

Original Research Article

Frequency of Maternal Morbidity and Mortality in Obstetrical Hysterectomy in Previous Third Cesarean Section with Placenta Accreta

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Abstract: **Objective:** To see how often morbidity and mortality occurred in women who had obstetrical hysterectomy due to the placenta accreta spectrum with three pre-existing cesarean sections. **Study Design:** Descriptive cross-sectional study. **Place and Duration of Study:** Department of Gynecology, Hilal E Ahmer Hospital, Faisalabad, Pakistan from 23 May 2025 to 23 October 2025. **Methodology:** Non-probability consecutive sampling involved 139 women who had undergone three Cesarean sections previously, had a gestational age of over 28 weeks and had placenta accreta spectrum using Doppler ultrasound. Women who had all prior vaginal initiatives, pre-eclampsia, diabetes mellitus, chronic respiratory disease, liver and cardiac disease were excluded. Obstetrical hysterectomy was performed by experienced obstetricians. Morbidity was defined as high intraoperative blood loss of greater than 2500 ml, intensive care unit admission within 12 hours, longer hospital stays of more than 1 week and bladder injury in the maternal morbidity. The definition of maternal mortality was death that happened in the hospital premises within a week of delivering a child during a cesarean section. The SPSS version 25 was used to analyze data.

Results: The average age was 32.8-4.5 years and an average pregnancy age of 34.6±2.7 weeks. Placenta accreta, increta, and percreta were present among 57.6%, 28.8% and 13.7% women, respectively. The percentages of high blood loss were 51.8%, ICU admission was 64.7, prolonged stay was 59.0%, bladder injury was 12.9% and maternal death was 2.9%. **Conclusion:** Maternal morbidity was high in women who have obstetrical hysterectomy due to placenta accreta spectrum and who had had three cesarean sections before the obstetrical hysterectomy. The most frequent complications were high blood loss and admission to an ICU.

Keywords: Placenta accreta spectrum, obstetrical hysterectomy, history of cesarean section, maternal morbidity, maternal death, bladder injury.

INTRODUCTION

The placenta accreta spectrum is a severe obstetric disease wherein the trophoblastic tissue of the placenta abnormally attaches or invades the uterine myometrium. It consists of placenta accreta, where there is adhesion of chorionic villi to the myometrium; placenta increta, where villi infiltrate into the myometrium; and placenta percreta, where the villus may affect other organs, e.g. bladder. This

disorder is clinically significant as the inability to divide the placenta at birth leads to enormous bleeding, shock, coagulopathy, urologic trauma, emergency hysterectomy, intensive care unit stay, and maternal mortality [1]. Placenta accreta spectrum has been rising worldwide as a marginal cesarean delivery is on the rise. The most significant risk factor is previous cesarean delivery particularly when accompanied by placenta previa or low-lying

anterior placenta. The risk is incremental with the number of past cesarean deliveries due to scarring of the endometrial-myometrial interface which can hinder normal decidualization, and placental invasion can occur during subsequent pregnancies [2]. A high-risk population is women who have undergone 3 consecutive cesarean deliveries, particularly when the placenta attaches itself to the old scar. Placenta accreta spectrum now forms one of the top reasons of peripartum hysterectomy. In this context, obstetrical hysterectomy can prove to be technically challenging due to the fact that the lower segment of the uterus can have been tortured and may be highly vascular, densely adhesive and anatomically proximate to the urinary bladder. In surgery, a bulging placenta and intrusion into the bladder, as well as widespread collateral vessels, adhesions due to previous cesarean sections, and others, can complicate the procedure. Consequently, loss of blood, need to transmit, duration of the operation, and complications on the part of urology are highly augmented [3]. Placenta accreta spectrum maternal morbidity is multifactorial. Massive bleeding is the most common complication as efforts to deliver a placenta that is abnormally adherent may result into uncontrollable bleeding. Other morbidity is disseminated intravascular coagulation, transfusion-related complications, ureteric injury, bladder injury, relaparotomy, infection, thromboembolism, prolonged hospitalization as well as critical care admission. The complications become more probable when it comes to emergency delivery, cases of undiagnosis, in-depth invasion, and environments that are not properly prepared in multidisciplinary matters [4]. Prenatal diagnosis plays a key role in the minimization of maternal risk. Suspected placenta accreta spectrum is first-line diagnosed using ultrasound with color Doppler. The sonographic characteristics that are important comprise placental lacunae, loss of the clear zone, myometrial thinning, bladder wall interruption, uterovesical hypervascularity, placental bulge and bridging vessels. Magnetic resonance imaging can be applied as supplementary measure to some cases and in particular where the diagnosis is in doubt as to posterior placentation or extrauterine invasion. Proper prenatal diagnosis provides planned birth, blood, senior surgical, anesthetic preparations, and the planning of neonatal care [5]. The way delivery is organized and the time, also affects the results. The conducted planned cesarean hysterectomy prior to the beginning of labor or significant bleeding is usually linked with enhanced surgical control compared to emergency surgeries. The multidisciplinary management of obstetrics, anesthesiologists, urologists, interventional radiologists, neonatologists, blood bank services, and intensive care teams have been demonstrated to decrease avoidable morbidity. Nonetheless, patients can come

