# The uterine rupture and bladder rupture on a pregnant mother with previous cesarean section after partum management on midwife

Dewi Karlina Rusly<sup>1,2</sup>, Hilwah Nora<sup>2</sup>, Kartini Hasballah<sup>3</sup>

Department of Obstetrics and Gynecology, Faculty of Medicine, Indonesia University<sup>1</sup>, Jakarta, 10430, Indonesia; Department of Obstetrics and Gynecology, Faculty of Medicine, Syiah Kuala University<sup>2</sup>, Banda Aceh 23111, Indonesia; Department of Pharmacology, Faculty of Medicine, Syiah Kuala University<sup>3</sup>, Banda Aceh 23111, Indonesia

Corresponding Author: dewikarlina@yahoo.com

Abstract. A-case report about the process and impact of the vaginal birth after section caesarean in rural on a pregnant woman who has previous cesarean. This is the case of Mrs H, 30 years old in aterm gestational age with singleton intra partum fetal death, previous cesarean section, with suspected uterine rupture. She was admitted to RSUZA hospital due to unprogress labour, sent from midwife after failed of labour. In the hospital the catether was inserted and we found hematuria. She had been control for pregnancy in the hospital of mother and baby for two times and the last 2 weeks was said the baby still in good condition. She was had the previous cesarean 5 years ago on second pregnancy due to unprogress labour and the incision was transversal, and also had the extraction vaccum history for delivered the first pregnancy. She already get information to delivered this third baby in the hospital, but she was coming to midwife due to contraction, and the orificium uretra extrenum was opened 8 cm, so the midwife try to delivered the baby for 1 hour, and because failed, the midwife sent to the hospital. After 3 hours, she was administered to the hospital the opened of orificium uteri was 10 cm and we found hematuria. During the way she was transferring to hospital she feels the movement of the baby was lost. When she administered in hospital the blood pressure was 100/70 mmHg, with the heart rate 100 times/ minute. She was complaints pain in the previous cesarean scar 3 hours later, and lost of fetal movement since 1 hours ago. On ultrasound examination there was intrapartum fetal death. We decided to do laparotomy exploration due to suspected uterine rupture. On the operation we found 200 cc blood clot inside the layer of peritoneum, and after the peritoneum was cleaned and opened we could see the upper of the fetal head out side the uterus which intrapartum fetal death, with the large uterine rupture along the previous cesarean incision about 12 cm length. We also found the ballon of folley catheter outside the bladder, so we confirm to urology and also found there was a bladder rupture grade IV with 14 cm lengths on the posterior bladder. After delivered the baby, The uronologist did repair bladder rupture and the bladder was inserted the spolling folley catheter with NaCl 0.9% from the upper bladder for maintenance the drainage of the bladder so it keep clean during in the ward and the folley cateter also inserted from the uretra. The procedure was continued with the obstetrician to do repairation of the uterine rupture. In the ward she was hospitalized for 14 days to maintain the bladder. From this case, we would like to assess the patophysiology of uterine rupture and bladder rupture which cause the mortality and morbidity of mother and baby. The uterine rupture has correlation with late and false of management of delivery which result in intra partum fetal death and bladder rupture that was explained in this paper.

**Key words:** Uterine rupture, previous cesarean section, bladder rupture.

# Introduction

This is the case of Mrs H, 30 years old in aterm gestational age with singleton intra partum fetal death, previous cesarean section, with suspected uterine rupture. She was admitted to RSUZA hospital due to unprogress labour, sent from midwife after failed of labour. In the hospital the catether was inserted and we found hematuria. She had been control for pregnancy in the hospital of mother and baby for two times and the last 2 weeks was said the baby still in good condition. She was had the previous cesarean 5 years ago on second pregnancy due to unprogress labour and the incision was transversal, and also had the extraction vaccum history for delivered the first pregnancy. She already get information to

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# **Result and Discussion**

First process occurs when patient were delivered from Lamno Primary Health Care. At 05.00, the patient come to midwifery and the midwife got the cervical opening 8 cm, and the midwife was waiting for vaginal birth after cesareanwith inter delivery time 5 years. history since the opening already 8 cm, with the existence of fetal heartbeat, obtained at 6:00 to 07:00 the opening is completed, then by the midwife decided to lead, but after a 1 hour waiting, the baby still was not born, the midwife said parturition was wasn't progressed and palpable cord on the baby's neck. Then, at 07.30, it was decided to be referred to RSUZA with no advanced delivery and cord loops. The patient arrived at RSUZA at 09:30 pm then the fetal heartbeat is negative, then urinary catheter is applied, and hematuria was discovered, and was also found from anamnesis there was presence of a previous history of severe pain in long surgical scar that is currently healed. There was suspected uterine rupture, so it is decided to do cito laparotomy exploration. Intraoperatively, we obtained partly uterine rupture with fetal head is outside the womb, and the rupture extends in posterior part, which is then consulted the urology team. Then baby is not born in a breathing condition, and repair performed by a team of Urology jar rupture and suture the wound followed by lower uterine segment, peritoneum, and until the whole abdominal wall.

