The use of Carbetocin in prevention and treatment of PPH

Zwolińska E, Zwoliński J

Szpital im. Świętej Rodziny / St. Family Hospital, Warsaw, Poland

Objective

The aim of this study was to assess the effectiveness of the use of Carbetocin in prevention and treatment of PPH after vaginal deliveries and c-sections.

Methods

62 patients were given Carbetocin between January 2013 and February 2014 in the St. Family Hospital in Warsaw, Poland. The indications to apply Carbetocin have been taken into consideration. Information about haemoglobin and erythrocyte levels before and after the caesarean sections and vaginal deliveries have been analyzed. In addition, need for blood transfusion has been determined. We highlighted the cost-effectiveness of the drug. The Student t-test was used to obtain statistical data.

Results

63% of the patients had a caesarean section performed and 27% delivered vaginally. Only 4 patients in the caesarean section group did not have an increased risk of PPH. Carbetocin was applied both as prevention and treatment in case of caesarean section and as a treatment only in case of vaginal birth as the doctors were not given any particular recommendations for its use. The average drop in haemoglobin and erythrocyte level was 22%. On average the blood loss was 785ml, estimated on the basis of subjective evaluation of the physician. 12 patients needed blood transfusions- in all cases the drug was given as another therapeutic option. We did not observe any adverse reactions to the drugs. The time of hospitalization was elongated to 8, 42 days. The neonatal outcomes were worsened by prematurity, placenta praevia and obstructed labour. If given in all high risk patients, hospital could decrease the costs of PPH treatment by 5000 euro annually.

Conclusion

The decision about Carbetocin should be given before caesarean sections in high risk patients, as only then it shows to be effective. The decision should be made by an experienced obstetrician. Although it is recommended as a treatment option in case of PPH after vaginal deliveries, we did not have statistically significant results. The physicians must follow the national and local recommendations.