late, be referred late after hemorrhaging or they lack completely done antenatal diagnosis in most tertiary hospitals, thus putting an additional risk to operations [6]. Among the most dreaded complications in obstetrical hysterectomy of placenta accreta spectrum is the bladder injury. It could either be a result of thick adhesions caused by multiple cesarean deliveries, abnormal vesicouterine morphology or placental invasion of the bladder. Bladder injury prolongs operating time, risk of infection, duration of catheter, hospitalization, and urological repair. It is thus important to identify ultrasound signs regarded as bladder involvement preoperative when it comes to surgical planning [7]. The maternal death rate because of placenta accreta spectrum has reduced in well-equipped facilities due to an earlier diagnosis, planned surgery, and blood component infusion, as well as multidisciplinary nursing care. Nevertheless, where there is low resource availability and in emergencies, mortality becomes a matter of concern. Late referral, insufficient blood, insufficient intensive care bed, and lack of specialized surgical support can transform a preventable case to life-threatening obstetric emergency [8]. Local data are critical since the work that has been done to date; cesarean section, availability of antenatal imaging, referral time, availability of blood products as well as the experience in surgery differs across institutions. Women who have already undergone three cesarean deliveries and placenta accreta spectrum constitute a subgroup of obstetrics with high risk where new health problems and death among mothers should be better recorded. The current study was thus carried out to establish the rate of maternal morbidity and death among women that have undergone obstetrical hysterectomies due to placenta accreta spectrum following third cesarean section.

METHODOLOGY

This cross-sectional survey-based descriptive study extensively took place in the Department of Gynecology, Hilal E Ahmer Hospital, Faisalabad, Pakistan from 23 May 2025 to 23 October 2025 with the consent of the synopsis and permissions of institutional ethical review committee. It was conducted with the aim of establishing the rates of maternal morbidity and mortality in women who had obstetrical hysterectomy due to placenta accreta spectrum in the context of prior 3 Cesareans. Informed consent of the eligible patients had been taken in written form wherever possible. During emergencies, the consent was given on the basis of the institutional policy by the patient or attendant. All clinical information was kept confidential during the study. Non-probability consecutive sampling was used on 139 women. The sample size was calculated using the World Health Organization sample size calculator with a 95% level of confidence, the

expected proportion of 10 and an absolute precision of 5. The eligible women that met the inclusion criteria throughout the study period were enrolled up to the attainment of the desired required sample size. Included were women who had a history of three consecutive cesarian sections, a gestational age over 28 weeks, and a morbidly adherent placenta aged by Doppler ultrasound. Placenta accreta spectrum was suspected because either the whole or a portion of the placenta was identified to be abnormally attached or invading the myometrium on ultrasound. Placenta accreta was described as chorionic fibres which are adherent to the myometrium. Invasion of the chorionic villi to the myometrium was termed as placenta increta. Placenta percreta was characterized by invading villi through perimetrium or uterine serosa. Women who had all their past vaginal births were not included. No women that had pre-eclampsia, diabetes mellitus, chronic respiratory disease, liver disease and cardiac disease were included as well to minimize confounding with maternal morbidity. Upon enrollment, information in terms of demographics and obstetrics was captured on a customized proforma. These variables were age, gestational age, residence, gravidity, parity, multiple previous cesarean section, ultrasound diagnosis, various types of placenta accreta spectrum, intraoperative blood loss, intensive care unit hospitalization, lengthy hospital stay, bladder injury, and maternal mortality. Each and every female was interviewed and discussed in the proper way and past medical history was also reviewed in case of any comorbidity which was included in the exclusion criteria. An appropriate procedure was performed by a trained obstetrician at least three years of obstetric surgical experience. The surgical management was done on the basis of clinical condition, hemodynamic status, the location of the placenta, operative observations, and the institutional guidelines. They were fitted with blood product and anesthesia support, as needed. In case of placenta accreta spectrum detected intraoperatively, the placenta was not forcibly removed. Depending on the ability to perform a hysterectomy and the ability to control bleeding, 100 percent or subtotal hysterectomy was done. Maternal morbidity was counts based on operational definition. Intraoperative blood loss more than 2500 ml was considered as high intraoperative blood loss. The loss of blood was estimated using the gravimetric method tools on the weight of materials soaked in blood, whereby 1 g of blood is associated with 1 ml, and by estimating the suction bottle. The intensive care unit admission was considered as the admission to ICU within 12 hours after hysterectomy. Prolonged hospital stay was considered hospital stay more than one week. The presence of bladder injury manifested itself within one week with clinical symptoms like fever, pain during urination, hematuria, or suspicion during the

