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Case Report

A case of multiple fibroid uterus, complete placenta praevia, antepartum haemorrhage, myomectomy and obstetric hysterectomy: a near miss

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ABSTRACT

An interesting case of young unbooked, unregistered, primigravida with multiple fibroid uterus, placenta praevia type IV, presented with APH in haemorrhagic Shock, impacted large fibroid in Lower Uterine Segment and Multiple fibroids on Anterior wall, fundus for which myomectomy was performed. Preterm Caesarean Section with extremely low birth weight infant delivered followed by life-saving Emergency Obstetric hysterectomy. She had uneventful recovery without any complications of massive transfusion or surgery. Case is being reported as an obstetric near miss.

Keywords: Multiple fibroids, Impacted fibroid in LUS, APH, Preterm CS, Obstetric hysterectomy

INTRODUCTION

Near Miss' in obstetrics is defined as very ill pregnant or recently delivered woman who nearly died but survived a complication during pregnancy, childbirth or within 42 days of termination of pregnancy. SAMM (Severe Acute Maternal Morbidity) refers to a life-threatening disorder that can end up in near miss with or without residual morbidity or mortality. Women who develop SAMM during pregnancy share many pathological and circumstantial factors related to their condition. Although some of these women die, a proportion of them narrowly escape death. Near miss cases and maternal deaths together are referred to as severe maternal outcome (SMO). Severe morbidity data are vital for policy planners to know requirements of essential and emergency obstetric care (EmOC) to manage these. It is also assumed to be a better indicator than maternal mortality alone for designing, monitoring, follow up and evaluation of safe motherhood programs.¹⁻³ Antepartum haemorrhage (APH) is defined as bleeding from or into the genital tract, occurring from 24+0 weeks of pregnancy and prior to the birth of the baby. The

most important causes of APH are placenta praevia and placental abruption, although these are not the most common. APH complicates 3–5% of pregnancies and is a leading cause of perinatal and maternal mortality worldwide. Upto one-fifth of very preterm babies are born in association with APH, and the known association of APH with cerebral palsy can be explained by preterm delivery. Obstetric haemorrhage encompasses both antepartum and postpartum bleeding. Here, we present such a case report of a near miss.

CASE REPORT

20 years old young Primigravida, unbooked case, @ POG~26 weeks presented with torrential bleeding, in Haemorrhagic Shock fetal cardiac activity was present. Internal examination was deferred, however vaginal toileting was done to assess blood loss and collection of blood in interoitus, bits of placental tissue were also present. She was being seen at another centre and was a known case of Pregnancy with multiple Fibroids and Complete Placenta Praevia covering Os. She had visible

clinical pallor (Hb 4 gm%), tachycardia (146/mt), thready peripheral pulses, hypotension (60/mmHg), oliguria (15 ml high coloured urine drained on catheterization), tachypnea (36/mt), air hunger, with fresh bleeding PV along with passage of clots. Her blood group was A negative. She was taken up for emergency hysterotomy/ caesarean section with preoperative consent for obstetric hysterectomy under GA, ASA (V) with central line in situ. Simultaneous resuscitation with blood colloids and crystalloids was done preoperatively and intraoperatively using pressure cuffs with 2 wide bore intracath in upper and lower limbs. Four units of whole blood were transfused preoperatively and intraoperatively and four units were kept on standby.

Abdominal incision was midline vertical as per existing guidelines in standard textbooks and intraoperative findings were as shown in Figure 1-2. Large- 15×15 cm intramural fibroid in LUS, -10×10 cm intramural fibroid on anterior wall, -8×8 cm intramural fibroid on fundus, -6×6 cm intramural fibroid on left cornual edge and -4×4 cm intramural fibroid on posterior wall. Fetus and placenta could not be delivered from LUS or midline vertical hysterotomy as both fibroids were impacting the approach to fetus. A deliberate decision of myomectomy of anterior wall fibroid was made for extraction of fetus. After completion of said myomectomy fetus could not be delivered as LUS fibroid was also impacted this was also removed (Figure 3-5). Delivery of a live extremely premature with very low birth weight (900 gm) male fetus was possible after all manoeuvres. Fetus was handed over to paediatrician who was immediately put on ventilator and surfactant was given.

