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Case report

The Placenta Accreta Spectrum In Previous Three Caesarean Section: A Double Trouble

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ABSTRACT

BACKGROUND: Placenta accreta spectrum disorder in pregnancy is the most dangerous entity in obstetric practice. The intractable massive hemorrhage and related complications results in high chances of maternal morbidity and mortality. The management often demands the involvement of high expertise of multidisciplinary team of senior consultants. We present here a case of previous three caesarean with posteriorly located low lying placenta in unscarred portion of uterus with placenta accreta with gestational hypertension and hypothyroidism. She was successfully managed with thorough and meticulous preoperative preparations and senior consultant led care. The patient was discharged home with healthy baby with uneventful postoperative recovery.

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Introduction

Placenta accreta spectrum refers to abnormal pathological adherence or invasion of the placenta into myometrium. it includes placenta accreta, placenta increta and placenta percreta. In Placenta accreta, the decidua is defective or absent and placenta is directly attached to myometrium.

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In Placenta increta, the villi invades into myometrium and in placenta percreta, the placental villi may reach upto uterine serosa or invade to closeby organ like urinary bladder[1]. The most favored hypothesis regarding the etiology of placenta accreta spectrum is defective endometrial-myometrial interface.

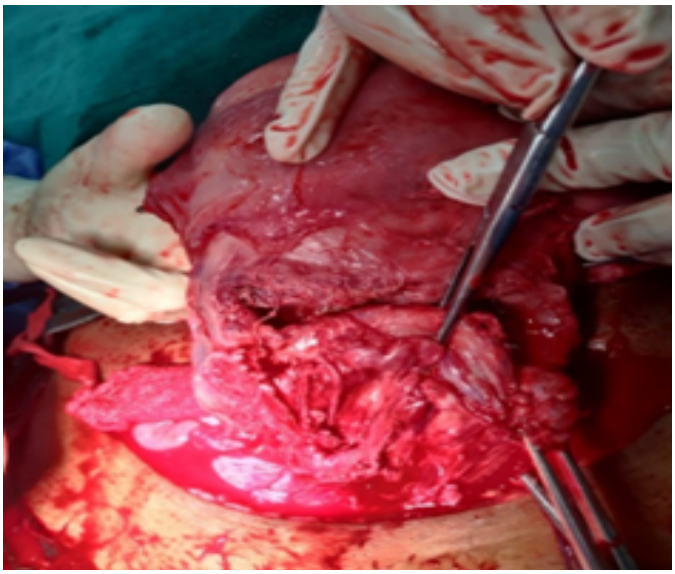
This leads to failure of normal decidualization in the area of a uterine scar or defect. It allows abnormally deep placental anchoring villi and trophoblast infiltration resulting in adherence[2]. The placenta does not get separated in second stage of labour causing torrential haemorrhage, shock, coagulation disorders and emergent hysterectomy to save mother's life.

The major risk factors for this disorder includes previous caesarean delivery, hysterotomy, myomectomy with breech of endometrium, uterine surgeries, uterine amomalies, placenta praevia, repeated endometrial curettage, septic endometritis,smoking, advanced maternal age, multiparity,In vitro fertilization etc [3]. The risk of placenta accreta spectrum increases with increase in number of prior caesarean sections. The risk of placenta accreta is 3%, 11%, 40%, 61%, and 67%, for the first, second, third, fourth, and fifth or more cesarean, respectively[4]. Here, we report Placenta accreta spectrum in patient with previous 3 LSCS with multiple high risk factors successfully managed with good perinatal and maternal outcome.

CASE REPORT

A 30 years old, Gravida4, Para3, Living2 at 36+3 weeks with previous three LSCS, gestational hypertension, hypothyroidism, booked at our institute, was admitted in view of high BP records and safe confinement. There was no history of any uterine curettage or a previous placenta previa or adherent placenta in previous pregnancies. Her Haemoglobin was 10.4g/dl and other blood investigations were normal. A pre-operative sonography showed a posterior placenta which was low-lying, 1.3 cm from the internal os with prominent placental lakes with no definitive remarks on retro placental area. The possibility of placenta accreta was considered and repeat elective caesarean planned at 37 weeks after stabilization. Necessary pre-operative arrangement was made as per the standard protocol. A senior surgeon referral was kept for back-up in view of possibility of dense adhesions. Abdomen was opened by vertical incision. Omental adhesions released. A healthy baby was delivered by lower segment caesarean section. Placenta was adherent to posterior uterine wall as shown in Figure 1.

Figure 1 : Placenta adherent to posterior uterine wall



A combined decision was made by the operating team involving senior consultants to proceed with bilateral uterine artery ligation and total hysterectomy. The per operative blood loss was 1.2 litres and patient



was stable throughout the surgery and received one pint blood. Her post-operative recovery was uneventful and was discharged with baby. Histopathology was suggestive of placenta accreta.

DISCUSSION

The placenta accreta spectrum is a pathological entity which can prove fatal if not timely diagnosed and intervened. The incidence of accreta is on massive rise over past two decades and posing as a nightmare to the treating obstetrician. ThePlacenta accreta is more frequent in case of placenta praevia and estimated to be about 3 to5% [5]. The maternal mortality rate in placenta accreta spectrum disorder varies from 7% to 30%[6].The average blood loss at delivery in case of placenta accreta is 3000 to 5000ml[7]. In contrast, the estimated blood loss in our case was 1200ml due to quick and meticulous surgical procedure by senior obstetrician. The Ultrasound examination with Doppler is the basic screening tool for placenta accreta spectrum and an higher imaging with MRI is done if required.

Our ultrasound findings was suggestive of possibility of placenta accreta but did not have all the classical signs to confirm the diagnosis. As per systematic review and meta-analysis by Shibin Hong et al., the sensitivity and specificity of ultrasonography for diagnosis of PAS is 0.90 and 0.83 respectively. The sensitivity and specificity of MRI is 0.89 and 0.87 respectively and there was no significant statistical difference between the diagnostic accuracy of ultrasound and MRI[8].Though our patient had scarred uterus, placenta accreta was posterior in unscarred portion of uterus making it unique.Tackling placenta accreta spectrum along with dense adhesions in previous three caesareans calls for an high expertise and is a double trouble nightmare to the obstetrician.

The management includes ligation of bilateral uterine artery or internal iliac artery with hysterectomy, conservative approach like angiographic embolization, leaving the placenta in situ with close follow up [9]. However, the hysterectomy as the best life saving procedure for long term outcome. The interventional radiological procedure can be considered if facility is available and patient desires to conserve her uterus and motivated for close and long follow up. The conservative management has limitations and can lead to severe infection, organ damage, secondary haemorrhage and hysterectomy[10]. We resorted for radical approach due to non availability of interventional radiology facility in our institution. The management of case can always be individualized based on the case profile and the expertise of the team.

CONCLUSION

The placenta accreta spectrum is an havoc and life threatening emergency condition. The possibility of this condition should always be kept in mind in presence of risk factors irrespective of the sonological findings. It is prudent to involve a multidisciplinary team of senior consultants in the management to prevent fatality. An early decision and quick hysterectomy reduces the blood loss and improves the obstetric outcome.

Conflicts of Interest : Nil

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DECLARATION : The Authors declare that we have not used any AI tool or AI Assisted Technology in preparing this Manuscript. It is our sincere work and all the authors have contributed in case management, manuscript preparation and editing.

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