Comparison of Maternal Morbidity, Mortality & Fetal Outcome between Planned & Emergency Management of Patients with PAS Disorder

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ABSTRACT

Background: The mother may not survive placenta accreta spectrum (PAS), which frequently leads to serious blood loss and peripartum hysterectomy. Ensuring prompt prenatal diagnosis in these circumstances enables meticulous birth planning in a specialist facility with a skilled multidisciplinary team. It has been demonstrated that this lowers maternal morbidity. Reductions in bleeding and emergency procedures are also linked to scheduled deliveries as compared to emergency ones. Objective: The aim of this study is to compare maternal morbidity, mortality & fetal outcome between planned & emergency management of patients with PAS disorder. Methods: The cross-sectional comparative study was conducted in the Department of Obstetrics & Gynaecology, Dhaka Medical College Hospital, Dhaka, during 18th January 2020 to 17th July 2020. A total of 62 patients diagnosed as a case of PAS disorder (antenatally and peroperative diagnosed) and scheduled for planned management or emergency management of PAS were included according to inclusion and exclusion criteria. 42 planned management of PAS disorder patients as Group A and 20 emergency management of PAS disorder patients as Group B. The questionnaire was pretested, corrected and finalized. Data were collected by face-to-face interview and analyzed by appropriate computer based programmed software Statistical Package for the Social Sciences (SPSS), version 24. Results: In this study, mean ± SD of age was calculated 25.3 ± 4.5 years for Group – A and 25.1 ± 3.4 years for Group – B. About 30 (70.0%)) patients in group-A and 7 (37.5) patients in group-B came from urban, the difference was statistically significant (p<0.05). Large number of respondents 22 (52.4%) and 10 (50.0%) were housewife in both groups. Among the patients, the lower class 18 (42.9%) and 11 (55.0%) comprised the major percentage of the patients in both groups. More participants in Group-A 29 (69.0%) received ANC regularly than Group B 6 (30.0%), the difference was statistically significant (p<0.05). Most of the women were multiparous 21 (50.0%) and 9 (45.0%) in both groups. In group-A maximum patients presented with only USG findings of PAS disorders and with APH or without APH 26 (61.8%) Result was significant. In group-B, PPH and internal haemorrhage (primary c-section outside DMCH) and was noted predominantly. The result was significant. About 36 (85.7%) patients in group-A and 10 (50.0%) in group-B had placenta praevia. The mild anemia was more in 23 (54.8%) patients in group A and 9 (21.4%) patients in group B which was statistically significant (p < 0.001). More participants in Group-B 12 (60.0%) required early termination, whereas majority of group A 35 (83.3%) was terminated at 35-36 weeks. There was a statistically significant difference between the groups. Maximum patients were managed by peripartum hysterectomy 35 (82.0%) and 18 (90.0%) in group A & B respectively. Presence of multidisciplinary team was

arranged in 38 (90.4%) in group A and 9 (45.0%) in group B. Placenta acreta was present 11 (26.2%) patients in group A and 3 (15.0%) patients in group B. Placenta percreta with bladder invasion and peroperative bladder injury was higher in group-B patients. More than 3 L blood was transfused 3 (7.1%) patients in group A and 11 (55.0%) patients in group B. Poor outcomes were significantly higher in group-B. NICU admission for prematurity was required in 8 (19.0%) of the babies in group-A and 10(50.0%) babies of group-B. Birth asphyxia was observed in 3 (7.1%) of the babies in group-A and 3 (15.0%) in Group-B. Conclusion: In a center of excellence for PAS, emergency delivery does not seem to increase mother morbidity; nonetheless, there is an iatrogenic risk of preterm for the newborn at an earlier delivery time. Antenatal hemorrhage is the single biggest risk factor for emergency delivery. Therefore, in women who have not bled and who do not have any risk indicators for preterm birth, delivery at >36+0 weeks' gestation may be considered.