Placenta which was covering os was delivered with a large retroplacental clot; however, lady continued to bleed on table. Next of kin were informed again by anaesthesiologist and a rapid obstetric hysterectomy (TAH) was performed with all other fibroids in situ. Haemostasis was achieved. Intra-abdominal and subcutaneous drain were placed. Abdomen closed. She was transfused with four units of whole blood postoperatively along with parental antibiotics, analgesia and supportive measures. She was ambulated on first postoperative day and oral fluids were administered. Parenteral antibiotics, analgesia and fluids were stopped after 48 hours and oral soft diet was given to the patient. Catheter was removed after 48 hrs and subcutaneous drain was removed after 72 hrs. Intraabdominal drain was removed on 5th postoperative day. She had an uneventful recovery and sutures were removed on 14th postoperative day. Contrast MR urogram was performed as a cautionary investigation to exclude ureteric or bladder injuries which was normal. Lady was placed on HRT (Low dose Estrogen only) along with Calcium and Vit D3. Couple was counselled for Surrogacy for future fertility.

Premature infant expired after 72 hrs on Ventilatory support.

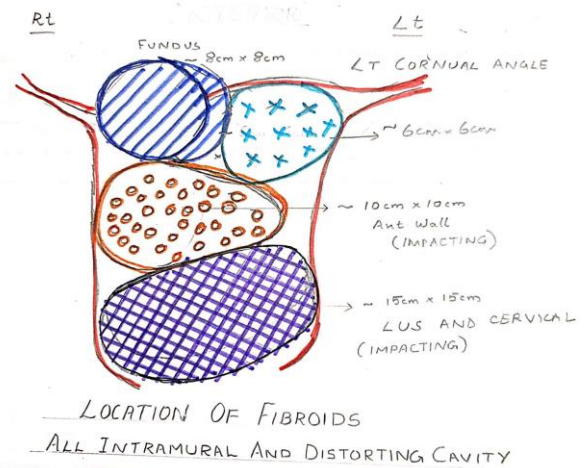


Figure 1: Location of fibroids (anterior view) diagrammatic representation, not to scale.

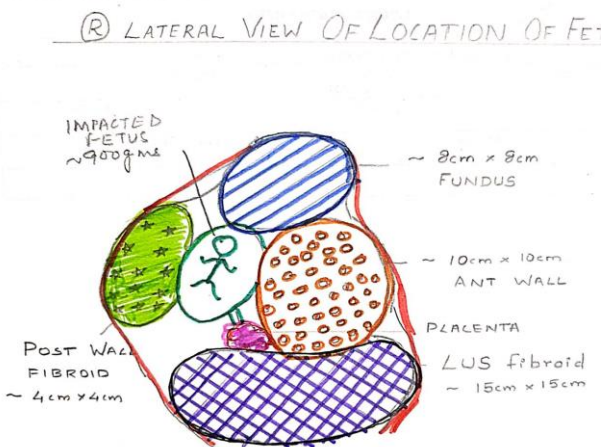


Figure 2: Location of fibroids impacting delivery of fetus, (lateral view) diagrammatic representation, not to scale.