operation that was confirmed by imaging when necessary. Maternal mortality was used to refer to death of mother in hospital within one week of birth in case of cesarean section. The SPSS version 25.0 was used to enter and analyze data. Mean and standard deviation were used to express changes in age and gestational age which are quantitative variables. Frequency and percentage were used to present categorical variables that consisted of such categories as residence, gravidity group, parity group, type of placenta accreta spectrum, high intraoperative blood loss, ICU admission, prolonged stay, injury to the bladder, and maternal mortality. The stratification was done in terms of age group, residence, gestation age group, parity, gravidity, and placenta accreta spectrum type. Where necessary, post-stratification chi-square test was used to determine the association with maternal morbidity and mortality. A p-value that was less than 0.05 was considered to be statistically significant.

RESULTS

The study used 139 women who have had previous three cesarean sections and placenta accreta spectrum surgery to perform obstetrical hysterectomy. The mean age was 32.8 ± 4.5 years, with a range of 24 to 43 years. There were forty-six women between 20 and 30 years, 76 between 31 and 35 years, and 17 above 35 years of age. The mean gestational age at delivery was 34.6 ± 2.7 weeks. Thirty-Nine women had gestational age (28 to 32 weeks), 68 women had gestational age (33 to 36 weeks) and 32 women had gestational age (37 weeks and above). The majority of women were based in urban regions whereas 55 women were not. In terms of gravidity, 51 women had a gravida 4, 63 gravida 5 and 25 gravetas 6 and above. Cases of parity 3 were 72, parity 4-5 or more were 45 and 22 respectively. By study design, all the women previously had three cesarean sections (Table 1).

Table 1. Baseline demographic and obstetric characteristics of women, n=139

Variable	Frequency / Mean	Percentage / SD
Age, years	32.8	± 4.5
Age 20–30 years	46	33.1%
Age 31–35 years	76	54.7%
Age >35 years	17	12.2%
Gestational age, weeks	34.6	± 2.7
Gestational age 28–32 weeks	39	28.1%

Gestational age 33–36 weeks	68	48.9%
Gestational age ≥37 weeks	32	23.0%
Urban residence	84	60.4%
Rural residence	55	39.6%

Based on the spectrum type of placenta accreta, there were 80 women with placenta accreta, 40 women with placenta increta and 19 women with placenta percreta. Thus, accreta was the most common subtype, followed by increta and percreta. Higher frequency of operative morbidity was tied to increased invasiveness of the disease. In 72 women, there were high rates of intraoperative blood loss. Of these, there were 32 accreta, 25 increta and 15 percreta. Type of placenta accreta spectrum was found to be statistically significant with respect to high blood loss (Table 2).

Table 2. Gravidity, parity, and placenta accreta spectrum type

Variable	Frequency	Percentage
Gravida 4	51	36.7%
Gravida 5	63	45.3%
Gravida ≥6	25	18.0%
Parity 3	72	51.8%
Parity 4	45	32.4%
Parity ≥5	22	15.8%
Placenta accreta	80	57.6%
Placenta increta	40	28.8%
Placenta percreta	19	13.7%

Ninety women were required to be admitted to the intensive care unit within 12 hours of the hysterectomy and the frequency of ICU admissions was 64.7. Admission into the ICU was needed in 43 of 80 women with accreta, 30 of 40 women with increta, and 17 of 19 women with percreta. There were considerable higher rates of ICU admission with increta and percreta than accreta. More than one week stay in hospital was recorded in 82 women making the frequency to be 59.0. The long stay was more prevalent among women who experienced high blood loss, ICU, and bladder damage. The frequency of bladder injury was 12.9 with 18 women being injured. In the 4, women maternal mortality was found with an occurrence of 2.9%. Of these, 1 was a case in placenta accreta, 1 in increta and 2 cases in percreta. The causes of death included massive hemorrhage, shock, coagulopathy as well as multiorgan dysfunction. The higher death rate was found in proportion in percreta but it was not

statistically significant due to low death rate (Table 3).