***Keywords:** Maternal Morbidity, Maternal Mortality, Fetal Outcome, Planned Management, Emergency Management, PAS Disorder*

I.   INTRODUCTION:

With the global trend of cesarean deliveries continuing to rise, PAS disorders are becoming an increasingly prevalent obstetric concern. In most medium- and high-income nations, there has been a reported ten-fold increase in the incidence of placenta accreta spectrum (PAS) disorders over the past 40 years, while the rate of cesarean deliveries has increased globally from less than 10% to over 30% [1]. Both abnormally adherent and invasive placentas were included in the original definition of PAS diseases given by Jauniaux et al. Both abnormally adherent and invasive placentas were included in the original definition of PAS diseases given by Jauniaux et al. There are currently three types of placentas that are recognized: (1) adherent placenta accreta, which pathologists also refer to as "placenta creta, vera or adherenta" when the villi merely attach themselves to the myometrium; (2) placenta increta, which occurs when the villi penetrate the myometrium; and (3) placenta percreta, which occurs when the villi invade the entire thickness of the myometrium, including the uterine serosa and occasionally the surrounding pelvic organs [1].

The most widely accepted theory explaining the origin of placenta accrete spectrum holds that excessively deep placental anchoring villi and trophoblast infiltration are made possible by a malfunction of the endometrial-myometrial interface, which prevents normal decidualization in the vicinity of a uterine scar. The diagnoses are verified by histological diagnosis of placental invasion into the myometrium, clinical evaluation of aberrant placental adhesion, or evidence of gross placental invasion at the time of surgery.

Numerous etiological events or risk factors, such as asherman's syndrome, myomectomy, endometrial resection, dilatation and curettage, cesarean birth, and surgical pregnancy termination, might lead to PAS condition. nonsurgical scar: intrauterine devices, endometritis, radiation and chemotherapy, IVF procedures, manual placenta removal, prior accreta, and others such as placenta previa (the most common, PAS occurs in women with placenta previa & with no prior C/S), maternal age, and multiparity. Additionally, the probability of accreta was 3%, 11%, 40%, 61%, and 67% for women who presented with placenta previa and prior cesarean births, respectively, for the first, second, third, fourth, and fifth or more cesareans [2]. The reported incidence increased by 1:4000 in the 1970s, 1:2500 in the 1980s, and 1:533 from 1982 to 2002. Because PAS condition is frequently described as an obstetrician's nightmare in modern practice, it is currently receiving the greatest focus and attention.

Grayscale ultrasonography (TVS/TAS) with or without color doppler sonography and MRI can be used to identify PAS problems antenatally. The thickness and makeup of the placental bed, the number of previous uterine scars, the depth of invasion, and the lateral extension of the villous tissue are among the factors that affect the ultrasound signals of PAS, which change with gestational age. A minimum of two prenatal USGs should be performed at the abnormality scan at 20 weeks to look for predictive signs & repeat scan at 30-32 weeks of gestation to assess PAS if predictive marker is present. Loss of the clear zone, myometrial thinning, placental lacunae, bladder wall disruption, placental bulge, exophytic mass, subplacental and/or uterovesical hypervascularity, and placental lacunae are among the ultrasound abnormalities associated with PAS. While MRI is not necessary to diagnose a fetus, it can be helpful in assessing pelvic extension and posterior placenta previa.

A "near-miss" maternal event is peripartum hysterectomy, which is an intervention done to save lives in potentially fatal obstetric conditions such major bleeding with placenta accreta spectrum disorder [3]. It causes a decline in fertility and is linked to high rates of maternal illness and death [4]. In order to reduce maternal death, an elective planned peripartum hysterectomy is typically carried out if PAS condition is identified during prenatal care using Doppler sonography or Grayscale USG. Because haste can result in morbidity and needless delay can cost lives, fast decision-making and sound clinical judgment are critical to the mother's prognosis [5–6]. When women with suspected placenta accreta undergo scheduled cesarean hysterectomy or peripartum hysterectomy without attempting placental removal, maternal morbidity is lowered. For the majority of low- and middle-income nations where alternative diagnostic and therapeutic alternatives,

such as UAE, and further treatments, are not available, primary elective cesarean hysterectomy is the safest and most feasible option. One of the developing nations with a rising rate of cesarean sections is Bangladesh, where PAS diseases are a prevalent cause of peripartum hysterectomy. Being a tertiary referral and teaching hospital, DMCH has been chosen as the study site in order to identify the women who are at risk and provide them with improved treatment in order to lower maternal morbidity and mortality. Women are referred either after a complication or voluntarily for surgery after being diagnosed with PAS disorders or accreta during the antenatal period.

