

# Management of Placenta Accreta in Patients with Repeated Caesarean Section in Tikrit

Israa Hashim AbidAlkareem

Department of Obstetrics, Medical College, Tikrit University

## Abstract:

**Background:** placenta accreta is still a major cause of obstetric hemorrhage. It is a potentially life-threatening obstetric condition that requires a multi-disciplinary approach to management. The incidence of placenta accreta has increased and seems to parallel the increasing cesarean delivery rate. The diagnosis is occasionally discovered at the time of delivery. In general, the recommended management of suspected placenta accreta is planned cesarean hysterectomy. Recently, some authors have proposed conservative treatment as an alternative to preserve fertility. However, surgical management of placenta accreta may be individualized.

**Methods:** A, descriptive study was undertaken over a period of 15 months in (Salah Aldin Teaching Hospital, Tikrit, Iraq) of all diagnosed cases of adherent placenta intraoperative. Two alternatives are caesarean section with subsequent immediate hysterectomy, which has traditionally been the treatment of choice or if the patient wishes more children, excision of the placenta site with internal iliac ligation.

**Results:** 34 cases adherent placenta diagnosed intraoperative were identified. All patients underwent emergency caesarean section. 26 patients had excision of placental site, 8 patient's required obstetric hysterectomy were noted.

**Conclusion:** Placenta accreta can be managed conservatively to preserve fertility

**Keywords:** Placenta accretes, Caesarean section, Hysterectomy.

## Introduction:

Placenta previa with accreta is a general term used to describe the clinical condition when part of the placenta, or the entire placenta, invades and is inseparable from the uterine wall. It occurs when a defect of the decidua basalis results in abnormally invasive placental implantation<sup>(1, 2)</sup>. It is often diagnosed antenatal or after delivery when manual removal of the placenta has failed. Attempting forcible manual removal of a placenta accreta can easily lead to dramatic hemorrhage that may result in hysterectomy. Thus, placenta accreta and especially placenta percreta reported as a result in a maternal mortality rate of (7%), and cause intra- and postoperative morbidity

associated with massive blood transfusions, infection, ureteral damage, and fistula formation<sup>(2)</sup>. Its incidence, along with the Cesarean section rate, has increased 10-fold over the past 50 years<sup>(3)</sup>. With a frequency of approximately 1 per 1000 deliveries, this disorder has become more common in our medical practice<sup>(4, 5, 6)</sup>.

Traditional management of placenta accretes was hysterectomy<sup>(7)</sup>. As fertility preservation is required in many cases due to their young age and uterine preservation is directly related to psychology, femininity and self esteem of female, obstetricians developed many conservative approaches in management of Placenta accreta such as excision of

the placental site with pelvic devascularization (internal iliac ligation) (8,9).

### **Patients and Methods:**

A clinical, descriptive study was undertaken over a period of 1<sup>st</sup> Of November 2015 to 1<sup>st</sup> of February 2017 (Salaah Aldeen Teaching Hospital, Tikrit, Iraq). The patients who had emergency caesarean section who discovered as cases of placenta accrete intraoperative or pre operative in Patients at high risk for invasion placentation detected b abdominal ultrasound .A total of 34 patients were included. Data were collected from them. 23 patients with antenatal evaluation. Eleven had no antenatal evaluation .Comprehensive information regarding age; parity previous obstetric history was noted. All patients were fully counseled regarding planned hysterectomy versus planned conserving uterus. The possible consequences of surgery, effects on future child bearing, with a written informed consent for caesarean hysterectomy if required. Mode of delivery was planned as emergency caesarean section for all patients, a Foley catheter was placed in the bladder through the urethra preoperatively. The delivery was performed by an experienced obstetric team that includes a two obstetrician, and a general surgeons, with other surgical specialists, such as urologists. Intraoperative findings of placental adherence, failure of placental separation (total or partial). Conservative treatment consisted in opening the uterus at a site distant from the placenta, and delivering the baby without disturbing the placenta with excision of lower uterine segment with the placenta and over sewing of remnant

placental site with internal iliac artery ligation. Going straight through the placenta to achieve delivery is dangerous attitude, associated with more bleeding, and should be avoided. If there is no wish for continued fertility or if the hemodynamic status is unstable, a hysterectomy must be performed.

One intrabdominal drain were placed in some cases and histological examination of the placenta. Because of the risk of massive blood loss cross-matched blood and blood products were be readily available in anticipation of massive hemorrhage. In addition, oxytocin used intraoperative and postoperative .Prophylactic antibiotics were indicated in all patients. They were observed after operation for any possible complication.