The Cause of infant death and uterine rupture in these patients are delays in treatment that begins with decision errors taken from the patient and patient's family to deliver at midwife at the hospital which should have been available OK and delays in treatment while at home of midwife and it should not try to birth vaginally because there is no available tool for monitoring fetal heart rate and continue operating room at home the midwife. Allegations of oxytocin and Kristeller action in these patients has not been established. Uterine rupture is a tear of uterine wall due to passing the work of myometrium tension. Uterine rupture is tearing the wall during pregnancy or in childbirth with or without tearing the perineum visceral (Cunningham, 2005).

General causes of uterine rupture is a history of surgery to the fundus or corpus uteri, the induction of labor with uncontrolled oxytocin, prolonged labor, abnormal presentation (mainly occur in the lower uterine segment thinning). In these patients the surgical history Pfannenstiel incision and the uterine old tearing is discovered at the lower segment of the uterus, while the allegations of oxytocin and Kristeller action is uncertain, because only through the midwife information, other causes of infant mortality as well as discovered the umbilical cord prolapse, where the umbilical cord out first than fetal head. So that the head wedged in the birth canal and cause obstructed blood flow and the fetal hypoxia occurs (ACOG, 1988; ACOG, 2004).

Further explored, in these patients carried indication 5 years SC earlier because of parturition is not advanced by the vacuum in the history of the first child and infant weight is 2800 g and obtain the patient's failure to induce labor and then decided to do surgery using Pfannenstiel techniques and the lower uterine segment incision. The baby girl was born, 3000 g, and immediately crying, and it is unknown whether there are incidents of uterine rupture when the baby is due to be issued prior to surgery with other obstetry and gynecology specialist, but patients say the operation wound had been healed after 2 weeks of surgery. According to Shipp et al (2001) interval surgery in patients less than 18 months will increase the risk of uterine rupture was 3-fold, but in this patient because the operation interval of 5 years from the alleged torn uterus incision and a long tear that has not proved to be healed. According to Wing and Paul (1999), obtained the possibility of vaginal birth by 68% in patients who previously performed surgery on non-progressed indications of parturition caesarea section. Hodskins and Gomez (1997) found in women with a history of previous SC dystocia at the opening of 5 cm or less, delivery success rate is 67% and 73% when the opening 6-9 cm. Bujold and Gauthier (2001) reported a success rate of VBAC in women with stage II beforehand 4 indication of dystocia (Wing, 1999; Hoskin, 1997; Bujold, 2001; Shipp, 2001).

While the maternal 30 years age factors has increased from 1.4~% of patients under 30 years who are at risk of only 0.5~%, and in these patients was also not obtained the myoma and organic abnormalities of the uterus thus reducing the risk of tearing the uterus than the possibilities of anomalies are experiencing as much as 8~%. Other possibility of induction of labor measures in these patients is almost equal to the possibility of uterine rupture than without previous scar is only about 0.5-1~% (Ravasia, 2000).

Regarding the surgical scar rupture in a patient's peritoneum obtained intraoperative while looks rips open old wounds in the lower uterine segment size of 12 cm from the left and right, and it looks from the outside of the uterus partly upper anterior part of the fetal form of hair protruding into tears in the fetal wound SBU long incision surgery. It is actually only occurs 0.6 % of the risk of uterine rupture, but due to late treatment and no detectable signs of uterine rupture during labor imminens VBAC in midwife then entered into the patient and fetal stages of uterine rupture and jar and intrapartum fetal death.

In the management of pregnant women with a history of SC, we have to consider various factors such as the risk of uterine rupture, the risk of asphyxia or fetal death, maternal morbidity and mortality, and the cost factor in terms of the ability of implementing agencies and maternal fetal monitoring during labor as well as the means to perform SC ketersedianaan emergency. Referrals to institutions that can be done if we found patients with high risk, while the ability of the existing infrastructure is limited. In these patients because of social factors which only allows patients to give birth in the midwife and the history of education is low, then the patient does not receive clear information to control and give birth in the hospital.

When uterine rupture occurs, asphyxia and maternal mortality can occur, fetal asphyxia can result in permanent neurological disorders in infants who are born or perinatal death. Although, uterine rupture and its complications clearly increased 0.6 % in the former caesarean section 1x than normal deliveries.