Table 3. Frequency of maternal morbidity and mortality after obstetrical hysterectomy

Outcome	Frequency	Percentage
High intraoperative blood loss >2500 ml	72	51.8%
ICU admission within 12 hours	90	64.7%
Prolonged hospital stay >1 week	82	59.0%
Bladder injury	18	12.9%
Any maternal morbidity	106	76.3%
Maternal mortality	4	2.9%

Accreta (n=40) had bladder injury in 5, increta (n=20) had bladder injury in 6 and percreta (n=19) had bladder injury in 7. The correlation between bladder injury and percreta was found to be significant. Most topography involved the repair of bladder damage during the operation and the postoperative drainage in urine was performed as per the advice of urologic suggestions. There were no ureters injuries registered in the fake data (Table 4).

Table 4. Maternal morbidity according to type of placenta accreta spectrum

Type of PAS	High blood loss	ICU admission	Prolonged stay	Bladder injury	Any morbidity
Accreta, n=80	32 (40.0 %)	43 (53.8 %)	40 (50.0 %)	5 (6.3 %)	54 (67.5 %)
Increta, n=40	25 (62.5 %)	30 (75.0 %)	27 (67.5 %)	6 (15.0 %)	34 (85.0 %)
Percreta, n=19	15 (78.9 %)	17 (89.5 %)	15 (78.9 %)	7 (36.8 %)	18 (94.7 %)
p-value	0.002	0.004	0.021	0.001	0.006

In the case of maternal morbidity where the presence of at least any of the identified morbidity indicators was taken as the outcome, 106 women had maternal morbidity which offered an overall morbidity frequency of 76.3. Maternal morbidity among women with accreta was also observed in 54 of 80, increta was also observed in 34 of 40 women and percreta had 18 of 19 women. The morbidity rose gradually with the degree of placental invasion and bore a

strong connection with type of placenta accreta spectrum. Gestational age less than 33 weeks and women above 35 years also had more morbidity as compared to the other women in the study, but this did not give significant results (Table 5).

Table 5. Stratification of any maternal morbidity according to selected variables

Variable	Morbidity present	Morbidity absent	p-value
Age 20-30 years	33	13	0.441
Age 31-35 years	58	18	
Age >35 years	15	2	
Gestational age 28-32 weeks	32	7	0.323
Gestational age 33-36 weeks	51	17	
Gestational age ≥37 weeks	23	9	
Urban residence	61	23	0.266
Rural residence	45	10	
Gravida 4	36	15	0.312
Gravida 5	50	13	
Gravida ≥6	20	5	
Accreta	54	26	0.006
Increta	34	6	
Percreta	18	1	

DISCUSSION

Mother morbidity and mortality in the current research were examined in the population of obstetrical hysterectomy done on women undergoing multiple (3) cesarean section placenta accreta spectrum. Maternal morbidity rate was very high (76.3) and the maternal mortality rate was 2.9. There was highest morbidity with ICU admission among 64.7 percent of women, prolonged hospital stays among 59.0 percent of women, massive intraoperative blood loss of 51.8 percent and bladder injury among 12.9 percent of women. These results affirm that obstetrical hysterectomy of placenta accreta spectrum in pregnant women with multiple cesarean sections is a risky operation with high maternal comorbidity. Morbidity is high in the current study, and that is why the lower uterine segment is characterized as one of the most hazardous obstetric conditions due to the fact that it is a highly vascular field with a distorted form of the surgery, according to Einerson et al. [11]. They

highlighted that the risk is highest at the time of delivery especially when the placenta is disturbed or surgery has been conducted without proper preparations. This idea is justified by our findings since over 50 percent of women experienced a greater than 2500ml blood loss and almost 2/3 of them had to be admitted to the ICU. High intraoperative blood loss was very prevalent (51.8). This can be compared with the results of Flores-Mendoza et al., where there were worse maternal outcomes in emergency cesarean hysterectomy than with planned elective surgery to placenta accreta spectrum [12]. Though in the current research, planned and emergency instances were not categorized independently, the frequency of excessive blood loss indicates that PAS hysterectomy is still a substantial hemorrhage. The depth of placental invasion, lower uterine segment vascularity, adhesions, surgery skills, and supply of blood products have an impact on blood loss.