II.   METHODOLOGY:

The cross-sectional comparative study was conducted in the Department of Obstetrics & Gynaecology, Dhaka Medical College Hospital, Dhaka, during 18th January 2020 to 17th July 2020. A total 62 patients diagnosed as a case of PAS disorder (antenatally and peroperative diagnosed) and scheduled for planned management or emergency management of PAS were included according to inclusion and exclusion criteria. 42 planned management of PAS disorder patients as Group A and 20 emergency management of PAS disorder patients as Group B. Patients who were not willing to give consent were excluded. Purposive sampling was done according to the availability of the patients who fulfilled the selection criteria. Face to face interview was done to collect data with a semi-structured questionnaire. After collection, the data were checked and cleaned, followed by editing, compiling, coding, and categorizing according to the objectives and variables to detect errors and to maintain consistency, relevancy and quality control. Statistical evaluation of the results used to be obtained via the use of a window-based computer software program devised with Statistical Packages for Social Sciences (SPSS-24).

III.   RESULT:

Table I: Distribution of the patients according to age (n = 62)

Table I shows that, mean ± SD of age was calculated 25.3 ± 4.5 years for Group – A and 25.1 ± 3.4 years for Group – B. (p-value = 0.783) which explains that there was no significant statistical difference between the groups was observed. Urban population were predominant in group-A. About 30 (70.0%)) patients in group-A and 7 (37.5) patients in group-B came from urban, the difference was statistically significant (p<0.05). Large number of respondents 22 (52.4%) and 10 (50.0%) were housewife in both groups. among the patients, the lower class 18 (42.9%) and 11 (55.0%) comprised the major percentage of the patients in both group, which is followed by middle class 15 (35.7%) and 6 (30.0%) and remaining are upper class 9 (21.4%) and 3 (15.0%) in both group

Age (years)	Group-A (n=42)	Group-B (n=20)	p-value
20 - 25	11 (26.2)	5 (25.0)	
26 - 30	16 (38.1)	8 (40.0)	
31 - 35	9 (21.4)	4 (20.0)	0.783
≥35	6 (14.3)	3 (15.0)	
Mean ± SD	25.3 ± 4.5	25.1 ± 3.4	
Residence			
Urban	30 (70.0)	7 (37.5)	
Rural	12 (30.0)	13 (62.5)	<0.05
Occupation			
Service holder	4 (9.5)	1 (5.0)	
Housewife	22 (52.4)	10 (50.0)	
Day Laborer	10 (23.8)	5 (25.0)	
Unemployed	6 (14.3)	4 (20.0)	
Socioeconomic status			
Upper	9 (21.4)	3 (15.0)	
Middle	15 (35.7)	6 (30.0)	
Lower	18 (42.9)	11 (55.0)	

Figure I: Distribution of the patients according to trend of antenatal care received by patients (n = 62)
Figure I shows that, more participants in Group-A 29 (69.0%) received ANC regularly than Group B 6 (30.0%), the difference was statistically significant (p<0.05)
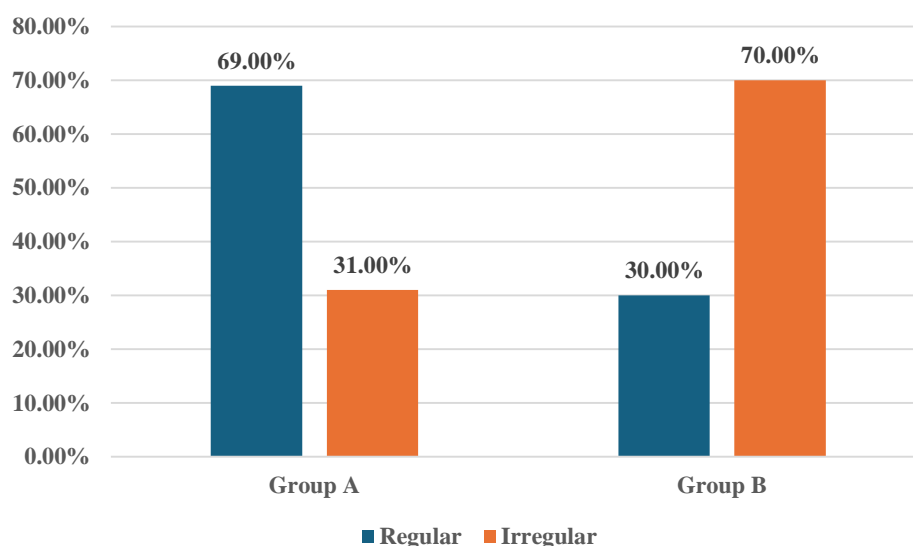