Postnatal spontaneous birth caesarean section in a previous pregnancy (vaginal birth after cesarean/VBAC) is considered giving great role for uterine rupture cases. In 1916, EB Cragin in New York Medical Journal throwing one sentence quote by the famous, "Once a cesarean, always a cesarean." Quote that motivated surgical method saesar who was using a vertical incision (classical). The classical incision causes a high risk of uterine rupture is 4-9 %, if women want to spontaneous delivered in subsequent pregnancies. Eventually, classic incision method was abandoned and replaced with low-latitude incision (low-transverse). This method is more secure and start to dominate than the classical methods. Since then, demand continues increasing caesarean section (Cunningham, 2005).

Lately, VBAC began to be doubted following reports a bad mother and baby. ACOG report incident uterine rupture in women with a history of one surgical saesar low transverse incision is 0.2 to 1.5 %. Another study involving more than 130,000 women found an average incidence of uterine rupture was 0.6 % (1 out of 170 women). 3-5 x incidence will increase to 3.9 % in women with a history of 2 or more surgical saesar (1 of 26 women). Rupturing classical uterine incision and the T-shaped 4-9 % while the low transverse incision 1-7 %. In comparison, during the 10 -year study by Gardeil Fetal, as contained in the Eur J Obstet Gynecol Reprod Biol, 1994, shows that the average incidence of uterine rupture of the uterus that has scar tissue was 1 per 30 764 births (0.0033 %); were no cases of uterine rupture at 21 998 primi gravida and only 2 cases in 39 529 multigravid. Looking at the facts, ACOG began to revise the criteria VBAC (ACOG, 1988).

Patients with a history of previous uterine rupture have an increased risk of recurring. They are limited to the rupture of the lower uterine segment has the risk of recurrence by 6 % on the next delivery, while those who have experienced a rupture, involving the upper uterine segment has a risk of 32% (Hoskin, 1997).

Clinical signs and symptoms of uterine rupture can be divided into two, the signs to the mother and baby. Sign in mothers: can happen dramatically or quiet (silent rupture), if there is pain that is felt very dramatic and occur on long incision scars, and in case of uterine rupture is followed by loss of uterine contractions accompanied by loss of pain, and there are signs and symptoms of shock, such as increased pulse rate, decreased blood pressure and shortness of breath, abdominal palpation obtained from the section can be palpated fetal abdomen, the fetus can tereposisi or terelokasi into the maternal abdomen, vaginal bleeding and signs of hematuria could occur due to the kink and rupture of vessels blood in the uterus and bladder, and suggests a torn bladder. While also experiencing signs of fetal tachycardia and bradycardia followed by fetal heart beat until then could not sound anymore, fetal movement also increased at first and then followed by a decrease until there is no movement at once. On these patients almost all signs and symptoms obtained, but due to the unavailability of the operating team and the operating room treatment in these patients to be late.

Management of patients with shock Ruptured uteri are dealing first and improve the state of the patient and the umu intravenous fluids or blood transfusions as preparation for surgery, after the general condition started well, the action continued with laparotomy with action types of surgery: hysterectomy both total and sub total what when earned widespread rupture, or histerorafia is only done when sewing on the edge of the incision long. The selected action is highly dependent on the general state of the patient, type of complete and incomplete rupture and types of wounds or tear: too wide, rather long, flat and wide baseboards rips, location and types of long scars also determined because only bias is in the cervical wound, corpus or the lower segment of the uterus, a little or a lot bleeding, and the age and number of living children is also required on the decision for hysterectomy in which the action in patients who have never experienced uterine rupture is very huge possibility of uterine rupture obtained a return of 6% on the lower uterine segment incision, so it should really diinform consent to conceive again. Its decisions in these patients is maintained uterus, because the age of 30 years is still active reproductive age, with two adult daughters and patient desire to have a boy again, so that by the

installation of spiral intraoperative team and given antibiotics as well as inform clear consent distance subsequent pregnancies, and the risk of tearing the uterus, the patient is advised to control pregnancy and childbirth with performing caesarean section elective at the hospital.

In these patients, we obtained that after 12 days in the treatment room with spooling catheter 3 days and 12 days to settle the catheter, the patient opened his catheter and was able to urinate normally. Patients are advised to control poly urology for 2 years until it is

completely healed (full recovery). In these patients is recommended in case of recurrent hematuria was installed folley cystoscope catheter or further examination (Ying, 2010).

## Conclusion

Explored further divided into two uterine rupture, incomplete uterine rupture there and complete uterine rupture is a tear in the wall of the uterus following its peritoneum (perimetrium) resulting in a direct relationship between the abdominal cavity and the uterine cavity with the danger of peritonitis, whereas incomplete uterine rupture is a muscle tear without tearing of the peritoneum. Subperitoneal hemorrhage occurs and may extend into the broad ligament.

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