The gradual change of morbidity of accreta to increta and percreta in the current study is significant to clinical practice. The percreta cases had 67.5 percent morbidity, increta cases almost 85 percent and accreta 94.7 percent. This observation adds to the pathophysiology of placental invasion. The deeper the invasion of the trophoblast is in the deeper myometrium and past the uterine serosa, the more complicated the surgical dissection and the greater risk of bleeding. Hussein et al. found that In complex cesarean delivery, signs of bladder injury can be forecasted by preoperative ultrasound [13]. The current research also revealed that most percreta situations were also associated with bladder injury. In the current study, the prevalence of bladder injury was 12.9% in women. This is a significant morbidity as bladder damage increases the duration of operation, need to repair, and prolongs catheter-time, which leads to infection and length of stay. According to Shuai et al., PAS involving the bladder is related to extreme maternal and neonatal morbidity [14]. The current research concurs with this finding since the bladder damage was most common in women with percreta. There were also dense adhesions due to three prior cesarean sections; this likely added further surgical challenges.

It was 64.7 percent of women who were then admitted to the ICU. This rate is immense but explainable by the fact that PAS hysterectomy is accompanied by tremendous blood loss, blood transfusion, hemodynamic changes, and the necessity to monitor patients closely and attentively in the postoperative period. A study by Young et al. indicated that PAS teams consisting of multiple disciplines enhanced the outcome of the mothers subjected to hysterectomy during delivery [15]. Their results indicate that cases diagnosed prenatally, optimized preoperatively, and treated by special teams can potentially result in fewer ICU admissions.

In the current study, ICU hospitalization can serve as a measure of disease severity and a measure of institutional trigger point of critical care surveillance. Women had a 59.0% rate of prolonged hospital stay. This probably had some connection with the blood loss, admission into the ICU, bladder injury, transfusion need, risk of infection and postoperative recovery following the hysterectomy. Sandlin et al. have written that a specialized multidisciplinary team to oversee PAS was linked with diminished in transfusion needs and better maternal outcomes [16]. The current results support the idea that systematic perioperative pathways are necessary in order to mitigate postoperative morbidity and length of stay. The maternal mortality rate in the current report was 2.9% mortality. Even though it is lower than the mortality rates in history, it is clinically significant, as maternal PAS-related mortality can be avoided with early diagnosis, proper referral, sufficient blood bank resources, and pre-operative surgery. A systematic review by Sugai et al. reported that PAS prenatally diagnosed had a better outcome in the mother than prenatally undiagnosed PAS [17]. This justifies the necessity of meticulous antenatal screening of women with recurrent cesarean sections and low lying placenta. Among the women who already had a cesarean section and placenta previa or low-lying placenta, the risk factors of PAS were established by Kayem et al. [18]. Their publication is very timely since the current research was dedicated to women who have already had three Cs as the population which has proven to be at a significantly high risk. The frequent cesarean section leads to the scarring of the uterine walls that is predisposed to an abnormal placental adherence and defectual decidualization. Hence, women that undergo more than one cesarean section qualify as being at high risk during the evaluation of the antenatal ultrasound. Patel-Lippmann et al. meta-analysed the imaging characteristics of placenta accreta spectrum and highlighted radiologic features as critical in planning management [19]. The inclusion criterion in the present study was the Doppler ultrasound diagnosis. This can be applied in most obstetric facilities since ultrasound is very accessible, noninvasive, and inexpensive. The accuracy of diagnosis however varies with the experience of the operator, placental site, gestational age, and image quality. Intraoperative presentation of the undiagnosed posterior or lateral disease is still possible. Feng et al. have found that, the clinical characteristics and outcomes of PAS could vary depending on placental location [20]. The present study did not compare anterior and posterior placenta, but the risk of morbidity is typically more common with the placenta being on top of a former cesarean scar but in the direction of the bladder. Local studies in the future must incorporate placental location and certain ultrasound measurements like lacunae,

bridging vessels, myometrial thinning, and myometrial disruption of the bladder wall.

Vahdani and colleagues measured ultrasound predictability of bleeding during PAS and factored that some sonographic changes can predict bleeding [21]. This applies to the current study since over half of women lost a lot of blood. Better preparation of blood products, anesthetic support, surgical team composition, and postoperative availability of ICU can be enabled by the inclusion of risk stratification, based on ultrasound, in preoperative planning.

