

Name: Dr. Ankita Maurya(PG),

Dr. Avinashi Kujur(Professor & HOD)

Title: Innovating care: A pilot program examining carbetocin for post-partum hemorrhage control.





Introduction:

WHO data says "Each year about 14 million women experience PPH resulting in about 70,000 maternal deaths globally"[1]. Rural areas, such as those in India, experience particularly high rates, with PPH affecting approximately 12% of deliveries and increasing to 15% in subsequent pregnancies^[2]. PPH is a major cause of morbidity and mortality, accounting for 1 death every 6 minutes globally, occurring mainly in LMICs^[3]. In India the incidence of PPH after vaginal delivery is 2%–4%, contributing to 19.9% of the maternal mortality rate^[4]. Therefore, there is an urgent need to find method to control PPH and prevent mortality.

Objective:

To access the efficacy of carbetocin in the treatment of post-partum hemorrhage.

Material and Methods:

A retrospective cohort study analyzing the efficacy of carbetocin as a first-line treatment for postpartum hemorrhage (PPH). Study was conducted between September 2023-September 2024. Focusing on its ability to control bleeding, need for additional uterotonics, surgical interventions, requirement for blood transfusions, and evaluate its impact on maternal morbidity and mortality.

Result:

In our study involving 50 women with postpartum hemorrhage, all women were referred from rural health care centers and received a 100mcg injection of carbetocin. Time is an essence in control of PPH, to save life. By using carbetocin effective uterine contraction was achieved within 2 mins and lasting up to 60 mins in 50% and up to 6 hrs in 50% of women. Significantly, we achieved 100% successful control of PPH. No additional uterotonics were needed and no surgical interventions were required. Out of 50 women, 11(22%) required a blood transfusion of 1-2 units, while 39 (78%) women did not need any transfusion. The use of carbetocin has led to a significant decrease in maternal mortality due to postpartum hemorrhage, reducing it from 90.97 deaths per 100,000 live births to zero as documented in our health facility.

Conclusion:

Carbetocin demonstrates significant potential as a rapid and effective treatment for postpartum hemorrhage. This medication could greatly reduce severe maternal morbidity and mortality, offering new hope for mothers facing this lifethreatening condition. By enabling a swift response to hemorrhage, carbetocin may improve outcomes for those affected.

Reference:

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- 2.Geller SE, Goudar SS, Adams MG, et al. Factors associated with acute postpartum hemorrhage in low-risk women delivering in rural India. Int J Gynaecol Obstet. 2008;101(1):94–9.
- 3 .Lifesaving solution dramatically reduces severe bleeding after childbirth.
- **4** .World Health Organization. Reducing the Global Burden: Postpartum Hemorrhage; 2008:1 -8

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