



Case Report of Placenta Accreta: Successful Management with Conservative Surgery

Dr. Berkheez Shabir^{1*}, Dr. Zahoor Hussain Daraz².

¹Consultant Gynecologist, HA Alif Atoll Hospital, Dhidhdhoo, Ministry of Health, Maldives.

²Consultant Pediatrics, HA Alif Atoll Hospital, Dhidhdhoo, Ministry of Health, Maldives.

ABSTRACT

The incidence of placenta accreta spectrum (PAS) disorders has increased over the last decades due to increase in cesarean deliveries, resulting in increase in Cesarean hysterectomies, maternal mortality and morbidity but since last few years there has been a gradual shift towards the idea of conservative management. Conservative management of PAS is known to reduce major obstetric hemorrhage and salvage hysterectomy. We present a case of placenta accreta diagnosed by ultrasound where management of post-partum hemorrhage was accomplished by conservative surgery. The concise steps taken in management of placenta accreta before and during cesarean section were: Availability of 4 donors with cross match; Stark cesarean section; atraumatic clamps around uterine arteries; ureterotonic drugs; external (B-Lynch suture); and application of diathermy where required. This experience indicates that few selected cases of PAS could be managed conservatively who are at risk of intra-partum hemorrhage and post-partum hemorrhage.

Key words:

PAS=Placenta accreta spectrum disorder, B-Lynch Suture, Hysterectomy, cesarean section.

Article History:

Received On: 22.02.2020

Revised On: 26.04.2020

Accepted On: 28.04.2020

*Corresponding Author

Name: Dr. Berkheez Shabir

Email: berkheez@gmail.com

DOI: <https://doi.org/10.37022/WJCMPR.2020.2217>

INTRODUCTION

An abnormally adherent placenta to the uterus is called as placenta accreta¹. Broadly, three main entities are defined histologically, depending upon the invasion of placenta into the wall of uterus called as myometrium. These are named as Placenta accreta, placenta increta and placenta percreta. ¹(Fig-I) Although Placenta accreta is commonest among the three and serious intra- partum hemorrhage is not uncommon and cesarean hysterectomy is always kept in mind to prevent post-partum hemorrhage and death; particularly when medical therapy fails. Here we present a case of placenta accreta which was earlier diagnosed by ultrasound and presented to our hospital with per vaginal spotting and low fetal movement for which emergency cesarean section was done and case was managed conservatively with success.

CASE REPORT

A 30-year-old woman (gravida-2, para-1) with previous history of cesarean delivery came to our hospital with the complaints of per vaginal spotting and less fetal movements for 2 days, she was term with 38 weeks and 2 days of pregnancy. On admission her non-stress test was non-reactive. An urgent abdominal ultrasound was done that showed a viable fetus with normal amniotic fluid volume but Bio- physical profile revealed low manning score and situation demanded emergency cesarean section. However; her recorded history and documentation revealed placenta accreta. Urinalysis was negative for blood and cystoscopy could not be done for revealing bladder invasion. Complete blood count showed; Hb% of 11.2g/dl and platelet count of 1.7 lac/mm³. Coagulation profile was within normal range. Referral to tertiary care was almost impossible in a short period of time. The patient was briefed about the potential obstetric complications during and

after the procedure. An emergency cesarean was planned, keeping at least 4 donors at standby with grouping and cross matching ready. Cesarean section with certain modification to minimize bleeding and time was performed. (Figure-II and Fig-III).