Table II: Distribution of the patients according to pattern of presentation of PAS disorder (n = 62)
Table II shows that, pattern of presentation of PAS disorder. In group-A maximum patients presented with only USG findings of PAS disorders and with APH or without APH 26 (61.8%) Result was significant. In group-B, PPH and internal haemorrhage (primary c-section outside DMCH) and was noted predominantly. Result was significant.

Presentation pattern	Group-A (n=42)	Group-B (n=20)	p-value
A) Diagnosed antenatally with USG with or without APH			
Only USG findings of PAS disorder	10 (23.8)	0	0.006
Mild APH with USG findings of PAS disorder	8 (19.0)	0	0.009
Moderate APH with haemodynamic status stable with USG findings of PAS disorder	8 (19.0)	8 (40.0)	0.215
B) Diagnosed peroperatively			
Severe APH with haemodynamically unstable with peroperative findings of PAS disorder	3 (7.1)	8 (40.0)	0.002
Scar tenderness (peroperative findings of PAS disorder)	7 (16.7)	4 (20.0)	0.736
Only PROM with peroperative findings of PAS disorder	2 (4.8)	1 (5.0)	0.983
C) Primary c-section outside DMCH			
PPH	0	2 (10.0)	0.041
Internal haemorrhage	0	2 (10.0)	0.041

Table III: Distribution of the patients according to Evaluation of risk factors (n = 62)
Table III shows that, 36 (85.7%) patients in group-A and 10 (50.0%) in group-B had placenta praevia. In Group A patients PAS disorder present with 1 C/S 21 (50.0%), 2 C/S 11 (26.2%), 3 C/S 7 (16.7) and in Group B patients 1C/S 13 (65.0%), 2 C/S 5 (25.0%), 3 C/S 1 (5.0%), the result was significant.

Risk factors	Group-A (n=42)	Group-B (n=20)	p-value
Previous LUCS			
One C/S	21 (50.0)	13 (65.0)	0.252
Two C/S	11 (26.2)	5 (25.0)	0.936
Three C/S	7 (16.7)	1 (5.0)	0.145
Presence of placenta praevia	36 (85.7)	10 (50.0)	0.005
Manual removal of placenta in previous SVD	5 (11.9)	4 (20.0)	0.582
Previous D & C	12 (28.6)	11 (55.0)	0.241
Previous MR	9 (21.4)	5 (25.0)	0.358
Short interval of pregnancy from previous C/S (<2 yr)	8 (19.0)	4 (20.0)	0.891
GDM	2 (4.8)	0	0.323
DM	1 (2.4)	0	0.323
Chronic HTN	2 (4.8)	0	0.223
PE	1 (2.4)	1 (5.0)	0.603

