International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Ali M et al. Int J Reprod Contracept Obstet Gynecol. 2024 May;13(5):1285-1288
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20241081

Case Series

Maternal near miss mortality: indication of maternal care

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Received: 05 March 2024
Revised: 04 April 2024
Accepted: 05 April 2024

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ABSTRACT

Maternal mortality is one of the important indicators used for the measurement of maternal health. To overcome this challenge, maternal near miss has been suggested as a compliment to maternal death. The prevalence of near miss is higher in developing countries and causes are similar to those of maternal mortality namely haemorrhage, hypertensive disorders, sepsis and obstructed labor. Reviewing near miss cases provide significant information about the delays in health seeking so that appropriate action is taken. It is useful in identifying health system failures and assessment of quality of maternal health-care. Certain maternal near miss indicators have been suggested to evaluate the quality of care. The near miss approach will be an important tool in evaluation and assessment of the newer strategies for improving maternal health. Here we are presenting case series of near miss mortality cases reported in Muzaffarnagar medical college.

Keywords: Maternal health, Maternal near miss, Quality of care, Severe acute maternal morbidity

INTRODUCTION

Maternal mortality is one of the important indicators used for the measurement of maternal health. In 1990-2015, there was a reduction of maternal mortality ratio by three quarters and according to millennium development goals to improve the health of mothers and all reproductive women by initiating different approaches.[1] Maternal near miss, defined as "a woman who nearly died but survived a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy."[2] Incidence ratio 18.76/1000 live birth, maternal near miss cases to mortality was 6.8:1 and mortality index was 12.7%. Mostly women in late trimester, multi-parity, low education status, lack of awareness are at increased risk of near miss cases, so our main goal is to create more awareness programs.[3]

The below we are presented the cases which we encounter in our hospital.

CASE SERIES

Case 1

A 32-year female Mrs. X G3P2L2 with 5 weeks 1 day gestation age admitted in the department of obstetrics and gynaecology, Muzaffarnagar medical college with complaint of pain in abdomen for 3 days and bleeding per vaginum since 5 hours. On examination patient was conscious and confused. She was afebrile with Pulse rate of 128 bpm. Respiratory rate 19/mt. and B.P was non recordable. Per abdominal examination revealed tenderness, bowel sounds were present. On per speculum examination, bleeding present. On per vaginal examination, cervical motion tenderness was present, uterus was anteverted, bulky in size, right fornix free non-tender, left fornix fullness present and tenderness present. After all preliminary preparation, the patient was immediately taken for laparotomy. On laparotomy, hemoperitoneum was present, around 2 litres of blood

along with clots was drained out and a perforation was found on left fallopian tube, left salpingectomy was done and hemostasis was achieved and abdomen was closed in layers. She received a therapeutic course of intravenous antibiotics and one unit of blood transfusion pre- operative and 1-unit intra operatively. We shift patient to ICU for monitoring and transfusion of 2 units of PRBC done post operatively along with 2 FFP, after 2 days of post op shifted to general ward and she was discharged on her 10th post operative day in healthy condition after stich removal.

Figure 1: Approx. 2 liter of blood clots.

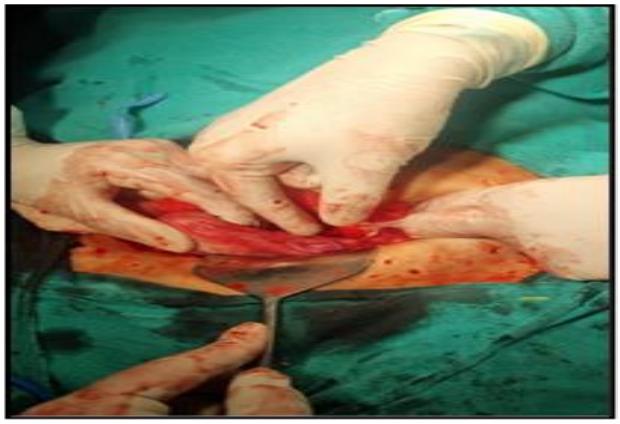

Figure 2: Site of ruptured ectopic pregnancy (Left side).