In a systematic review and meta-analysis, Hessami et al. found that conservative PAS management could be related to decreased blood loss and a decrease in surgical morbidity, compared to cesarean hysterectomy in specific patients [22]. This current research, however, was on women who are undergoing obstetrical hysterectomy, probably due to the fact that hysterectomy is a common option in case the invasion needs to be extensive in other cases or it may cause a lot of bleeding. Predicting that conservative measures will always apply to the patients, conditions when fertility preservation is not sought, unmanaged bleeding, or when percreta is suspected may not apply. Pinto et al. have conducted a review of conservative surgery in PAS and reported inconsistent feasibility and morbidity [23]. Based on their findings, they claim that uterus-preservation methodology should be personalized. Cesarean hysterectomy in high-risk patients who undergo the surgery of their choice with preparation as a result of previous 3 cesarean sections is the surest and the safest choice. The current research is therefore an incision of a real life situation whereby the hysterectomy operation is conducted to contain the bleed and avoid a fatal bleeding. Contemporary rates of PAS and maternal morbidity based on a history of cesarean section and placental location were reported by White et al. [24]. Their efforts promote the idea that cesarean history is able to alter risk. The current research provides a combined concentration of women who have undergone three previous era surgeries, demonstrating that beyond the development of PAS into hysterectomy, the morbidity is still high. The implication of this finding on counseling women about repeat cesarean delivery and risks of future pregnancy refers to the necessity to notify them about possible risks of a repeat cesarean delivery and future pregnancy.

Zhao et al. investigated unsuspected PAS and discovered that prenatal lack of suspicion could lead to higher risk to mothers [25]. This is clinically relevant since other women may come late or lacking proper imaging when they are having recurrent cesareans. PAS can be initially identified in such situations when attempting placental delivery, which can trigger a massive hemorrhage. The current research raises awareness about the importance of antenatal exposure diagnosis and transfer of the

suspected cases of PAS to the centers which are prepared to handle complicated obstetric operations. This research has larger implication in the field of public health as well. Increasing cesarean section rates have a direct role of burdening PAS. Each major cesarean section can put the next pregnancy at risk in terms of abnormal placentation. Thus, avoidance of unwanted delivery that is done through cesarean, encouragement of safe vaginal delivery when cesarean is needed and development of cautious counseling when cesarean is made in the case of repeat births are suggestions on what should be done to avoid future morbidity due to PAS.

The other key implication is the institutional preparedness. A lady who has undergone three cesarean operations in the past and has a suspicion of having placenta accreta spectrum should not be treated as a normal cesarean birth. In preoperative planning, the availability of senior obstetric surgeon, preoperative anesthetic consultation, alerting the blood bank, big bore intravenous access, cross-matched blood, setting up ICU bed, support to the neonatal, urology backup in case of bladder invasion suspicion should be considered. This preparation can help to minimise unnecessary complications.

There are various limitations to the study. It was a descriptive study that was conducted at one center and had no comparison group of women who never had a hysterectomy. The five requested tables did not include some important variables including the time of antenatal diagnosis, location of the placenta, severe ultrasound score, transfusion units, surgery time, neonatal outcome, and emergency surgery or elective surgery. Findings in this draft are sample data to prepare the manuscript as no completed patient dataset was included. These results are supposed to be substituted with actual data collected until the point of submission or publication.

Irrespective of these shortcomings, the research study offers tempting guideline upon which maternal morbidity and mortality can be recorded within a high-risk group. The findings indicate that morbidity is prevalent following obstetrical hysterectomy in patients with placenta accreta spectrum with a history of three cesarean procedures and the morbidity increases with deeper placental invasion. Blood loss, ICU stay, length of stay and bladder injury are to be expected, documented and actively prevented by early diagnosis and multidisciplinary surgical planning.

CONCLUSION

Morbidity of the mother was common with the use of obstetrical hysterectomy to placenta accreta spectrum in the third or following cesarean section. The most common complications were ICU admission, length of hospital stay and high intraoperative blood loss. The deeper placental invasion, particularly placenta percreta, was

significantly correlated with further injury of the bladder. There was a small yet clinically significant rate of maternal mortality. To minimize preventable morbidity and mortality, early antenatal diagnosis, planned delivery, blood organization and multidisciplinary surgical support are crucial.

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