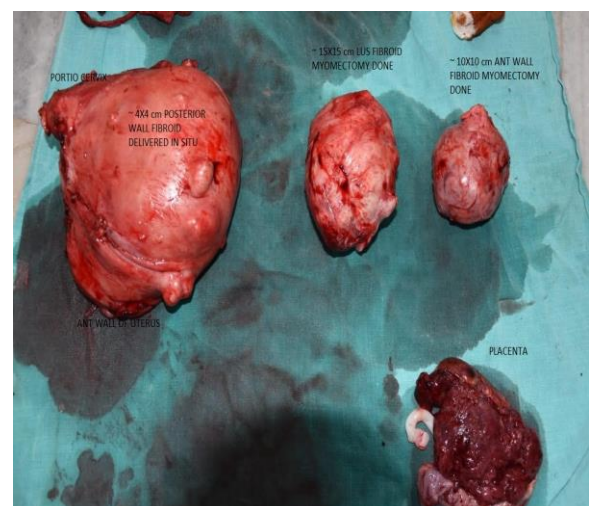


Figure 3: Post-operative view of uterus, myomectomy of LUS and anterior wall fibroid done, placenta seen, specimen of uterus (obstetric hysterectomy done).

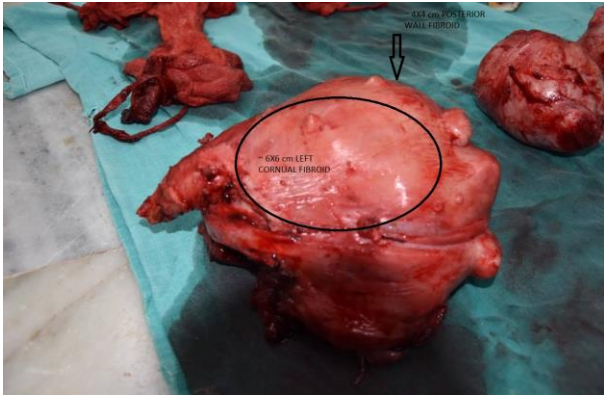


Figure 4: Specimen of uterus posterior wall fibroid and left cornual fibroid.

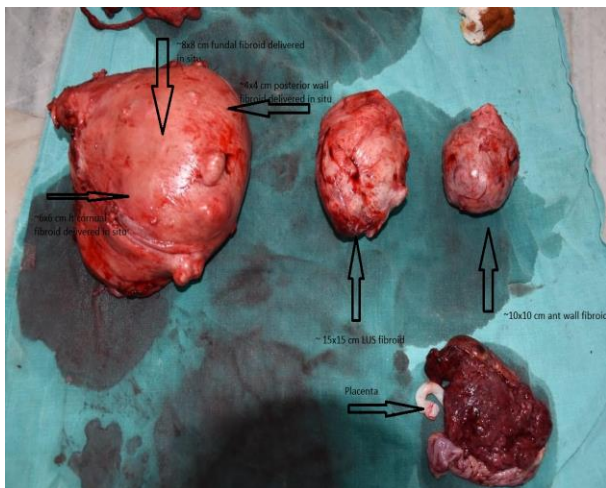


Figure 5: Postoperative figure with myomectomy specimen of LUS fibroid, anterior wall fibroid, obstetric hysterectomy specimen and placenta.

DISCUSSION

The core obstetric complications predisposing pregnant women to near-miss events are almost always similar. The major chunk is formed by hemorrhagic disorders which may be antepartum, peripartum, or postpartum. Pregnancies complicated with hypertension-related disorders (eclampsia) and disorders of morbid placenta become more prone to obstetric haemorrhage. In this study, 45.6% of near-miss cases were caused by PPH and 37% by hypertensive disorders. In comparison, the literature also reports haemorrhage and hypertensive disorders to be the major predictors of near-miss cases as well as maternal mortality.⁴⁻⁶ Some pregnancy-related complications leading to high-risk childbirth are almost unavoidable. The benefit of evaluating near-miss events in depth is that the records of these patients and the hindrances they had to witness can help in creating safer and more approachable obstetric health care for future patients. Some of these factors may be associated with things lacking at the patient's end such as desire for home delivery to maintain tradition, inadequate antenatal care, non-compliance with healthcare practitioner's advice, disbelief in modern