Figure II: Distribution of the patients according to status of anemia (n = 62)
Figure II shows that, the mild anemia was more in 23 (54.8%) patients in group A and 9 (21.4%) patients in group B which was statistically significant (p < 0.001). Similarly, severe anemia was higher in group-B patients 6 (30.0%) and 2 (4.8%) in group A. The difference was statistically significant (p > 0.108).
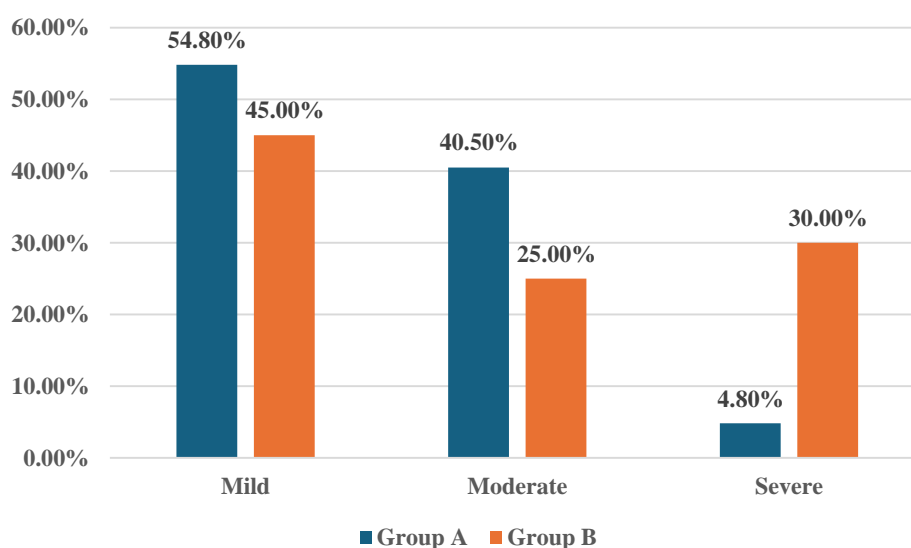

Table IV: Distribution of the patients according to Gestational age of termination (n = 62)
Table IV shows that, more participants in Group-B 12 (60.0%) required early termination, whereas majority of group A 35 (83.3%) was terminated at 35-36 weeks. There was a statistically significant difference in between groups.

Gestational age of termination	Group-A (n=42)	Group-B (n=20)	p-value
28-30 weeks	0	1 (5.0)	<0.05
32-34 weeks	7 (16.7)	12 (60.0)	

35-36 weeks	35 (83.3)	6 (30.0)	

Table V: Distribution of the patients according to operative procedure (n = 62)
Table V shows that, maximum patients were managed by peripartum hysterectomy 35 (82.0%) and 18 (90.0%) in group A & B respectively. Stepwise devascularization& resuturing of placental bed was done in 4(9.5%) cases in group A & 1 (5.0%) in group B. Ballon tamponade was done in 3(7.1%) patients in group A & 2 (10.0%) patients in group B. Tripple procedure was done in 1(2.4%) patient in group A & 1 (5.0%) patients in group B. The difference was statistically significant.

Operative procedure	Group-A (n=42)	Group-B (n=20)
Peripartum hysterectomy	35 (82.0)	18 (90.0)
Stepwise devascularization& resuturing of placental bed	4(9.5)	1 (5.0)
Ballon tamponade	3(7.1)	2 (10.0)
Tripple procedure	1(2.4)	1 (5.0)

Table VI: Distribution of the patients according to preoperative & peroperative intervention (n = 62)
Table VI shows that, Presence of multidisciplinary team (fetomaternal specialist, senior obstetrician, ICU specialist, urologist, neonatologist, etc) was arranged in 38 (90.4%) in group A and 9 (45.0%) in group B. General anesthesia and CV line was given in 36 (85.7%) patients in group-A and 14 (70.0%) patients in group-B. Massive blood transfusion was needed in 11 (55.0%) patients in Group B & only 3 (7.1%) patients in Group A. The difference was statistically significant.

Variables		Group-A (n=42)	Group-B (n=20)	p-value
Presence of multidisciplinary team		38 (90.4)	9 (45.0)	0.001
General anesthesia and CV line		36 (85.7)	14 (70.0)	0.005
Blood transfusion	Whole blood 1-2 L	31 (73.8)	4 (20.0)	0.582
	Whole blood 3-4 L	7 (16.7)	6 (30.0)	0.241
	Whole blood 5-6 L	3 (7.1)	11 (55.0)	0.358
	Large volume >10 L	0	1 (5.0)	0.891
	Fresh frozen plasma	11 (26.2)	19 (95.0)	0.001
Use of oxytocic's drugs		9 (21.4)	7 (35.0)	0.386

Table VII: Distribution of the patients according to peroperative findings (n = 62)
Table VII shows that, Placenta acreta was present 11 (26.2%) patients in group A and 3 (15.0%) patients in group B. Placenta percreta with bladder invasion and peroperative bladder injury was higher in group-B patients. More than 3 L blood was transfused 3 (7.1%) patients in group A and 11 (55.0%) patients in group B.

