

Clinical Analysis of 38 Cases of Obstetric Emergency Hysterectomy

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ABSTRACT Objective: To discuss and analyze the clinical situation of emergency obstetric hysterectomy. **Methods:** Retrospective analysis of the clinical data of 38 cases obstetric emergency hysterectomy medical records from 2012 to 2014 in our hospital is made. **Result:** 38 cases of emergency obstetric hysterectomy indications are uterine massive bleeding, placental factor medical records are 20 cases, accounted for 52.3%, with the cure rate of 97.4%, and perinatal child mortality rate is 7.9%. **Conclusion:** Hysterectomy is a quick, effective means of treatment of acute obstetric massive bleeding, effectively reduced the rate of cesarean section, also can reduce the incidence of obstetric hysterectomy.

KEYWORDS

Obstetrics
Emergency hysterectomy
Uterine bleeding

1. Introduction

Postpartum hemorrhage is still the main reason of maternal deaths, while hysterectomy technology is an effective means of treatment of uterine bleeding, it is an important surgical measures to save the life of postpartum hemorrhage patients. Retrospective analysis is made on the clinical data of 38 cases patients with emergency hysterectomy in our hospital from 2012 to 2014. The timing selection, surgical indications and clinical significance of emergency hysterectomy are discussed.

2. Materials and Methods

2.1. General Information

From 2012 to 2014, the number of obstetric deliveries in the hospital is a total of 1500 cases, including 211 cases of cesarean section and 1289 cases of normal delivery, of

which emergency hysterectomy is 38 cases, accounting for 0.123 percent. Patients aged between 21 to 42 years old, with an average age of 31.5 years. Primipara accounts for 8 cases (21.05%), the multipara accounts for 30 cases (78.9%), the mean gestational weeks are 36.8 weeks. Patients with hysterectomy after normal delivery are 4 cases (2 cases of late postpartum hemorrhage, 1 case of amniotic fluid embolism, 1 case of uterine eversion), accounting for 0.04% of the total number of patients with normal delivery; patients with hysterectomy after caesarean delivery are 34 cases, accounting for 0.16% of the total number of cesarean section. There are 8 cases of total hysterectomy, 30 cases of subtotal hysterectomy.

2.2. Operation time

34 patients received hysterectomy immediately after cesarean delivery. There were 4 cases received hysterectomy after diagnosis of the causes of bleeding. Among them, one case went to hospital due to vaginal delivery and late postpartum hemorrhage, hysterectomy were performed at 1 day, 7 days 8 days before delivery; 2 case went to hospital due to amniotic fluid embolism after vaginal delivery, hysterectomy were performed at two hours and five hours after giving birth; 1 case received hysterectomy 17 days after caesarean due to late postpartum hemorrhage [1].

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doi: 10.18686/aem.v4i3.3

Received: August 7, 2015; Accepted: August 30, 2015; Published online: September 13, 2015

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2.3. Diagnostic methods

DIC diagnostic criteria 6 is based on the standard of the Seventh National Symposium on Thrombosis and hemostasis. Placenta previa: placenta is attached to the lower uterine segment or covered on the opening of the cervix, a position lower than the first exposed portion of the fetus. Placental implantation can be diagnosed by ultrasound, especially for determination of placenta previa or placenta accreta. Image criteria: (1) the gap after placenta partly or totally disappear; (2) the placenta rear and (or) the placenta essence is rich in blood and blood sinuses. We can detect arterial blood flow, the performance is blood disorders, rapids and even involving the myometrium. Placental abruption: Placenta check shows pressure trace, placental pathology report indicates uterus stroke. Obstetric hemorrhage is commonly calculated by comprehensive calculation of volumetric method + weight method + visual method [2].

2.4. Pre-operative bleeding

Preoperative hemorrhagic shock is nine cases, the average blood loss is 1109.7 mL.

2.5. Surgical methods

Among the 38 cases of emergency hysterectomy, there are 8 cases of total hysterectomy and 30 cases of subtotal hysterectomy. Surgical procedures are performed according to routine procedures.

2.6. Statistical method

Analyzed by SPSS 11.5 statistical software, statistical data is analyzed using χ^2 test. The significant difference level is set at 0.01.

3. Results

3.1. Surgical indications

Among the 38 patients with emergency hysterectomy: 20 cases of placenta factors (placenta previa: 7 cases, placenta implantation: 6 cases, placental abruption: 7 cases), accounting for 52.6 %; 6 cases of uterine inertia, accounting for 15.7%; 4 patients with uterine rupture, accounting for 10.5%; 3 cases of patients with severe infections, accounting for 7.9%; one of each cases of amniotic fluid embolism and eversion of uterus, accounting for 2.6% respectively, 2 cases of patients with advanced postpartum hemorrhage, accounting for 5.2%, 1 case of DIC, fetal death, accounting for 2.6%.

3.2. Blood loss

Among the 4 cases of hysterectomy patients after determination of cause, 1 case's blood loss is less than 600 mL of 1 case's blood loss is between 600–1000 mL, 2 case's blood loss is more than 1000 mL; among the 34 cases of hysterectomy patients due to uterine bleeding during cesarean section; 7 cases of 600 mL blood lost, 15 cases of 600–1000 mL blood lost, 12 cases of more than 1000 mL

blood lost. Patients with hemorrhagic shock due to blood loss are 9 cases, accounting for 23.7%. The average blood loss of 38 patients is 1109.7 mL, 34 cases of patient receive blood transfusion of 800–3000 mL.

3.3. Complication

Three cases of amniotic fluid embolism during surgery were reported; since patient timely received corticosteroids, theophylline, pressurized oxygen and other measures, they were cured.

