to significant maternal morbidity and mortality. The loss of wanted pregnancy is always distressing to the couple and the associated psychological morbidity can cause mental, physical and sometimes social deterioration. Women with severe complications like ruptured ectopic pregnancy and hemorrhage in a molar pregnancy may end up in grave ill health, compromised obstetric future and even death. This is a highly traumatic emotional event in any woman's reproductive career and greatly underestimated by the medical practitioners [8]. Amongst the cases of early pregnancy bleeding, the prevalence of abortion was found to be 10.8%. This is comparable to the study from Liaquat Medical College Hyderabad, where the corresponding figure was 11.4% [9]. Regan found the risk of miscarriage before 20th week to be 12% [10]. However, Saad reported the incidence to be around 45-55% [11]. This difference may be due to the difference in the number of patients reporting to the respective hospitals. The gestational age also influenced the frequency of early pregnancy bleeding. The first trimester bleeding was more common than the second trimester bleeding. 81.7% women with first trimester pregnancy had vaginal bleeding as compared to 18.2% of the second trimester patients. A prospective study by Everett also supports this finding [12]. He found out that over 1/5th of the pregnancies before 20th week of gestation had bleeding and over half the cases miscarried. Tabinda Rana showed that 90% gestations were lost during the first trimester and 10% during the second trimester [13]. Aga Khan Hospital study also concluded that there is a higher bleeding rate in first trimester patients [14]. Arafa and Abdul Fataah reported similar findings from their hospital [15]. Women between 26-35 years of age experienced more miscarriages. Increasing parity was also related with increased number of abortions. Women in their fourth and fifth pregnancies had higher rate of abortion than others. Anemia, low health, preexisting diabetes mellitus, hypertension and conception after treatment for infertility were the main maternal risks factors for abortion. IUCD users also had a higher abortion rate, 72.9% than those using other methods of contraception. Mehrunnisa found maternal metabolic problems and induced abortion to be the major causes of abortion [9]. Previous history of abortion, recurrent or repeated abortions and last pregnancy abortion were found to be the main contributory factors leading to abortion in the present pregnancy. The observations of the study by Regan are similar to the above findings [10]. However Everett concluded that the risk was not significantly increased after a miscarriage in the previous pregnancy [12]. Ectopic pregnancies 2.14%, Molar pregnancies 1.87% and incidental causes / trauma 0.69% were the other main causes of bleeding. A study from Post Graduate Medical Institute, Services Hospital Lahore reported that in a series of 118 consecutive cases, abortion related causes were in 100 patients, ectopic in 15, molar in 1 and local causes in 2 cases [16].

The patient who is bleeding must be identified as a priority. It is important to assess the amount and rate of blood loss as accurately as possible. A speculum examination of the vagina is essential to fully assess external "revealed" blood loss associated with a miscarriage. Although shock can occur in association with bleeding in early pregnancy, young fit women can compensate by maintaining their arterial

blood pressure until very late when it may be difficult to reverse the shock. Early pregnancy hemorrhage may be catastrophic. Further more it may be intraperitoneal and not obvious. Regular recording of pulse and blood pressure should be made in a potentially shocked patient. If patient is shocked irrespective of the amount of revealed bleeding she should be managed as if there has been a large blood loss [17].

The management of bleeding in early pregnancy is complex in term of accurate assessment and may require quick intervention to maintain hemodynamic equilibrium to avoid morbidity and mortality. The objective in management of bleeding in early pregnancy is to diagnose accurately a normal viable intrauterine pregnancy. If it is not established then alternative differential diagnoses must be considered and appropriately managed. They include a complication of intrauterine pregnancy, miscarriage, ectopic pregnancy and molar pregnancy. It is important to manage the bleeding in term of acute situation and the women's reproductive career [18].

CONCLUSION

More pregnancies are lost in the early weeks than at any other stage of gestation. Main categories of early pregnancy loss are spontaneous abortion, induced abortion, ectopic pregnancy, as well as the molar pregnancy. Although early pregnancy loss is often considered to be less important than loss of a fetus in late pregnancy, this attitude is inappropriate. The loss of wanted pregnancy is always distressing to the mother irrespective of its timing. Further more abortion and ectopic pregnancy can have serious maternal consequences, with appreciable risk of maternal mortality and long term morbidity. Therefore more attention to be paid to the problems of early pregnancy to ensure prevention and prompt diagnosis of such cases.

