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Recombinant Factor 7A- An Upcoming Boon to the Obstetrician

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ABSTRACT *Intractable PPH is one of the most threatening condition for the obstetrician.rFactor 7a originally used for hemophilia patients , is now upcoming to solve this issue.Reporting a third gravida who developed abruption and went in for severe DIC ,where all the medical methods failed and when even an obstetric hysterectomy could not solve the crisis,2 units of rFVIIa helped in controlling the situation.Hence it is advisable for all the major obstetric units to be enabled with blood bank facilities where access to rFVIIa is available.*

KEYWORDS : Kikuchi Fujimoto, Histiocytic Necrotizing Lymphadenopathy, SLE.

CASE REPORT

Mrs. Chithra 33years G3P2L2, previous two normal deliveries presented with pain abdomen followed by bleeding pv at 9months of amenorrhoea. She also complaint of decreased fetal movements since morning. She had a uneventful past and obstetric history. O/E: Mild pallor +, Uterus tense, tender and irritable FH absent. PV done after ruling out previa by ultrasound. And the finding was Cervix 50% effaced os 2cm dilated Head at -2 station. Membranes present. ARM was done. Mild blood stained liqor draining and within half an hour patient had profuse bleeding and was taken for emergency LSCS. A dead male baby of 2.8kg was delivered and there was 750g of retroplacental clot. Uterus was closed in two layers. Uterus was flabby. Injection oxytocin, prostadin and tranexamic acid infusion was given. Conservative measures failed. Clotting time prolonged to more than 10 minutes. Urine was blood stained. 2units platelets and 4units FFP given and proceeded onto subtotal hysterectomy. Multiple drain kept.

In the post operative period, patient was connected to ventilator and a total of 4 units whole blood, 4 units packed cell, 12 units FFP, 4 units platelets and 4 units cryoprecipitate given. Clotting time 9 minutes till 6 hours after surgery there was continuous oozing from the operative site and bleeding through all drains.

Hematologist opinion was sought and rFVIIa was given in a dose of 60mcg per kg in 20 minutes the oozing got completely arrested and the clotting time was improved and the patient had uneventful recovery and ther was no arterial or venous thrombo embolic complication.

DISCUSSION:

Postpartum hemorrhage and many other conditions leading to DIC poses significant risk for the mother's life.The usual manner for its management includes, first, noninvasive and nonsurgical methods, and, then invasive and surgical methods. However, mortality and morbidity related to PPH still remains unacceptably high, contributing to hysterectomy in at least 50% of cases. Early, effective, and preferably noninvasive treatments that can reduce maternal mortality and morbidity due to this entity are therefore essential.

One of the most spectacular advancements in the control of PPH has been the use of recombinant activated factor (rFVIIa), both as initial and a life- and uterus-saving therapy. rFVIIa also reduces costs of therapy and use of blood components in massive PPH. In cases of intractable bleeding with no other obvious indications for hysterectomy, administration of rFVIIa should be considered before surgery.In massive, life-threatening PPH , patients often have a coagulopathic diffuse bleeding in addition to surgical bleeding. Bleeding from larger vessels may be controlled by using various surgical methods; however, the ability to control diffuse bleeding is limited and, at many a times, not feasible.

Thus, administration of hemostatic drugs that can control the coagulopathic component of blood loss may reduce mortality and morbidity in such patients. rFVIIa appears to be an effective hemostatic measure in such cases, both as a adjunctive to surgical hemostasis as well as a rescue therapy where PPH is refractoryto current pharmaceutical and "uterus sparing" surgical techniques. Its mechanism of action and accumulating reports in the literature as well as clinical studies suggest that rFVIIa has a potential to function as a universal hemostatic agent across a range of indications.

rFVIIa induces hemostasis at the site of injury. Its mechanism of action includes the binding of factor VIIa to the exposed tissue factor (TF)-dependent pathway and, independently of TF, activation of factor X directly on the surface of activated platelets localized to the site of injury. Also, therapeutic effect of rFVIIa is due in part to its ability to overcome the inhibitory effect of physiologic FVII on FVIIa: TF-initiated thrombin generation.At pharmacological concentrations, rFVIIa also directly activates factor X on surface of locally activated platelets and helps generate thrombin and fibrin. rFVIIa does not bind to resting platelets. Therefore, the effect of high-dose rFVIIa is localized to the sites of vessel injury only.

SUMMARY

We need to prevent PPH in the first place, but if it happens, then to aggressively manage it with all what is available in our armamentarium. Aim of management should be to save every drop of blood, because with every additional drop of blood lost, the condition of the patient worsens and enters a vicious cycle of hemorrhage, coagulopathy, and hypothermia. Many a times, patients are lost with a too little done, too late. Therefore, it is im-

portant that further studies are done on this new weapon, which is now available in the obstetrician's armamentarium to give it its rightful place as a life-saving and uterus/fertility-sparing drug in management of PPH.

REFERENCES

1. Freedman LP, Waldman RJ, de Pinho H, Wirth ME. Who's got the power? Transforming health systems for women and children. UN Millennium Project Task Force on Child Health and Maternal Health. 2005:77–95.
2. Mousa HA, Walkinshaw S. Major postpartum haemorrhage. Curr Opin Obstet Gynecol. 2001;13:595–603. [PubMed]
3. Khan KS, Wojdyla D, Say L, Gulmezoglu AM, van Look PF. WHO analysis of maternal death: A systematic review. Lancet. 2006;367:1066–74. [PubMed]
4. Hazra S, Chilaka VN, Rajendran S, Konje JC. Massive postpartum haemorrhage as a cause of maternal morbidity in a tertiary hospital Gynaecol. 2004;24:519–20. [PubMed]
5. Lusher JM, Roberts HR, Davignon G, Joist JH, Smith H, Shapiro A, et al. A randomized, double-blind comparison of two doses of recombinant factor VIIa in the treatment of joint, muscle and mucocutaneous haemorrhages in persons with haemophilia A and B, with and without inhibitors. rFVIIa Study Group. Haemophilia. 1998;4:790–8. [PubMed]