ORIGINAL ARTICLE

RETAINED PLACENTA AND ITS CLINICAL MANAGEMENT

Vaijinath Biradar[1], Sangeeta Tengli[2]

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ABSTRACT: **INTRODUCTION:** 102 cases of retained placenta admitted to Cheluvamba Hospital, Department of Obstetrics and Gynecology, Mysore Medical College between 1st January 1995 to 5th February 1997 were studied with a name to identify high risk cases for retained placenta to study and analyze clinical features and management of retained placenta. **METHODS:** All cases of delivery both pre-term and term with history of retained were included. A history along with clinical examination laboratory investigation were done and treated accordingly. **RESULTS**: 40.19% patients were between the age group of 20-24 years, which fall in active reproductive period. 54.90% had home delivery; 22.54% were delivered in Hospital. There were there were 2(1.96%) of maternal deaths, hypovolumic shock in 15 cases. **CONCLUSION**: Watchful expectancy for prolonged period followed by efforts at home was the usual scene for delayed reporting to the hospital unawareness and failure to anticipate this third stage threat by the birth attendant may result in late referral and also inadequate transport facilities and long distance to be travelled by the patients.
KEYWORDS: Retained placenta, PPH, prolonged third stage.

INTRODUCTION: 102 cases of retained placenta admitted to Cheluvamba Hospital, Department of Obstetrics and Gynecology Mysore Medical College between 1st January 1995 to 5th February 1997 were studied. To identify high risk cases for retained placenta. To shorten the duration of third stage of labour. To reduce the amount of blood loss due to retained placenta. To study and analyze clinical features including maternal morbidity and mortality and proper management of retained placenta. To study and analyze clinical features including maternal morbidity and mortality and proper management of retained placenta.

METHODS: All cases of full term deliveries and preterm deliveries admitted to the hospital with history of retained placenta and those with full term and preterm hospital deliveries with retained placenta were included.

For all the cases admitted detailed history was obtained from the patient and their relatives, and were examined thoroughly as per the proforma, risk consent was obtained from the patient and their relatives, follow-up of the cases was done during their hospital stay and after discharge wherever possible.

The laboratory investigations included

1. Urine - Albumin
   Sugar
   Microscopy
2. Hemoglobin percentage

3. Bleeding time by IVY's method.
4. Clotting time by Lee and Whites method.
5. Clot retraction time in patients with post-partum hemorrhage (uncontrolled).
6. Blood grouping Rh typing and cross matching.

All cases of retained placenta were immediately shifted to second labour ward. The vital signs were checked systemic examination was done especially per abdomen to see whether the uterus is well contracted and retracted or flabby in most cases of well contracted uterus the placenta was usually separated partially or completely.

DISCUSSION: This study includes all the cases of retained placenta admitted to Cheluvamba Hospital, Mysore, between January 1995 to 5th February 1997. The incidence of retained placenta is 0.8% for the total number of deliveries occurred during the above period.

The incidence of retained placenta reported by other authors Aaberg and Reid et al (1945)[1] was 0.47%, Sheth et al[2] (1966) was 0.33%, Gupta and Mishra et al[3] (1977) was 0.4%; Mathur et al[4] (1984) was 0.64%, Attal Shashtrakar et al (1984)[5] was 0.29, Arti Patel et al (1991)[6] was 0.25%, P.K. Shah et al (1991)[7] was 0.2% and the incidence of retained placenta in retrospective study of two years January 1993 to December 1994 was 0.76%.

The incidence of retained placenta in present study is 0.8%. The incidence certainly varies from institution to institution.

Depending upon the general condition of the patient at the time of admission. They were divided into three groups for analysis.[2]

- Group I Cases with retained placenta whose general condition has not deteriorated much (77 caess - 75.49%).
- Group II Cases with retained placenta presented with shock with or without bleeding per vagina (20 cases = 19.60%).
- Group III Cases with retained placenta presented with sepsis after hours or days of delivery (5 cases = 4.90%).

In age incidence there is not much difference between Shah P.K. et al[7] 1993-94 study and present study. In both the studies the incidence of retained placenta is highest between the age group of 20-24 years of age, who fall in active reproductive period.

In out of 102 cases of retained placenta 89.21% of cases have occurred in poor socio-economic class; 10.78% has occurred in middle class family and in upper class, it is nil.

In Arti Patle[6] et al (1991) the incidence of retained placenta in primipara was 37.73% and Shah PK[7] (1991) was 40.48%. In present study also the rate of retained placenta has decreased with increasing parity in primipara the percentage was 39.21%; in primipara as they are more predisposed to prolonged labour; uterine inertia; post-partum haemorrhage due to retained placenta and operative interference.