Postoperative complications include kidney failure caused by primary disease, disseminated intravascular coagulation (DIC). Details are as follows: two cases of acute renal failure, one case complicated by amniotic fluid embolism, two cases of pelvic hematoma [3].

3.4. Prognosis

All the 38 cases were cured and discharged, the cure rate is 100%. Perinatal infant are 38 cases, among them, there are 1 cases of severe birth asphyxia, 2 cases of mild asphyxia, 37 cases of survival (accounting for 97.4%), 1 case of perinatal deaths, the fatality rate was 2.6%.

3.5. Statistic analysis

Among the 38 cases of patients with emergency hysterectomy, emergency hysterectomy rate of multipara accounted for 78.9%, unipara accounted for 21.01%, calculation and comparison was made, $p < 0.01$, therefore there was a significant difference. The emergency hysterectomy rate of patients with cesarean section accounted for 82%, that of patients with vaginal deliveries accounted for 18%, calculation and comparison was made, $p < 0.01$, therefore there was a significant difference.

4. Discussion

4.1. Hysterectomy indications

The uterus is characteristic of a women, it is to produce menstruation and the fetus. In the women's physical and psychological, it has a very important role, especially for the young, pregnant and lying-in woman who has not given birth, if there is a need for surgery to remove the uterus, it will be done carefully. Therefore, the clinical hysterectomy, as a urgent measures of maternal bleeding, although rescued the lives of patients, but patients lose the ability to reproduce, the psychological, physical and family life are subject to greater trauma. However, the loss of the appropriate timing of surgery may lead to failure to rescue, death, therefore we should strictly control the indications for surgery, make a decision as soon as possible, the timely implementation of surgery is the key to successfully rescue patient.

4.1.1. Placenta factor

Placental factors is the main cause of postpartum hemorrhage even hysterectomy, of which the placenta previa, placenta accreta, placental abruption are the

important indicator of obstetric emergency hysterectomy. In this paper, out of 38 cases of obstetric emergency hysterectomy, there are 20 cases of placental factors, accounting for 52.3%. Of which there are 7 cases of placenta previa, 6 cases of placenta accreta and 7 cases of placental abruption. The main causes of placenta factors are related to abortion, second trimester abortion, multiple pregnancy and other behaviors. The increase of abortion and cesarean section results in damage to the endometrium of patients, causes inflammation, bleeding, incomplete reset and other pathology, leads to defects in endometrial development caused by reduced blood supply, so that abnormal placental attachment causes adhesion implantation, thus the incidence of placenta implantation increases significantly. Placenta implantation is the important cause of massive bleeding, once massive bleeding occurs, they inevitably will face the choice of hysterectomy.

4.1.2. Uterine inertia

Uterine inertia is the most common cause of postpartum hemorrhage. Uterine inertia can be caused by many factors, which include prenatal psychological stress, postpartum depression, excessive use of intraoperative anesthetic, poor patient's uterus development, complications of pregnancy, too long labor, precipitate labour, prolificacy, insensitive uterus for uterotonics, inappropriate surgical operation and other factors, observation and attention should be made before surgery [4]. When there are uterine inertia, ineffective oxytocin therapy, does not have the embolic conditions, or the surgeon not proficient for conservative uterine suture or pelvic vascular ligation, we should promptly select a hysterectomy for postpartum hemorrhage patients with appropriate first aid, thereby ensuring the health and safety of puerpera.

4.2. Timing of hysterectomy

With the improvement of medical conditions and medical standards, after postpartum hemorrhage, timely transfusion blood may relieve the obvious decrease of blood pressure and obvious symptoms of shock, therefore, blood loss volume is selected as a reference index of hysterectomy in clinical. When patients are bleeding for more than 2000 mL and above and cannot control metabolic compensation in a short time, we should consider a hysterectomy, to have the opportunity to save them.

4.3. Method of hysterectomy

For obstetric hysterectomy, there are mainly 2 methods, one is called selective hysterectomy, and another one is called emergency hysterectomy. In this study, there are eight cases of total hysterectomy, 30 cases of subtotal hysterectomy. You can select the appropriate mode according to the characteristics of different resection and specific clinical characteristics of the patients.

Selective hysterectomy is relatively simple and short

operation time, subtotal hysterectomy is more in line with the physiological and psychological needs of patients, at the same time, as emergency surgery, the patient's vagina has inadequate preparation, hysterectomy could easily lead to postoperative infection. So for patients with excessive bleeding, shock, disseminated intravascular coagulation (DIC) and other severe cases, subtotal hysterectomy should be the first approach. However, studies have suggested that subtotal hysterectomy may cause cervical stump cancer in future, it is difficult to handle, the prognosis is worse, therefore the total hysterectomy is proper. So we should select the surgery by combining with the patients' degree of emergency, so as to achieve better prognosis while rescuing patients. As for the patients with amniotic fluid embolism, disseminated intravascular coagulation (DIC), uterine rupture implicating cervix, we should conduct total hysterectomy, in order to achieve the purpose of removing the root cause. Now, with the development and progress of perinatal medicine and related disciplines, the probability of obstetric emergency hysterectomy also decreases year by year [5,6].

5. Conclusion

Emergency hysterectomy is a quick and effective treatment of acute obstetric bleeding, can effectively inhibit the phenomenon of acute bleeding and may also reduce the incidence of obstetric hysterectomy. Due to post-operative patients will lose fertility, especially for the young, primiparous patient, it will have greater physiological impact, and therefore it is important to mastered surgical indications, and select resection approach according to the patient's actual clinical condition. Meanwhile, in order to reduce the incidence of hysterectomy, pregnant and lying-in woman needs to prepare for pregnancy and care during pregnancy, and for patients who were not suitable to continue the pregnancy, we should terminate the pregnancy timely.

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