Variables		Group-A (n=42)	Group-B (n=20)	p-value
Placenta acreta		11 (26.2)	3 (15.0)	0.252
Placenta increta		12 (28.6)	4 (20.0)	0.292
Placenta percreta without bladder invasion		14 (33.3)	6 (30.0)	0.802
Placenta percreta with bladder invasion		7 (16.7)	9 (45.0)	0.016
Peroperative bladder injury		7 (16.7)	9 (45.0)	0.016
Blood loss	1-1.5 L	32 (76.2)	4 (20.0)	0.001
	2-3 L	7 (16.7)	5 (25.0)	0.386
	>3 L	3 (7.1)	11 (55.0)	0.001

Table VIII: Distribution of the patients according to postoperative complications (n = 62)
Table VIII shows that, PPH, Sepsis, Re-exploration, DIC and ICU admission were the significant complication in Group-B patients, reported 19 (95.0), 2 (10.0), 4 (20.0), 4 (20.0) and 10 (50.0) of women and in less complication in Group A 19 (95.0), 0%, 0%, 1 (2.3) and 4 (9.5). In this study mortality rate was 1 (5.0%) in group-B (due to irreversible shock &DIC). So planned or scheduled management had better outcome.

Postoperative complications	Group-A (n=42)	Group-B (n=20)	p-value
Uneventful	24 (57.1)	8 (40.0)	0.232
Primary PPH	13 (30.9)	17 (85.0)	0.001
Secondary PPH	0	2 (10.0)	0.037
ICU admission	4 (9.5)	10 (50.0)	0.001
Delayed hysterctomy	0	0	-
Sepsis	0	2 (10.0)	0.031
Re-exploration	0	4 (20.0)	0.002
Uterovaginal fistula	0	1 (2.3)	0.142
DIC	1 (2.3)	4 (20.0)	0.005
Pulmonary oedema	1 (2.3)	2 (10.0)	0.043
Shock	1 (2.3)	2 (10.0)	0.043
Mortality (due to irreversible shock &DIC)	0	1 (5.0)	0.200

Table IX: Distribution of the patients according to neonatal outcome (n = 62)
Table IX shows that, poor outcomes were significantly higher in group-B. NICU admission for prematurity was required in 8 (19.0%) of the babies in group-A and 10(50.0%) babies of group-B. Birth asphyxia was observed in 3 (7.1%) of the babies in group-A and 3 (15.0%) in Group-B

Neonatal outcome	Group-A (n=42)	Group-B (n=20)	p-value
NICU admission for prematurity	8 (19.0)	10(50.0)	0.003
Birth asphyxia	3 (7.1)	3(15.0)	0.027
IUGR	2 (4.8)	2(10.0)	0.062
Neonatal death	1(2.4)	2(10.0)	0.001
No complication	28(66.7)	3(15.0)	0.004

IV.   DISCUSSION:

A total of 62 cases of placental Accreta were recruited in this study and described the planned & emergency management and observed the fetomaternal outcomes of placenta accreta spectrum (PAS) disorders in a tertiary level hospital. Here, mean $\pm$ SD of age was calculated 25.3 $\pm$ 4.5 years for Group – A and 25.1 $\pm$ 3.4 years for Group – B. About 30 (70.0%)) patients in group-A and 7 (37.5) patients in group-B came from urban, the difference was statistically significant (p<0.05). Large number of respondents 22 (52.4%) and 10 (50.0%) were housewife in both groups. Among the patients, the lower class 18 (42.9%) and 11 (55.0%) comprised the major percentage of the patients in both groups. More participants in Group-A 29 (69.0%) received ANC regularly than Group B 6 (30.0%), the difference was statistically significant (p<0.05). Most of the women were multiparous 21 (50.0%) and 9 (45.0%) in both groups.