### **Results:**

A total of 34 cases diagnosed intraoperative placenta accreta were studied. Total of 13563 women were delivered, 1505 women with caesarean section deliveries performed the frequency of placenta accreta found to be (2.26%). Table (1) shows the mean and. Standard deviation of maternal age & gestational age. All patients had previous caesarean section. A conservative management was performed in 26 cases while total abdominal hysterectomy was performed in 8 cases. In present study, conservative treatment failed in three cases out of 26 (11%) and led to relaparotomy for hysterectomy.

Table (2) shows that there is a difference in both group Internal iliac artery ligation in six of the eight cases (75 %). Total blood loss was less in patient with a total hysterectomy less than 1500 ml of blood in only 3 cases (37%) and patient with conservative

methods had more than 1500 of blood in 22 patients (84%). Two patients had acute renal necrosis in total hysterectomy group we received them in shock referred to the Bagdad hospital for further management. The mean length of hospitalization was 3 days patients with hysterectomy and 7 days in-patient with conservative management. Table (3) shows the percentage of placenta accreta in

patients with caesarean section there is great association of placenta preveia and placenta accreta mainly in patients with previous 3 caesarean section (62%) and patients had more than 6 caesarean section (42%).

Figure (1) shows the clinical presentation of patients.

Figure (2) shows the intraoperative site of placenta with methods of management.

**Table (1):** The demographic characteristic of patients.

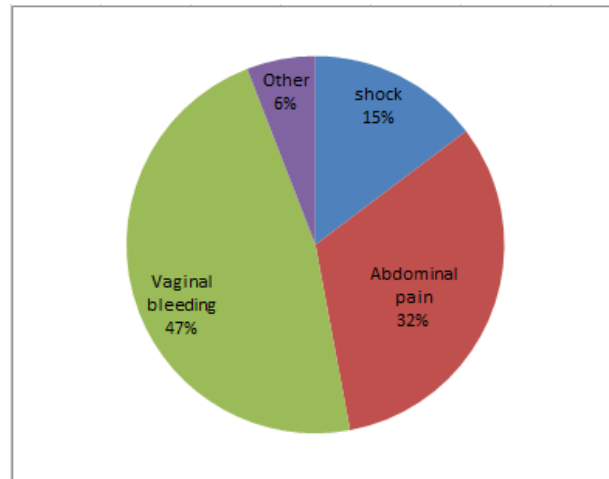
Variable	Mean	SE	ST DEV	Minimum	Median	Maximum
Maternal age (years)	35.176	0.984	5.739	29	33	45
Gestational age (weeks)	33.676	0.604	3.522	25	36	36
Hospital admission (days)	4.206	0.422	2.459	3	3	11

**Table (2):** The percentage of placenta accretes.

	No. Patients	Placenta Previa	%	Placenta Accreta	%
Previous 1 C/S	587	65	11.1%	4	6.2%
Previous 2 C/S	297	71	23.9%	15	21.1%
Previous 3 C/S	299	8	2.7%	5	62.5%
Previous 4 C/S	175	10	5.7%	2	20.0%
Previous 5 C/S	104	22	21.2%	2	9.1%
Previous 6 C/S & more	65	14	21.5%	6	42.9%
Total		190		34	100%

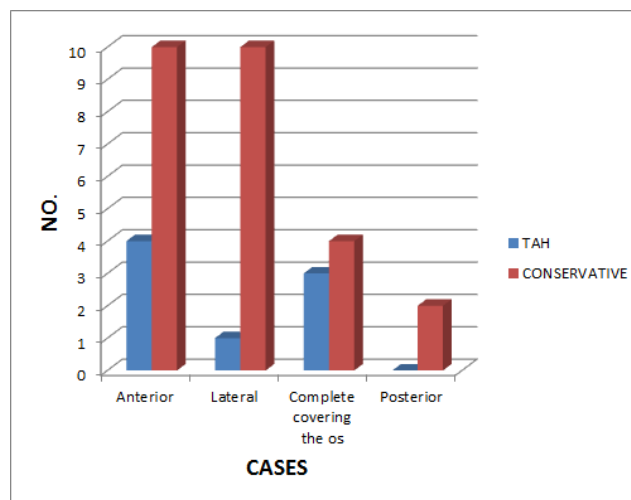
**Table (3):** Intra &Post operative complications.

	TA H	*TAH Cases	%		Conservative Management	Conservative Management Cases	%
Intenal iliac ligation	8	6	75%		26	20	76.9%
Bladder-injury	8	2	25.0%		26	3	11.5%
Re-laparotomy	8	0	0.0%		26	3	11.5%
Admission to ICU	8	3	37.5%		26	11	42.3%
Fever	8	2	25.0%		26	18	69.2%
Days of hospitaiaon (days)	8	3	37.5%		26	7	26.9%
Estimated blood loss							
<1500	8	3	37.5%		26	4	15.4%
>1500	8	1	12.5%		26	22	84.6%
Acute renal necrosis	8	2	25.0%		26	2	7.7%
Recurrent hemorrhage	8	1	12.5%		26	8	30.8%



\*other: - rupture membrane, fetal distress.