medicine, and others. Some factors are associated with delay in reaching a tertiary care institution due to longer distances, lack of transport or funds. Factors related to health system include delay in providing immediate relief and/or referral, lack of adequate intensive care facility, well-trained staff, and others.⁷⁻⁹ This case has been highlighted because it was a young Primigravida with no living issues and multiple obstetric complications which required a tough decision by surgeon to perform obstetric hysterectomy to save maternal life with concurrence of intensivist and relatives. Availability of blood and blood products was extremely important in management of the case. There is a lack of uniform criteria for identification of cases of severe obstetric morbidity or maternal near miss. Identification of cases is complex and varies across studies. Three major criteria have been mentioned in a review conducted by the WHO, these are described in (Table 1). There are not many studies available from India on maternal near miss inspite of very high maternal mortality ratios and poor maternal health care. The causes of near miss vary in different geographical areas of the world and also there are variations within countries. Haemorrhage, hypertensive disorders, sepsis and obstructed labour are the most important causes in the developing countries.¹⁰ Causes of near miss are similar to causes of maternal deaths prevailing in the area. A systematic review to determine the causes of maternal deaths conducted by the WHO recorded wide regional variation. Haemorrhage was the leading cause of maternal deaths in Africa (33.9%) and in Asia (30.8%) while in Latin America and the Caribbean, hypertensive disorders were responsible for 25% deaths. Anaemia was reported as an important cause in 12.8% deaths in Asia, 3.7% in Africa and none in the developed countries. Studies from our country have also reported anaemia as an important cause and contributor to maternal mortality and severe maternal morbidity.

To understand the gaps in access to adequate management of obstetric emergencies leading to severe maternal complications and death three delays have been identified. The first delay is in deciding to seek care by the woman and/or her family as they are unaware of the need for care, this occurs as the danger signs are not recognized or there is lack of support of the family. The second delay is in reaching an adequate health-care facility as the services may not exist or may be inaccessible for reasons such as distance, lack of transport, cost or socio-economic barriers. The third delay occurs in receiving adequate care at that facility resulting from errors in diagnosis and clinical decision-making, or lack of medical supplies and of staff proficiency in the management of obstetric emergencies. In developing countries, about 75% of women with severe obstetric morbidity are in a critical condition upon arrival, underscoring the significance of the first two delays. Availability, accessibility, cost of health-care and behavioural factors play an important role in the utilization of maternal health services.

The causes of APH include: placenta praevia, placental abruption and local causes (for example bleeding from the

vulva, vagina or cervix). It is not uncommon to fail to identify a cause for APH when it is then described as ‘unexplained APH’. There are no consistent definitions of the severity of APH. It is recognised that the amount of blood lost is often underestimated and that the amount of blood coming from the introitus may not represent the total blood lost (for example in a concealed placental abruption). It is important therefore, when estimating the blood loss, to assess for signs of clinical shock. The presence of fetal compromise or fetal demise is an important indicator of volume depletion. Definition of blood loss: (a) Spotting-staining, streaking or blood spotting noted on underwear or

sanitary protection; (b) Minor haemorrhage- blood loss less than 50 ml that has settled; (c) Major haemorrhage- blood loss of 50-1000 ml, with no signs of clinical shock; (d) Massive haemorrhage- blood loss greater than 1000 ml and/or signs of clinical shock (IUFD in presence of any blood loss is massive haemorrhage); (e) Recurrent APH is the term used when there are episodes of APH on more than one occasion (RCOG GTG 63).

Here the lady presented to us in haemorrhagic shock with no available alternative to prevent maternal morbidity.

Table 1: Criteria for identification of near miss cases.¹⁰

Criteria	Description	Advantages	Disadvantages
Clinical criteria related to a specific disease entity.	Disease specific definitions used for common conditions and clinical criteria defined for severe morbidity e.g. Preeclampsia and Eclampsia.	Ease to interpret cases can be identified retrospectively. Quality of care can be identified.	All problems may not be covered. Difficult to define and quantify the condition.
Management Specific.	Management or intervention to disease e.g. hysterectomy, blood transfusion or admission to ICU.	Simple to use in identification of cases.	Depends on other variables such as availability of ICU beds, indications for hysterectomy.
Organ system dysfunction or failure.	Based on the concept that there is a sequence of events leading from good health to death. Death is preceded by organ dysfunction or failure are specified e.g. HELLP, DIC, AFLP, AFE, PPCMP, Jaundice in preeclampsia, Puerperal Sepsis.	Allows for identification of critically ill women. Keeps focus on severe diseases.	Dependent on the existence of a minimum level of care including functioning laboratories and basic critical care monitoring.