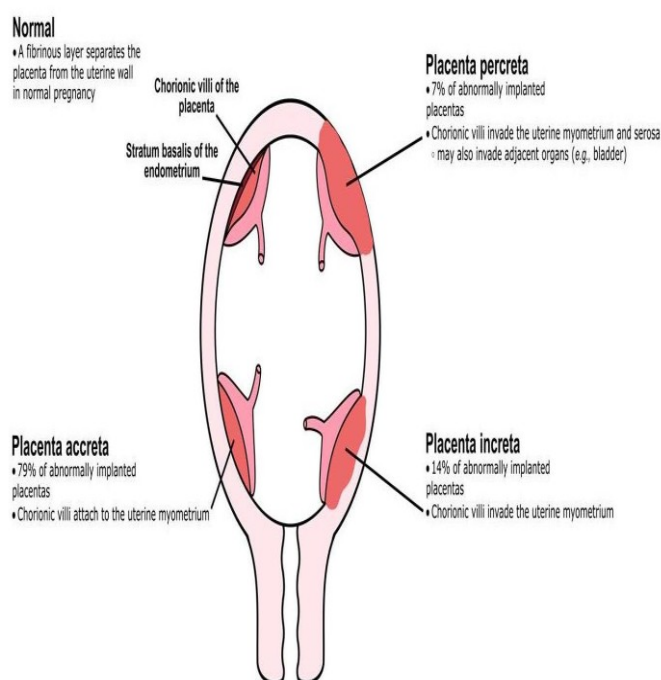


Fig-I Showing different types of placental abnormalities: (Courtesy-Internet)

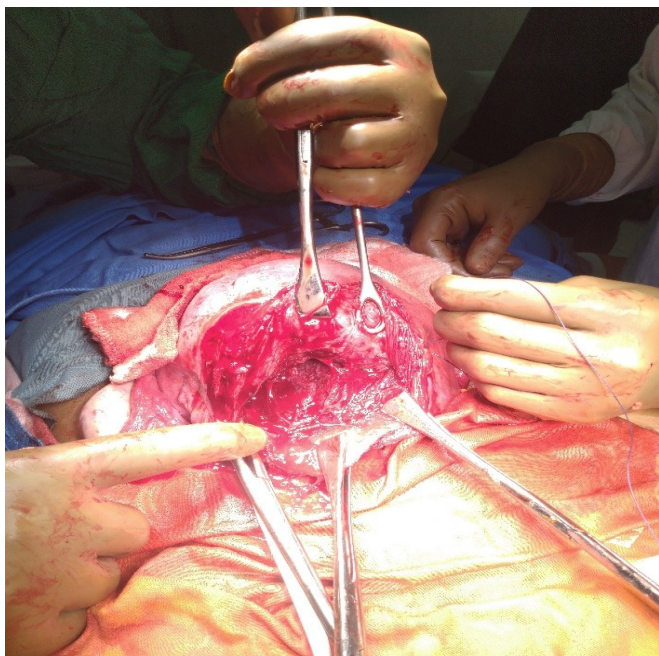


Fig II: Superior view of anterior placental invasion.

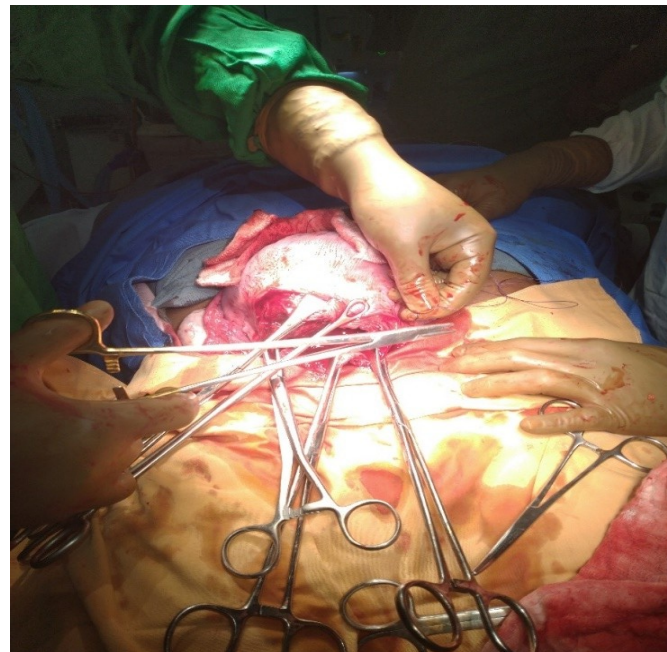


Fig III: Superior view of lower uterus during closure of uterus leaving some of the abnormal adherent placental tissue in situ.