Findings were consistent with the result of other studies. In one study overall mean maternal age was 31.6 (17–46) years and 29.3% (n¼496) were older than 35 years at time of delivery. 187 (57%) women were multiparas [7]. Another study found that age is a risk factor for PAS, the majority of the patients (69.7%) were above the age of 30 years [8]. Williams MA, et al, (1993) found that age is considered a higher risk factor for placenta accreta which is associated with advanced maternal age. Among older women, there may be compromised uteroplacental blood flow. This has been shown by microscopic studies of placentae from older women that have revealed uteroplacental under perfusion & large placental infarcts [9]. Eniola AO, Bako AU, et al. (2002) also demonstrated the association between increasing maternal age & risk of development of PAS [10].

In this study, in group-A maximum patients presented with only USG findings of PAS disorders and with APH or without APH 26 (61.8%) Result was significant. In group-B, PPH and internal haemorrhage (primary c-section outside DMCH) and was noted predominantly. The result was significant. Previous history of placenta praevia or accreta, endometrial trauma as in dilatation and curettage or evacuation of the uterus for retained products of conception, and previous uterine scar after caesarean section, myomectomy can all affect Placenta accreta. In this study group, Placenta accreta was present 11 (26.2%) patients in group A and 3 (15.0%) patients in group B. Placenta percreta with bladder invasion and peroperative bladder injury was higher in group-B patients. More than 3 L blood was transfused 3 (7.1%) patients in group A and 11 (55.0%) patients in group B.

This study was consistent with the other studies, that the risk of PAS increases with previous caesarean deliveries with statistically significant p value of less than 0.00012 [8]. All these studies agreed that patients who had previous delivery by C/S were associated with an increased risk of PAS [11,12,13]. Most studies have reported a dose related response pattern of risk factors of placenta accreta was found with increasing number of C/S deliveries.

Another study shows, factors associated with PAS were history of assisted conception and history of endometriosis. Nearly half (49.1%) of patients with a placenta praevia had prior uterine surgery. The most frequent surgical history was obviously caesarean section [7]. In general it seems important to avoid primary CS whenever possible, especially if there is wish to have future fertility. In our institution, caesarean deliveries are only performed when indicated. However, in other provincial hospitals, especially the private ones, a considerable number of caesarean deliveries may have been performed on maternal request, which obviously contributed to the increased number of this intervention [7].

The increased risk of placental pathologies in subsequent pregnancies should be emphasized during informed consent for caesarean section. Evidence suggests a correlation between the number of previous caesarean sections and the occurrence of a placenta praevia, uterine rupture and hysterectomy. Therefore, vaginal birth after caesarean delivery may be offered and consenting patients be transferred to institutions with adequate experience. A substantial number of women in our study population previously underwent curettage due to abortions. These patients may be benefited from less invasive approaches [14, 15], like medical treatment of missed abortions with misoprostol whenever this is in accordance with clinical and personal prerequisites [16].

In this study more participants in Group-B 12 (60.0%) required early termination, whereas majority of group A 35 (83.3%) was terminated at 35-36 weeks. There was a statistically significant difference in between groups. Presence of multidisciplinary team (fetomaternal specialist, senior obstetrician, ICU specialist, urologist, neonatologist, etc) was arranged in 38 (90.4%) in group A and 9 (45.0%) in group B. General anesthesia and CV line was given in 36 (85.7%) patients in group-A and 14 (70.0%) patients in group-B. Massive blood transfusion was needed in 11 (55.0%) patients in Group B & only 3 (7.1%) patients in Group A. The difference was statistically significant. PPH, Sepsis, Re-exploration, DIC and ICU admission were the significant complication in Group-B patients, reported 19 (95.0), 2 (10.0), 4 (20.0), 4 (20.0) and 10 (50.0) of women and in less complication in Group A 19 (95.0), 0%, 0%, 1 (2.3) and 4 (9.5). In this study mortality rate was 1 (5.0%) in group-B (due to irreversible shock &DIC). So planned or scheduled management had better outcome. In this study poor outcomes were significantly higher in group-B. NICU admission for prematurity was required in 9 (21.4%) of the babies in group-A and 11(55.0%) babies of group-B. Birth asphyxia was observed in 4 (9.5%) of the babies in group-A and 6(30.0%) in Group-B.