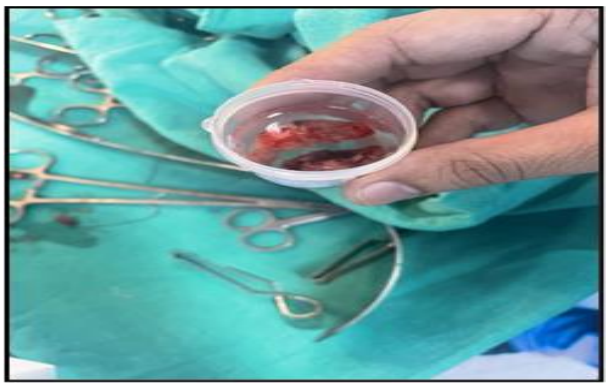

Figure 3: Left side tube.

Case 2

A 33-year-old Mrs. Y P5l5, presented in emergency department of Muzaffarnagar medical college post natal day (1) of expulsion of fetus with some parts of placenta (history given by patient attendant) at home (Dai delivery) with hypovolemic shock with severe PPH. Her BP was non recordable with feeble pulse. The patient admitted and infusion hemacel was started, inj. norad @8ml/hr and inj. dopamine@8ml/hr was started to stabilize the vitals of patient. On per speculum examination bleeding associated with clots was present. On per vaginal examination a clots felt through OS and size of uterus large and soft. After stabilizing vitals and blood arrangement, she was shifted to O.T. suction and evacuation was done and retained products of placenta were removed followed by which hemostatis was achieved and she has been transfused 2 unit PRBC intra-op and 1 unit PRBC and 2 unit FFP post op. She received a therapeutic course of intravenous antibiotics. Her post operative period was uneventful and she was discharged on her 7th post operative day in a healthy condition. She also counselled for contraception methods for which she denied.

Figure 4: Retained products of placenta.

Case 3

A 28-year-old P4 L3 patient presented in emergency department of Muzaffarnagar medical college with bleeding per vaginum since 3 hrs, she has history of vaginal delivery of IUD fetus 7 days ago in hospital (outside Muzaffarnagar medical college). On examination patient was conscious and confused. She was afebrile with tachycardia, respiratory rate 22/mt. and systolic BP 60 mmHg and diastolic was non recordable. Per abdominal examination reveals soft abdomen and contracted uterus. On per speculum examination, heavy bleeding present associated with clots. On per vaginal examination cervical tear present over right cervical lip at 9' O clock position tear extending upto lower segment of uterus. After all preliminary preparation the patient was immediately taken for laparotomy. A rent of 8 cm extending from lower uterine segment was observed. Subtotal hysterectomy was done after explaining the condition to family and consent for procedure taken. She received a therapeutic course of

intravenous antibiotics along with two units of blood transfusion intraoperatively, 4 units FFP and 1 unit post operatively. Her post operative period was uneventful and she was discharged on her 10th post operative day in a healthy condition after stich removal.

Figure 5: Rent extending to lower segment of uterus.

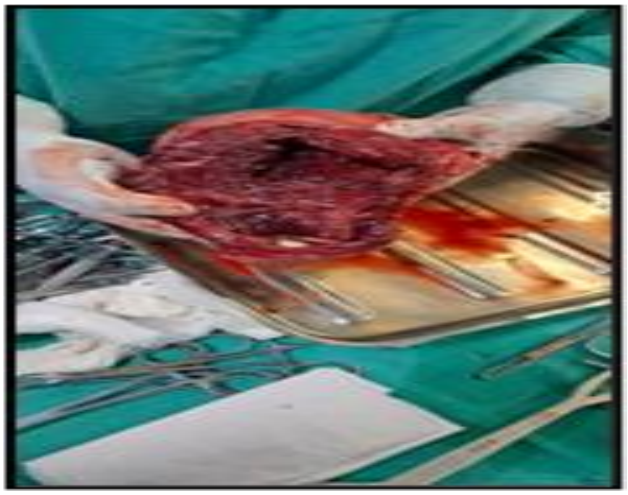

Figure 6: Showed scared uterus.

Case 4

A 26-year-old G2P0L0 with 16 weeks 3 days POG patient presented in emergency department of Muzaffarnagar medical college with history of expulsion of IUD fetus with severe bleeding with hypovolemia shock. On examination, her vitals were, bp was 70/40 mmHg, pulse rate-130 bpm and respiratory rate-26/min. On per abdomen examination uterine fundus cannot be felt. On per speculum examination bleeding associated with clots was present and on per vaginal examination cervical OS was open and bleeding was present with uterine fundus was not felt. She has been taken up for exploratory laparotomy after blood arrangement. Intraoperatively-a rent of 3×4 cm was found over the fundus of uterus. Uterine rent repair was done. She has been transfused 2-unit PRBC and 1-unit FFP intra-op and 1-unit PRBC and 1-unit FFP post op. She received a therapeutic course of intravenous antibiotics. Her post operative period was uneventful and she was discharged on her 14th post operative day in a healthy condition after stich removal. She has been counselled for contraception and suggested preconception visits.