A healthy neonate weighing 3140 g was delivered. Preliminary precautions to minimize uterine bleeding were taken by positioning the atraumatic clamps around uterine arteries. Extraction of placenta was not spontaneous so manual removal was performed. Small vascular placental tissue was kept in situ to prevent excessive bleeding. Furthermore; the placental site was properly reviewed. Multiple hemostatic sutures using 1.0 vicryl were applied in the area of bleeding at the site of the placental bed². Later a B-Lynch compression suture was prepared (2.0 coated vicryl). 13 Twenty IU of oxytocin (Syntocin) was intravenously administered simultaneously with 20 units in 1 liter of intravenous fluid was started. Finally, using regular technique abdomen was closed. A total of 2,000 mL of crystalloids, 500 mL of colloid fluid and 1 unit of erythrocyte suspension was given intra-operatively assuming that the amount of bleeding was approximately 1L. CBC was sent intra-operatively which revealed a hematocrit 30.1% and hemoglobin 8.9 g/dL. In Post-operative care another unit of whole blood was transfused and postoperative course was uneventful and the patient was discharged on day 3 in good condition.

DISCUSSION

A few decades ago placenta accreta was an obstetric rarity, however at present it contributes to a significant percentage of morbidity and mortality along with its other types⁴. Hence, its incidence has increased from 0.8/1000 deliveries in the 1980s to 3/1000 deliveries in the past decade approximately^{5,6}. Usually ante natal scan, early in the pregnancy; is sufficient to diagnose placental abnormalities including placenta accreta. However MRI imaging is considered important to further know its complete anatomical details and precise topography^{7, 8}. Despite latest techniques of diagnosing precisely the type of placenta in the earlier stages of pregnancy, hysterectomy remains the most common surgical procedure to avoid PPH.⁹ Conservative approach has many intentions and advantages; 1st the surgical complications associated with radical procedures are avoided; 2nd preservation of fertility when

family is not complete; 3rd physiological burden of symptoms which patient has to bear after hysterectomy can be avoided^{5,10-12}. There are various techniques which can be devised to avoid radical surgical procedures. It include uterotonic drugs, intrauterine packing (Bakri balloon), external compression with uterine sutures (B-Lynch, Hayman, Cho) and selective devascularization by ligation or embolization of the uterine artery^{5, 10-12}. Many authors have recommended placement of intra uterine packing like Bakri balloon in conjunction with uterine B-Lynch compression sutures. This technique is referred as "uterine sandwich" and is rendered a useful technique in treating uterine atony and bleeding¹³. Our conservative surgical protocol in this case of placenta accreta was successful in preserving the uterus of women and avoiding a radical procedure which is not free from complications during and after the surgery. Our approach was simple but effective. We kept 4 donors ready with grouping and cross matching. Simple modified Cesarean section to minimize bleeding and time was performed delivering 3140 g healthy neonate. Effective preliminary precautions to minimize uterine bleeding were taken by positioning the atraumatic clamps around uterine arteries. Placental extraction was manually done for failure of spontaneous removal. Whole placenta could not be retrieved and small adherent vascular placental tissue was kept in situ. Furthermore, the placental site was again properly reviewed. During the procedure various hemostatic sutures e.g. 1.0 vicryl were applied in the area of bleeding at the site of the placental bed³. Later during the procedure, a B-Lynch compression suture was prepared (2.0 coated vicryl) and all bleeders were properly managed and bleeding controlled¹⁴. Finally, abdomen was closed using a regular technique. Urinary catheter that was placed prior to procedure was kept for 24 hours. Patient was kept on intravenous antibiotics and she did quite well and was discharged on day 3 after the cesarean section in stable condition with normal parameters.

