

A Study Of Near Miss Cases: Saved All Patients In Shorter Time Span

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Abstract

Maternal mortality (MM) is a very important maternal health indicator. Sometimes it is considered as 'just the tip of the iceberg'.

World Health Organization (WHO) has defined near miss case as 'a woman presenting any life-threatening condition and surviving a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy'. Author wants to report case series of 6 near miss cases (NMC), which was managed nicely and saved the all patients in shorter time span period between 6 January to 17 January (11 days).

A maternal death is one of the most dangerous incident in obstetrics with widespread implications on both the family and the medical staff concerned.

Keywords: Maternal mortality (MMR), Near miss cases (NMC), patients, obstetrics.

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I. Introduction

Maternal mortality (MM) is a very important maternal health indicator. Sometimes it is considered as 'just the tip of the iceberg'.

World Health Organization (WHO) has defined near miss case as 'a woman presenting any life-threatening condition and surviving a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy'.

A maternal death is one of the most dangerous incident in obstetrics with widespread implications on both the family and the medical staff concerned. Every woman goes through a risk for this sudden and unexpected event during pregnancy, childbirth and after delivery. According to World Health Organization (WHO), a maternal death is defined as death of a woman while pregnant or within 42 days of termination of pregnancy; irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes¹.

A maternal near miss case is defined as a woman who nearly died but survived a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy¹.

In practical scenarios, women are considered near-miss cases when they survive lifethreatening conditions i.e. organ dysfunction. Severe maternal outcome (SMO) is the maternal near-miss cases and maternal death^{2,3}.

II. Cases

Case 1. patient xyz, 26 year female, 2nd gravida term pregnancy with history of three convulsion with BP 160/110 mm hg presented to labour room. Immediate loading dose of MGSO4 prichard regimen started. After that maintenance dose of MGSO4 given.

Two doses of injectable labetalol given. Emergency LSCS was done as bishop score was poor.

Patient was shifted to OBS ICU and managed by multidisciplinary team approach.

By 5th day patient improved vitally.

Patient discharged at 8th day. At the time of discharge mother and baby doing well.

Case 2... case xyz, 24 year female, EMLSCS done for twin pregnancy with term pregnancy in labour.

Patient was alright up to 4th day of post lscs. Discharged mother and baby.

On 11th day she returned to hospital with complaining of distention of abdomen and fever with chills. Gradually she developed discharge of pus from stich line. She was further investigated.

USG abdomen-pelvis and MRI abdo-pelvis suggested lscs scar dehiscence and involved lower uterine segment with leakage of endometrial pus through it .

There were multiple localized collections in abdomen and pelvic region.Largest measuring 8x6x6 mm. in left side abdomen.There were more than three pelvic abscesses.There was small anterior abdominal wall hernia.

There was increased WBC and CRP,her haemoglobin was falling. She was having fever On and off With chills.Decision for laprotomy and proceed was taken,in view of sepsis with anaemia with altered vitals.There were multiple adhesion between ant abdominal wall,bowel and bladder.Gradually adhesiolysis done by experienced gynaecologist.Pelvic abscesses were drained and sample for histopathology sent.Anterior abdominal uterus was defective and opened ,whole uterus was macerated,torned and there was bleeding from uterus.

The preservation of uterus was tried but because of bleeding and grossly defect in uterine dimension,it could not be possible.Complete obstetric hysterectomy was done .

Two unit of BT were transfused.Patient was vitally stable.

She was doing well post operatively.She was discharged 7th day of post operative period.

Case 3.patient xyz operated for term pregnancy with fetal distress for meconium stained liquor.

On 4 th day post op she developed fever .

Increasing abdomen distention . Haemoglobin was in decreasing trends.

Problem was worsening. Wbc was increasing trends. Imaginary finding reveals multiple pelvic abscesses. Lscs scar dehiscence,pus discharging from scar.

Patient was treated conservatively for one week but did not respond.

Gradually pus started coming from lscs scar through muscle to the skin and made multiple skin sinuses from skin stitch linealso.

On laprotomy there was frozen abdomen .It was complete tough session.

Multiple adhesion of bowel,bladder and uterine wall were there.It was completely undifferentiable tissues .Meticulous and optimum adhesiolysis done.but it took time.

Uterus was macerated,torned,anterior uterine wall was missing , necrosed and opened .

There was bleeding from uterus and cornual structures.

Pelvic abscesses and haematoma were drained. Because of pus filled incomplete uterus and bleeding from multiple sites of uterus . We tried to save uterus,but not succeed. For life saving purpose of mother, Complete hysterectomy was done. We transfused two units of BT.

After that a abdominal wash with metranidazole was given.After successful completion of laprotomy, she was maintaining vitals,did not developed fever.After 6 days of laprotomy patient was discharged.

Case 4....primi with term pregnancy with jaundice bilirubin 10 gm with raised creatinine(6) underwent normal vaginal delivery .There was massive traumatic and atonic pph took . Atonic pph was managed by oxytocics.Her hemoglobin was 4gm %.Coagulation profile was altered. Two unit of pcv given and 4 units of FFP transfused.

Multiple vaginal tear were repaired by vicryl 1.

Meanwhile managing conditions patient underwent shock .Patient was managed by multidisciplinary team approach,by Physician,critical care specialist and team of Obgyn.

Resuscitation done and cpr given.Patient was intubated and kept on ventilation .

She was Shifted to ICU.Managed combinedly physician ,critical specialist and obgy team.

After 20 hrs patient again collapsed.Resuscitation done and cpr given and revived.