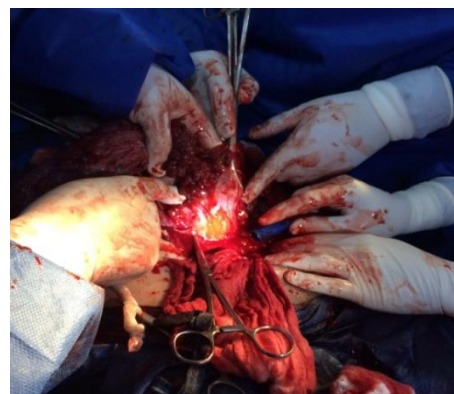
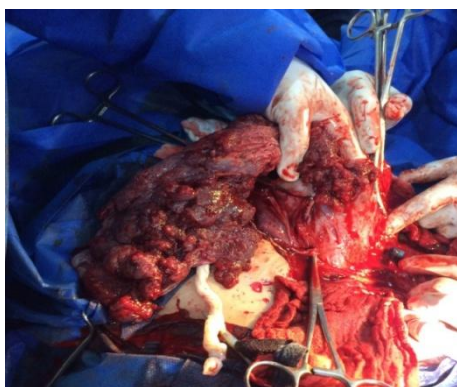
**Figure (1):** shows the clinical presentation of patients.



**Figure (2):** Shows the intraoperative site of placenta with methods of management.



**Figure (3):** Thin and vascular lower uterine segment noted during caesarean section. (Patient with previous 4cs).



**Figure (4):** Intra operative photograph showing adherent placenta. (Patient with previous 1cs).

### **Discussion:**

Placenta accreta is a serious obstetric complication. The optimal management of placenta accretes remains a topic of debate. Increasingly, conservative treatment has been advocated when blood loss is not excessive and future fertility is desired. In a modern obstetric setting, conservative management is a reasonable alternative when chosen cautiously. Miller found that the number of caesarean sections, age, parity and location of the placenta in relation to the scar were all risk factors.

Placenta accreta is much more frequent in patients with placenta previa (880/100,000) than in upper uterine segment implantations (5/100,000). Tong S et al also observed an increased frequency of placenta accreta and placenta praevia after caesarean section from (0.26%) in normal uterus to (10 %) after 4 caesarean section this study similar to present study but unfortunately patients with 3 caesarean section had more risk to have placenta accrete this may be related to history of the last caesarean section that mainly occurs in the period of the war against ISIS in 2014.

Patients with placenta accreta require emergency preterm delivery because of the sudden onset of massive hemorrhage, the above results mirror to those reported in the study done by Hagi mean gestational age is 31 weeks<sup>(13, 14)</sup>.

Cesarean-hysterectomy immediately after delivery of the neonate without attempt of

placental separation became and still is, since 1972, the recommended treatment option in placenta accreta. It is considered the gold standard treatment<sup>(10, 11)</sup>.

Present study, conservative management of placenta accrete was associated with an increasing of hemorrhaging, infection, treatment failure, restrictive follow-up and hysterectomies mainly because of secondary hemorrhage. These results similar to Nijametal<sup>(15)</sup> noticed the maximum blood loss in patient with uterine sparing surgery is more than patients with hysterectomy. While Kayem et al compared maternal outcome among women with placenta accrete by preserving the uterus and hysterectomy in patients complete her family there was a reduction in blood transfusion and post operative complication in patient treated conservatively<sup>(5)</sup>. However the number of patients included in the study is too low for an adequate evaluation of the risk of maternal morbidity or mortality. Accordingly, this type of management is presently appropriate only hysterectomy and conservative treatment remain debatable. The ability to secure homeostasis intraoperatively is the main determining factor as to whether uterine conservation can be considered. With sufficient blood bank supply or adequate availability of subspecialty and support personnel should consider ideally, these should be discussed prenatally with the patient to give her conservation has



proven to be successful in carefully selected decisions regarding optimum management have to be made on an individual basis and as per the condition of the patients during surgery.

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### **Conclusions:**

All patients with morbidly adherent placenta should have pre-operative assessment. Caesarean hysterectomy with internal iliac artery ligation would be the best option if family is complete. Conservative treatment is an interesting alternative especially if subsequent pregnancy desired; however, it exposes to infection and bleeding. In conclusion, conservative management of placenta accreta with uterine conservation has proven to be successful in carefully selected patients.

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