CONCLUSION

Cesarean hysterectomy is usually performed in cases of placenta accreta syndrome but this case experience has made us to consider a conservative approach in the management of placenta accreta in absence of placenta previa; keeping all preparation for hysterectomy in standby, thus preserving fertility and the uterus of patient.

CONFLICTS OF INTEREST

The authors report no conflict of interests.

REFERENCES

1. Y. Oyelese and J. C. Smulian, "Placenta previa, placenta accreta, and vasa previa," *Obstetrics and Gynecology*, vol. 107, no. 4, pp. 927–941, 2006.
2. M. Arduini, G. Epicoco, G. Clerici, E. Bottaccioli, S. Arena, and G. Affronti, "B-Lynch suture, intrauterine balloon, and endouterine hemostatic suture for the management of postpartum hemorrhage due to placenta previa accreta," *International Journal of Gynecology and Obstetrics*, vol. 108, no. 3, pp. 191–193, 2010.
3. C. B-Lynch, A. Coker, A. H. Lawal, J. Abu, and M. J. Cowen, "The B-Lynch surgical technique for the control of massive postpartum haemorrhage: an alternative to hysterectomy? Five cases reported," *British Journal of Obstetrics and Gynaecology*, vol. 104, no. 3, pp. 372–375, 1997.
4. J. M. Palacios-Jaraquemada. One-Step Conservative Surgery for Abnormal Invasive Placenta (Placenta Accreta-Increta-Percreta) vol.2, no.31; pp. 177:264–71
5. K. M. Flood, S. Said, M. Geary, M. Robson, C. Fitzpatrick, and F. D. Malone, "Changing trends in peripartum hysterectomy over the last 4 decades," *American Journal of Obstetrics and Gynecology*, vol. 200, no. 6, pp. 632.e1–632.e6, 2009.
6. S. Wu, M. Kocherginsky, and J. U. Hibbard, "Abnormal placentation: twenty-year analysis," *American Journal of Obstetrics and Gynecology*, vol. 192, no. 5, pp. 1458–1461, 2005.
7. W. C. Baughman, J. E. Corteville, and R. R. Shah, "Placenta accreta: spectrum of US and MR imaging findings," *Radiographics*, vol. 28, no. 7, pp. 1905–1916, 2008.
8. B. K. Dwyer, V. Belogolovkin, L. Tran et al., "Prenatal diagnosis of placenta accreta: sonography or magnetic resonance imaging?" *Journal of Ultrasound in Medicine*, vol. 27, no. 9, pp. 1275–1281, 2008.
9. H. A. Mousa and Z. Alfrevic, "Major postpartum hemorrhage: survey of maternity units in the United Kingdom," *Acta Obstetrica et Gynecologica Scandinavica*, vol. 81, no. 8, pp. 727–730, 2002.
10. R. G. Hayman, S. Arulkumaran, and P. J. Steer, "Uterine compression sutures: surgical management of postpartum hemorrhage," *Obstetrics and Gynecology*, vol. 99, no. 3, pp. 502–506, 2002.
11. J. H. Cho, H. S. Jun, and C. N. Lee, "Hemostatic suturing technique for uterine bleeding during cesarean delivery," *Obstetrics and Gynecology*, vol. 96, no. 1, pp. 129–131, 2000.
12. Y. Y. Cheng, J. I. Hwang, S. W. Hung et al., "Angiographic embolization for emergent and prophylactic management of obstetric hemorrhage: a four year experience," *Journal of the Chinese Medical Association*, vol. 66, no. 12, pp. 727–734, 2003.
13. W. L. Nelson and J. M. O'Brien, "The uterine sandwich for persistent uterine atony: combining the B-Lynch

compression suture and an intrauterine Bakri balloon," *American Journal of Obstetrics and Gynecology*, vol. 196, no. 5, pp. e9–e10, 2007.