Risk factors	Arti Patel[6] et al (1991) %	Shah P.K.[7] et al (1991) %	January 1933 to December 1994 Cheluvamba Hospital study %	Present study %
Bicornuate uterus	4 (3.7%)	1 (1.19%)	3 (3.84%	4 (3.92%)
Past history of retained placenta	1 (0.94%)	-	-	6 (5.88%)
Past history of abortions and check curettage	9 (8.4%)	12 (14.29%)	7 (8.97%)	11 (10.78%)
Past history of caesarian section	6 (5.6%)	5 (5.98%)	2 (2.56%)	1 (0.98%)
History of administration of prophylactic methargin	-	9 (10.71%)	-	1 (0.98%)
Fibroid uterus with pregnancy	-	-	-	1 (0.98%)
Total risk factors	20 (18.64%)	27 (32.14%)	12 (15.38%)	24 (23.52%)

Associated risk factors with retained placenta

Significant past history and probable etiological factors mullerian anomalies implantations over pre-existing uterine scars especially prior cesarean delivery scar, any previous endometrial damage like previous abortions, dilatation and curettage, previous MTPs previous history of retained placenta, Asherman's syndrome are more common etiologies for scarred endometrium. Although adenomyosis has been proposed as a predisposing factor to retained placenta and placenta accreta, mullerian anomalies such as bicarnuate uterus increase risk with the placenta invading the septum.

In present study the risk factors for retained placenta is 24(23.52%) cases. The predominant risk factors compared to other risk factors is all four studies is past history of abortions and check curettage.

In present study in 2.94% of cases the delivery admission interval was $\leq$1 hour. In 22.54% of cases the interval was 1-3 hours; in 21.56% of cases the interval was between 3-5 hours; in 25.49% of cases the interval was more than 6 hours and in 4.90% the interval was more than 24 hours to several days.

Mode of delivery	Arti Patel[6] et al (1991)	Shah P.K.[7] et al (1991)	January 1993 to December 1994 Cheluvamba Hospital study %	Present study
Full term normal vaginal delivery	59 (55.66%)	73 (86.9%)	54 (69.23%)	79 (77.45%)
Preterm deliveries	47 (44.33%)	-	18 (23.07%)	19 (18.62%)
Number of twin deliveries	-	1 (1.1%)	1 (1.28%)	3 (2.94%)
Number of assisted breech deliveries	-	5 (5.95%)	4 (5.12%)	4 (3.92%)
Number of IUD in both FT and preterm deliveries	-	2 (2.38%)	13 (16.66%)	18 (17.64%)

The incidence of retained placenta according to mode of delivery

In present study 79(77.45%) of cases had full term normal vaginal delivery, 19(18.621) of cases had preterm vaginal delivery in 3(2.94%) of cases twin delivery has occurred; 4(3, 92%) of cases assisted breech delivery has occurred and in 18(17.64%) IUD has occurred in both preterm and term delivery.

Number of preterm delivery and IUD with retained placenta shows that they definitely fall in the high risk group.

In hospital delivered cases the minimum time of retension was 1-2 hours and maximum retension time was up to 5 hours.

In home delivered cases the minimum time of retension was 2-3 hours and maximum time was up to 18 hours and in few cases several days and weeks (1-3 weeks).

In present study out of 102 cases of retained placenta 26(25.49%) of cases the placenta was separated and was lying in the vaginal canal which was removed by cord traction in 16 (15.68%) of cases spontaneous expulsion has occurred with IV syntosinon drip; in 60(58.82%) of cases the placenta was removed manually under general anaesthesia in 60 cases of MRP in one case the placenta was morbidly adherent and was removed in piece meal twice in the OT under G.A.

In P.K. Shah et al. (1991)[7] study out of 84 cases of retained placenta excessive blood loss producing hypovolemic shock was seen in 21(37.5%) out of 56 cases of home delivery and cases transferred from other hospital whereas in hospital delivered cases 6(21.42%) out of 28 went into hypovolemic shock.

In the present study out of 78 cases of retained placenta excessive blood loss producing hypovolemic shock was seen in 15(19.23%) of cases. Out of this 15, 11 cases were from home delivery.

In Sheth et al[2] (1966) study, the maternal mortality was in 2(2.77%) of cases out of 72 retained placenta both patients died due to post-MRP irreversible shock.