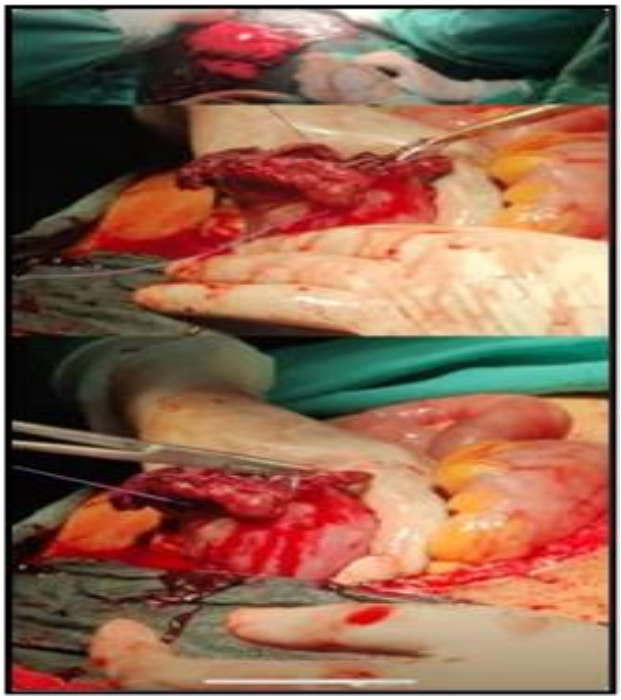

Figure 7: Fundal perforation and repairment.

DISCUSSION

The incidence maternal near miss cases widely range from 3.9 to 379.5 per 1000 live births and 7.6-60.4 per 1000 deliveries. MNM: maternal death varied from 1.7:1 to 21.8:1.[4] Haemorrhage and hypertension disorder are the leading cause of maternal mortality but we mostly encounter hemorrhagic one. As, we heard rule of golden 60 second is very crucial in such cases, one must be very quick in diagnosis and proper management in that way can reduce such cases.[5] In case 1, she was haemodynamically unstable, so our goal to make her stable. The ultrasound found the ectopic pregnancy with intraperitoneal effusion. the patient was admitted immediately for emergency laparotomy with left salpingectomy performed. In case 2, she has expelled IUD baby at home. Maternal death is a severe public health problem where home delivery without skilled care at birth has a significant detrimental impact, still with so much educational program public chose Dai over skilled doctors. Almost 295,000 mothers died from various pregnancy and childbirth-related problems in 2017, accounting for approximately 810 maternal deaths every day. Hospital delivery care before, during and after childbirth can save and reduce these. Dai delivers are a

major contributing factor for increasing incidents of maternal deaths. Most importantly, these are presentable, and for this non-institutional or home delivery needs to be eliminated. Sustainable development goal 3 (SDG-3) targets: "reducing the global MMR to less than 70 per 100,000 births, with no country having a maternal mortality rate of more than twice the global average". During 2000-2017, the number was in decreasing pattern by 38% worldwide.[6] In last two cases, one, fetus was delivered again by unprofessional which leads to traumatic PPH, and second due to unskilled the patient landed up in uterine rupture. The second most common cause of primary PPH is traumatic (20%). Traumatic PPH when diagnosed early can be preventable. A "safe" abortion is "safe" only after its completion and when it is performed by skilled practitioners. Here the patient follow-up is very important and timely intervention.

CONCLUSION

From our study we concluded that, by studying the maternal near miss cases, one can improve the health care, generate more awareness programs at every level so that can stop big mishap to be happen. As maternal mortality can occur if we miss or can't provide proper facilities to near miss cases. By spreading information at every level or by giving them more manageable options and by giving them proper care, we can reduce the mortality and morbidity rate.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

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Cite this article as: Ali M, Prabhakar M, Kuracha AS. Maternal near miss mortality: indication of maternal care. Int J Reprod Contracept Obstet Gynecol 2024;13:1285-8.