Women with PAS disorder had a significant higher incidence of preterm delivery [17]. Studies also showed that there was higher admission to neonatal intensive care unit, stillbirth and death [18]. Placenta accreta was associated with adverse maternal (34.15%) and neonatal (60.06%) outcome [5]. PAS disorder with placenta praevia had high maternal morbidity as antepartum bleeding [42.3%], maternal anemia [30%], hysterectomy [82%] needed and neonatal complications were frequent (preterm birth [54.9%], low birth weight below 2500 g [35.6%], low APGAR score after 5 min [5.8%]and fetal mortality [1.5%] [14]. Neonates of women with PAS disorders had a significant worse outcome in other study [7].

In this study overall outcome was better in group-A. maximum patients were managed by peripartum hysterectomy 35 (82.0%) and 18 (90.0%) in group A & B respectively. Stepwise devascularization& resuturing of placental bed was done in 4(9.5%) cases in group A & 1 (5.0%) in group B. Ballon tamponade was done in 3(7.1%) patients in group A & 2 (10.0%) patients in group B. Tripple procedure was done in 1(2.4%) patient in group A & 1 (5.0%) patients in group B. The difference was statistically significant.

In this study, poor outcomes were significantly higher in group-B. NICU admission for prematurity was required in 8 (19.0%) of the babies in group-A and 10(50.0%) babies of group-B. Birth asphyxia was observed in 3 (7.1%) of the babies in group-A and 3 (15.0%) in Group-B. Outcomes are improved when delivery is done through optimal management with a comprehensive multidisciplinary care team accustomed to management of placenta accreta spectrum. Timing of delivery decisions need to balance maternal risks and benefits with those of the fetus. Unplanned intervention or emergency surgery increase the likelihood of complications, e.g., massive haemorrhage, shock, DIC. Peripartum hysterectomy/Cesarean hysterectomy is considered the gold standard treatment for invasive accreta but it remains associated with high rates (40%–50%) of severe maternal morbidity. The mortality rates can be as high as 7% owing to damage to pelvic organs (most commonly bladder) and vasculature [19-22]. Although individual factors are relevant, a multi-disciplinary team care plan at 34–36 weeks preferred gestational age as scheduled C/S or hysterectomy after administration of corticosteroid for fetal lung maturity demonstrated a reduction in emergency deliveries from 23% to 64% with no adverse effects on neonatal outcomes. Performing a cesarean delivery followed immediately by cesarean hysterectomy before the onset of labor improves maternal outcomes [23]. Earlier delivery may be required in cases of persistent bleeding, preeclampsia, labor, rupture of membranes, or fetal compromise, or developing maternal comorbidities. Therefore, detection and management of placenta Accreta Spectrum Disorder (PASD) should be planned and conducted a careful evaluation with timely delivery in order to reduce the associated maternal and perinatal complications.

V. CONCLUSION:

The current study found that, when compared to emergency management of PASD patients, planned management using a multidisciplinary team approach offers superior outcomes without mortality. Placenta accreta continues to provide a risk factor for a number of issues for mothers and worse outcomes for newborns. The rates of shock and postpartum hemorrhage (PPH) were greater. Out of the 62 cases in this study, the majority experienced complications such as irreversible shock, DIC, renal failure, sepsis, PPH, and reversible shock. When group B patients underwent emergency care, the maternal outcome was dismal. In order to reduce maternal mortality, elective management is carried out when placenta accreta is identified during prenatal checkups using Doppler sonography or magnetic resonance imaging. In women with suspected placenta accrete, scheduled or planned care that avoids attempts at placental removal is linked to decreased maternal morbidity. Massive bleeding and shock are the acute dangers of placenta accreta, and they are the main causes of morbidity and death. Early prenatal registration, knowledge of early warning signals, early ultrasound diagnosis, early appropriate care, and planned management should all be prioritized. Reducing feto-maternal mortality and morbidity should be encouraged by scheduled or planned care.

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