Still high bilirubin and high creatinine. After 40 hours patient third time collapsed revived with cpr and resuscitation done according to protocol.

After 15 days creatinine and bilirubin started decreasing.Because of muscle weakness she was having problem. Tracheostomy done.She improved,dysphagia and dyspnoea improved.By 21 days creatinine becomes normal.Bilirubin(5gm) still high.Started improved vitally . Now she is Conscious ,cooperative and well oriented to time place person.Now mother and baby doing well.

Case 5 .A XYZ Second gravid term pregnancy patient with placenta praevia taken for emergency LSCS for bleeding PV was taken by assistant professor of OBGY department on duty.During intra operative it turned out to be placenta increta(morbid adherent placenta).

There was massive bleeding.Bilateral uterine artery and ovarian artery ligation done.

Systematic devascularisation done.Still bleeding was not controlled.Decision for keeping some portion of placenta and membrane in situ ,because of invading placenta into uterine wall.

Still bleeding continued.Intra uterine packing done.Two unit PCV transfused.

On second day packing removed, there was no active bleeding. Because of timely and optimum efforts

Uterus was preserved. Post operative period mother was doing well. Injection METHOTRAXATE was given. On sixth day mother and baby discharged.

Case .6. Sharing a case of Primi with term pregnancy with central placenta praevia with history of bleeding PV. She underwent emergency Lscs, by gynaecologist on duty. A live healthy baby delivered.

After two hour of completion of operation there was massive bleeding from vagina. There was active bleeding. Around two liter of Clots removed. Patient was Vitally altered.

Decision for re lapotomy taken. Intra operative there was haemoperitoneum present

Uterus opened. Bleeding was actively present from placental bed site, From both anterior and posterior wall of lower uterine segment.

Haemostatic suture taken over placental bed by chromic catgut.

Bleeding did not controlled. Bi lateral uterine artery ligation done, bleeding still present.

Right sided internal iliac artery ligation done, bleeding satisfactory controlled.

Intra uterine packing done. Haemostasis achieved.

III. Discussion.

MNM is a surrogate for poor pregnancy outcomes. MNM cases, being large in numbers provide valuable data for the assessment of obstetric care. MNM can generate more information as women themselves can be a source of information to enable identification of common causes of MNM and in future might be useful for survival of mothers.

Similarly, the foetal outcomes observed in the near miss study by Pragati et al and Kalra et al [4](#), [5](#) were that a live birth was present in less than two-thirds of the near miss and still birth was reported in 25% of the near miss cases.

Author wants to report case series of 7 near miss cases (NMC), which was managed nicely and saved the all patients in shorter time span period between 6 January to 17 January (11 days).

The prospective observational study by Rakesh HJ et al [6](#), found that near miss ratio was calculated to be 2.81 per 1000 live births.

Hypertensive disorders of pregnancy have been the common cause of mortality in various other studies. [7](#), [8](#), [9](#)

In our study, near miss was higher amongst younger women. 30.4% women aged less than 24 years. Our all patients were less than 30 years of age which is not comparable to the multicountry study conducted by WHO where the prevalence of pregnant women with AMA was 12.3%. [10](#)

MNM ratio estimated by Gupta et al [7](#) in their study was (3.98 per 1000 live births) and both the facilities have similar health care facilities and infrastructure.

In the history the highest near miss incidence (379.51 per 1000 live births) reported so far is by Kumar and Tewari et al [11](#) using the Filippi et al. criteria and the high frequency of near-miss cases was attributed to the selective referral of high-risk pregnancies.

In our study we saved all patients. We prevented MMR in those patients. This can be due to (a) different criterion being used for identifying near-miss (b) delay in referral to our centre and (c) increased mortality rate due to higher number of patients who are referred in sick and moribund state.

In many studies, the most common cause of maternal mortality was hypertensive disorders of pregnancy.

But in our cases different risk factors were there.

The age of women in our study was less than 26 years which is not comparable to Indian and international studies like Rakesh HJ et al. where mean age was 27.75 years and Bolivian study [12](#) where it was 27 years.

Most near miss cases had no good education in our study which was also seen in the Nigerian study. [13](#) The Nigerian study also concluded that amongst the women with tertiary level education, the MM was the least being 3%, while the MNM was the highest being 97%. Those in the group with no formal education had the highest MM of 41.7% and the least MNM of 58.3%.

In our study all cases were unbooked. The education level of all patients were upto primary level.

They belong from low socio economic status.

Near miss has been observed to occur more in third trimester across several studies conducted in India and globally. In our study, most near miss were seen in second and third trimester. This is comparable to Rakesh HJ et al [6](#) where prevalence of near miss was more (59.25%) in third trimester. Near miss was higher among the multigravidas.

Similar statistics were seen in the study by Rakesh HJ et al [6](#) where haemorrhage was also the commonest cause of near miss followed by hypertensive disorders of pregnancy.

Similarly, anaemia was the major contributory factor of severe morbidity in 75% of the near miss cases in the study conducted by Gupta et al.⁷

In our study all patients required blood transfusion.

The study by Ingole et al¹⁴ where 14.4% near miss cases received massive blood transfusion (more than or equal to 5 PRBC).

IV. Conclusion

Near miss cases are leading cause of maternal mortality and morbidity in india.

Dealing of high risk cases by optimum skilled full obstetrian will give good results definetly.

In our cases OPTIMUM decision was taken by OPTIMUM skillful obstetritians in OPTIMUM time.

We saved our all six patients in 11 days time period.

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