Table-1: Early pregnancy bleeding (n=1494)

Abortion	1434 (95.9%)
Ectopic	28 (1.87%)
Molar	22 (1.47%)
Local causes/ trauma	10 (0.69%)

Table-2: Main types of abortion

Main types	No of Patients	Percentage
Spontaneous	990	69.0%
Induced	444	30.9%
		99.9 %

Table-3: Showing risk factors for abortion

Risk factors	Patients	Percentage
Medical illness	307	21.40%
Uterine/ cervical fibroids	102	701%
Uterine malformations	25	1.74%
Use of contraception	266	18.5%
a. IUCD	194	72.9%
b Others Methods	72	27%
Low lying placenta	173	12.0%
Treatment of infertility	265	18.47%
Previous h/o bleeding in early pregnancy	86	5.9%

REFERENCES

1. Grudzinskas JG. Miscarriages, Ectopic pregnancy and rophoblastic diseases. In: Edmonds DK. Dewhurst's Textbook of Obstetric and Gynecology for Postgraduates. 6th ed. **London Blackwell Science 1999.**

2. Rosevear S. Bleeding in early pregnancy. In: James DK, steer CP, Gonick B. High Risk Pregnancy Management Options. 2nd ed. **London Saunders WB 2003.**

3. WHO Recommended definition, technology and format for statistical table related to the perinatal period. **Acta Obstetrica Gynecologica Scandinavica 1997; 56:247-253.**

4. Soomro N, Idrees R. Management of abortion. In: Farooqui SM, Samad S. A Manual for Physicians. Reproductive Health Pak. **J Coll Phys Surg Pak 2002.**

5. Anne GT. Improving woman's health in Pakistan. **J Coll Phys Surg Pak 1999; 9(5).**

6. Mumtaz. Maternal mortality in induced abortion finders. **J Coll Phys Surg Pak 1999; 9(5).**

7. Inayat H, Thaver, Latif N. Seeking help for abortion. **J Coll Phys Surg Pak 1999; 9(1).**

8. Edmonds DK. Spontaneous and recurrent abortion. In: Shaw WR, Soutter PW, Stanton LS. Gynecology. 2nd ed. **London: Churchill Livingstone 1997.**

9. Khaskheli M. Evaluation of early pregnancy loss. **Pak J Med Res 2002; 41(2): 70-72.**

10. Regan l, Braved PR, Trembath PL. Influence of past reproductive performance on risk of spontaneous abortion. **BMJ 1989; 299(6707): 1082.**

11. Rana S, Rehman R, Azeem N. Abortion- A diagnostic problem. **Pak J Obst & Gyn 1990; 3(1): 13-21.**

12. Everett C. To estimate miscarriage rate in cohort of pregnant women and final outcome of pregnancy. **BMJ 1997; 315(7099): 32-4.**

13. Rana T. Induced abortion and its complications-a common problem in Pakistan: a study of 125 cases in Services Hospital Lahore. **Pak J Obst & Gyn 1992; 5(1): 53-9.**

14. Karim S, Bakhtawar I, Bhutta A, Jalil M. Effects of first and second trimester vaginal bleeding on pregnancy outcome. **J Pak Med Assoc 1998; 48(2): 40-2.**

15. Arafa M, Abdel- Fataah M, Zeid HA, El-Khouly A. Outcome of pregnancy complicated by early vaginal bleeding. **East Mediterr Health J 2000; 6(2-3): 457-64**

16. Suhail R, Maqsood F. Causes of bleeding in early pregnancy. **Ann King Edward Med Coll 2000; 2(6): 205-6.**

17. Thorburn J, Bryman I, Hahlin M (1992) nistinction between early normal interuterine pregnancy and pathological pregnancies by mean of a logistic model. **Human Reproduction 7, 120 – 122.**

18. Neilson S, Hahlin M, Oden A (1996) using a logistic model to identify women with first limeta bleeding ands it management. **Br J Obst & Gyn 130, 1230 -1235.**