

Case report: secondary postpartum hemorrhage ending with hysterectomy

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Abstract: Secondary postpartum hemorrhage is life-threatening condition, which occur after 24 hours to 12 weeks after delivery, when patient already discharged at home. It happened as a result of retained placenta or infection of the decidua of uterus called endometritis, especially when women came febrile =>38 degree Celsius (1). The postpartum endometritis increase with cesarean section by 27 % (2). In 2016, the Confidential Enquiry into Maternal Deaths in the UK report that there were seven death from urinary and genital tract infection, out of 200-pregnancy death in 2012 to 2014 (3). It is associated with multiple pathogens but the major bacteria are *Streptococcus pyogenes*, *Escherichia coli*, *Staphylococcus aureus*, *Streptococcus pneumoniae*, *meticillin-resistant S. aureus (MRSA)*, *Clostridium septicum* and *Morganella morganii*.

In this paper we report unusual case for young age women came with secondary postpartum hemorrhage as a result of postpartum endometritis, and unfortunately need abdominal hysterectomy.

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I. Case report

A 40 years old woman (gravida 6, para 4), came to the ER after 11 days from cesarean section to the 3.1kg baby, complain of mild vaginal bleeding since one day. The cesarean section done in our hospital without any complication and patient discharged on day three post-operative with clean dry wound and normal lochia. On examination in the ER, vitally stable, abdominal examination is soft lax well-contracted uterus with small area of induration over the wound, discharging pus. Pad: normal lochia, no excessive bleeding. Swab taken from the wound and patient was admitted for observation with IV antibiotics (cephazolin).

After admission, the patient had one attack of heavy bleeding, melena fully soaked and patient was looked pale. Vital signs show (BP 109/65, Pulse 110, temp 37.9 c). Abdomen soft lax with lax uterus, per-vaginal exam show clots so, removed from vagina, estimated blood loss was 1 liter. Initial measures of PPH done and the order was double IV line and IV fluids 200ml/h with syntocynon, Methergine 1 ampule IM and repeat the hemoglobin after 7 hours, (which was 8.3, wbc 16.5).

On the next day, the patient shift to ICU according to her consultant to start blood transfusion (BT). The patient need 3 packed RBC (PRBCs), 2 fresh frozen plasma (FFB), misoprostol 1000 mcg and Per-rectal BID.

In ICU patient had recurrent attack of vaginal bleeding (her Hb reach to 7.5mg/dl and WBCs 15.7), she was hypotensive (BP=95/56) and tachycardia (P=102, Temp=38), and patient need BT again and PRBCs. Also, we kept the patient on metronidazole. Bedside ultrasound show bulky uterus, no RPOCs seen.

Her consultant contacted with her husband and the condition explained with possibility of hysterectomy.

However, the patient still had bleeding and her hemoglobin low. Therefore, we assessed the patient and bakri balloon inserted and ordered if there is bleeding for hysterectomy.

Scan by radiologist show bulky involuted uterus, no focal lesion cavity was filled with bakri balloon, normal adnexa, Minimal free fluid, and Mild splenomegaly. The result of wound swab showing staph. aureus sensitive to tazocin and linezolid, high vaginal swab (HVS) and blood culture are Negative.

The patient not respond to bakri balloon, so the patient need hysterectomy. In OR, wound was infected, uterus was opened with pus and clots coming through opening with foul smell, swab taken, drain inserted. She received 15 PRBCs, 2 FFB, 3 Plat and 3 cryoprecipitate so HB become 7.5-mg/dl. Shifted to ICU in good condition. Later on swab showing staph. aureus sensitive to linezolid and tazocin.

In ICU post hysterectomy, Stayed for 6 days, became afebrile and Clips were removed alternatively, then discharged in good condition, given OPD after 1 week (last HB 10mg/dl and wbc dropped to 10).

In OPD, Seen doing fine and VS stable. Histology report: cervix with granulation tissue and blood vessels and endometrium show exudate and fibrin with BV. Then, patient was discharged with good condition.

II. Introduction

Postpartum hemorrhage (PPH) is one of the obstetrical emergency, leading to cause maternal mortality and morbidity in most developing countries regardless the mode of delivery. The incidence of PPH is 5 to 20 % of labor, with two types primary and secondary PPH. (4)

The WHO definition of PPH is blood loss more than 500 ml from genital tract after normal vaginal delivery or 1000 ml after cesarean section (5). However, some other reported as any visual estimation of blood loss could be truly postpartum hemorrhage in only 0.44% of patients(6). When bleeding occur within 24 hours after delivery called primary postpartum hemorrhage, and bleeding loss after 24 hours until 12 weeks called secondary postpartum hemorrhage which affect 2% of admitted women in hospital of developed countries, half of them need uterine evacuation (7). The most common cause of PPH especially in primary form and act as 70% of PPH is uterine atony, also there are other causes like trauma in genital tract {20%}, coagulation abnormality and uterine inversion {1-2%}(8). However, the secondary PPH usually came with infection like endometritis or any retained product in the uterus, such as placenta.

The secondary postpartum hemorrhage after cesarean section is very low incidence only {app. 0.1%}(9). The management of secondary PPH need multi-disciplinary care, which aim to reach the patient with good hemodynamic stabilization. After that, there is two-option either surgical or medical treatment (10). The medical treatment include uterotonic agent like syntocinon and antibiotic because 97% from 0.69% in each 20,000 women had treated with antibiotic (11). Uterine evacuation, we did when have retained tissue is suspected clinically or seen by ultrasound. The surgical procedure use when there is large bleeding not respond to medication and uterine evacuation such as Bakri balloon or unfortunately end by hysterectomy (12).

III. The Discussion

The maternal death by hemorrhage in Saudi Arabia is 43.75% (13), the secondary PPH after caesarian section is not common. There are many risk factor of secondary PPH like multipara, multiple pregnancy prolonged third stage of labor, previous history of antepartum and postnatal hemorrhage. Also, the most two causes are part of placenta remain in the uterus, which is unlikely after cesarean section and the second cause which is more common with cesarean section and prelabour rupture of membranes at term is endometritis. The last researches report the incidence of endometritis will decrease to 60-70% by prophylactic antibiotic used (14).

IV. Conclusion

this case report of secondary postpartum hemorrhage after 11 days form caesarian section came to ER with pus discharge from the wound, she stay in ICU with recurrent blood transfusion and bakery balloon inserted without benefit, with hysterectomy done for her.

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