In Arti Patel et al[6] (1991) study, the mortality was in 2(1.88%) of cases out of 106 retained placenta one died due to septic shock who had presented after 72 hours of delivery with puerperal sepsis due to retained placenta.

In Shah P.K. et al[7] (1991) study there was 2(2.38%) maternal deaths out of 84 cases of retained placenta.

In present study there were 2(1.96%) of maternal death details regarding the cause of death has mentioned in case analysis study.

RESULTS: The incidence of retained placenta in the present study is 0.8 percent.

40.19% patients were between the age group of 20-24 years, which fall in active reproductive period.

39.21% were of primipara and 32.35% of second paras majority are in this group because of small family norm.

54.90% had home delivery; 22.54% were delivered in Hospital, 18.62% of cases referred from primary health center and taluk general hospital; 3.92% of cases referred from private hospital. This shows home delivered patient fall in high risk group, delivery conducted by untrained birth attendants without any aseptic precautions, chances of intrapartum infection is more hence the retained placenta is more.

7.84% cases were booked cases and 92.15% of cases were unbooked cases, as unbooked case usually delivered at home and fall under high risk.

89.21% of cases were of peer socio-economic class 10.78% of cases were middle class most of the patients belongs to poor socio-economic class are illiterate, lack of health education, economically backward and they are daily wage workers and are unbooked cases, most of them delivered at home, we miss the high risk patients for retained placenta and home delivery itself fall in high risk group, for retained placenta.

10.78% of patients gave history of abortions and check curettage; 5.88% of patients gave past history of retained placenta; in 3.92% of patients had bicornuate uterus; 1(0.98%) of cases had undergone L.S.CS. is during previous pregnancy; 1(0.98%) of patients were administered Inj. Methargin before delivery of placenta and 1(0.98%) patient had fibroid uterus with pregnancy. Any previous scarred endometrium patients definitely fall in the high risk group for retained placenta.

25.49% of patients had delivery hospital admission interval of more than 6 hours.

22.54% of patients had delivery hospital admission interval between 1-3 hours; 21.56% of patients had delivery hospital admission interval between 3-5 hours; 4.90% of patients had delivery admission interval was more than 24 hours to several days and in 2.94% of patients had delivery admission interval $\leq$1 hours. As delivery hospital admission interval increases, then maternal mortality and morbidity due to retained placenta rises.

70(68.62%) of cases were from rural area; 17(16.66%) of cases from suburban area and 15(14.70%) of cases from urban area. Most of the cases from rural area are unbooked and home delivered are fall in high risk group for retained placenta.

Both preterm delivery 18.62% and intrauterine death are fall in high risk group for retained placenta.

50% of the patients had retention of placenta between 1-6 hours of duration; 26.47% had retention of placenta between 13-18 hours of duration; 8.82% had retention of placenta more than 18 hours duration and 4.90% of patients had retention of placenta upto one hour.

44.45% of patients had retention of placenta more than 6 hours. In this most of the patients delivered at home social taboos, poverty, illiteracy and lack of facilities are enforcing factors to prefer home delivery. The important factors for prolonged retention of placenta seem to be inadequate transport facilities and long distance to be travelled by the patients.

58.82% of patients underwent MRP under general anaesthesia in operation theatre. 42.15% of patients were given one unit of blood transfusion. 11.76% of patients were given two units of blood transfusion. 1(0.98%) patient given three units of blood transfusion.

There were 2(1.96%) maternal deaths in one case. She had severe atonic PPH after placental removal went into irreversible shock and died.

CONCLUSION: In the third world countries like ours retained placenta as one of the complication of third stage of labour is still an important causative of maternal morbidity and mortality.[8]

Identify the high risk patients for retained placenta and proper advice should be given to them and proper health education should be given regarding the importance of regular antenatal checkup, advantages of hospital delivery.

Any high risk patient for retained placenta should be advised admission to tertiary centre well in advance two weeks prior to expected date of delivery.

More than 50% of retained placenta needs blood during MRP and hence high risk group should be identified well in advance, admitted at least two weeks prior to delivery and ensure about the availability of cross matched blood.

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AUTHORS:

1. Vaijinath Biradar
2. Sangeeta Tengli

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Obstetrics and Gynaecology, Bidar Institute of Medical Sciences, Bidar.
2. Assistant Professor, Department of Obstetrics and Gynaecology, Bidar Institute of Medical Sciences, Bidar.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Vaijinath Biradar,
Department of Obstetrics and Gynaecology,
Bidar Institute of Medical Sciences, Bidar.
E-mail: drvijayh@yahoo.com

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