CONCLUSION

Obstetric emergencies demand prompt life-saving measures. Accepting the concept of near miss and identifying the clinical characteristics of these patients is a substantial step towards preventing maternal mortality. Combating these issues at the level of primary health care facilities has become essential with availability of functional OT, Blood bank services and dedicated HDU (Obstetrics) staff. Evaluating patients for risk factors and providing high-risk and SAMM patients HDU (Obstetrics) care can further decrease the ratio of maternal mortality. In order to reduce the incidence of near-miss cases, it is important to address women at all levels including awareness about antenatal compliance, hygienic deliveries in proper health care facilities, availability of trained staff, and birth spacing. Maternal near miss has emerged as an adjunct to investigation of maternal deaths as the two represent similar pathological and circumstantial factors leading to severe maternal outcome.

As the number of maternal near-miss cases is more than the maternal deaths and the cases are alive to directly inform on problems and obstacles that had to be overcome during

the process of health-care, they provide useful information on quality of health-care at all levels.

Thus, there is a need for application of the maternal near-miss concept for assessment of maternal health and quality of maternal care. RCOG guidelines are helpful in management of such cases with multiple comorbidities; however, resource poor nations must develop their own protocols for management of obstetric emergencies in peripheral settings.

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REFERENCES

1. World Health Organization. Reviewing severe maternal morbidity: Learning from survivors from life threatening complications. Beyond the Numbers: Reviewing Maternal Deaths and Complications to Make Pregnancy Safer, 2004. Available at: https://apps.who.int/iris/bitstream/handle/10665/42984/9241591838.pdf?sequence=1&source=post_page. Accessed on 26 February 2021.

2. Pattinson RC, Buchmann E, Mantel G, Schoon M, Rees H. Can enquiries into severe acute maternal morbidity act as a surrogate for maternal death enquiries? *BJOG*. 2003;110(10):889-93.
3. Filippi V, Brugha R, Browne E, Gohou V, Bacci A, De Brouwere V, et al. Obstetric audit in resource-poor settings: lessons from a multi-country project auditing 'near miss' obstetrical emergencies. *Health Policy Plan*. 2004;19(1):57-66.
4. Liyew EF, Yalew AW, Afework MF, Essén B. Incidence and causes of maternal near-miss in selected hospitals of Addis Ababa, Ethiopia. *PLoS One*. 2017;12(6):0179013.
5. Shahid A, Rizwan S, Khawaja N. Near miss events frequency and most common causes. *Pak J Med Health Sci*. 2015;9(3):920-2.
6. Khatun T, Rahman Z, Parveen N, Ansari AA, Mansuri MI, Chaurasia AK. Obstetric near miss events in a tertiary research level teaching hospital. *Med Phoenix*. 2017;2:44-7.
7. Ngonzi J, Tornes YF, Mukasa PK, Salongo W, Kabakyenga J, Sezalio M, et al. Puerperal sepsis, the leading cause of maternal deaths at a Tertiary University Teaching Hospital in Uganda. *BMC Pregnancy Childbirth*. 2016;16(1):207.
8. Buddeberg BS, Aveling W. Puerperal sepsis in the 21st century: progress, new challenges and the situation worldwide. *Postgrad Med J*. 2015;91(1080):572-8.
9. Soma-Pillay P, Pattinson RC. Barriers to obstetric care among maternal near misses. *S Afr Med J*. 2016;106(11):1110-3.
10. Chhabra P. Maternal near miss: an indicator for maternal health and maternal care. *Indian J Community Med*. 2014;39(3):132-7.

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