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Case Report

# Traumatic Uterine Rupture by Public Road Accident in Young Pregnancy about a Case at the Fousseyni Daou Hospital in Kayes (Mali)

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### Abstract

Uterine ruptures are common in Africa incidence 1 per 70 to 151 deliveries [1]. Rupture of the gravid uterus affects less than 1% of pregnant women involved in a public road accident. We report a case of uterine rupture due to direct abdominal trauma during a road accident (AVP) occurring in Kayes (Mali) [1].

Keywords: Uterine rupture, abdominal trauma, public road accident.

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# INTRODUCTION

Uterine ruptures are common in Africa, incidence 1 per 70 to 151 deliveries [1]. Rupture of the gravid uterus affects less than 1% of pregnant women involved in a public road accident. The main etiologies reported are the following [2, 3]: feto-pelvic disproportion, obstructed presentations and misuse of oxytocics. Among these etiologies, trauma is rarely involved, in less than 1% of cases [4]. We report a case of uterine rupture due to direct abdominal trauma during a road accident (AVP) occurring in Kayes (Mali) [1].

#### **Clinical Case**

Ms. KD, 23 years old, 3rd gesture, 2nd parent with 2 living children, was transferred to our department on July 21, 2020 at 1:20 p.m. by the emergency reception service for uterine rupture after a public road accident in a pregnancy of Approximately 17 weeks of amenorrhea occurred around 7 a.m.

**Questioning:** The accident occurred around 7 a.m. She was driving a motorcycle, she hit a cart which was being pulled by a donkey and as she fell, her belly hit the edge of the road. She was admitted to the emergency department (SAU) at 8 a.m.: the clinical examination and pelvic ultrasound revealed a large amount of hemoperitoneum with the fetus in the abdominal cavity; hence his transfer to our gynecology-obstetrics department at 1 p.m.

#### Examination in the Gynecology-Obstetrics Department:

The patient complained of diffuse abdominal pain. Pallor of the conjunctival mucous membranes was noted, blood pressure at 90/60 mm Hg, radial pulse 110 beats/minute, temperature 37.2°C. The abdomen was painful with positive flow sign. On vaginal examination, Douglas' cry was positive.

Diagnosis: Traumatic uterine rupture.

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#### Action to be taken

Rhesus blood grouping, hemoglobin level returned to 7g/dl, resuscitation and transfusion care, emergency laparotomy performed resulting in a 1600 ml hemoperitoneum with a fetus and its placenta intraabdominally weighing 140 g decapitated from the head (Figure 4). After extirpation of the fetus and its placenta, exploration revealed a complete transverse isthmocorporeal uterine rupture over 12 cm on both anterior and posterior surfaces; separating the uterus almost into 2 halves (Figures 1, 2 & 3). We proceeded to trim the uterine lesions (hysterorrhaphy). Postoperatively, the patient received triple antibiotic therapy.

Evolution: the surgical outcomes were favorable.



Figure 1: Externalized ruptured uterus



Figure 2: Externalized ruptured uterus

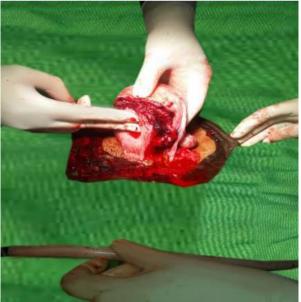


Figure 3: Externalized ruptured uterus



Figure 4: Decapitated fetus and placenta

# **DISCUSSION**

Traffic accidents affect pregnant women in 0.3 to 7% of cases [5, 6]. Our case occurred at the beginning of the 2nd trimester while most uterine ruptures due to road accidents (AVP) occur mainly in the 3rd trimester. Among the damage to the gravid uterus, placental abruption is the most common and is observed in 20-50% of cases, particularly in cases of severe trauma [4].

In our case the diagnosis was delayed by 4 hours at the SAU (emergency reception service), this diagnosis was helped by a paraclinical examination which is the obstetric ultrasound because it was a young pregnancy. Some authors claim that the diagnosis is not obvious on admission because the presence of other severe lesions can distract attention. No other associated lesion such as bone was found in our case. The diagnosis of uterine rupture requires immediate surgical intervention. The nature of this procedure (suture of the lesions or hysterectomy) depends on the extent of the lesions. In our case, despite the importance of the uterine lesions, the treatment was conservative as in that reported by DAO. B in Bobo-Dioulasso, Burkina Faso [3].

The maternal prognosis depends on the associated lesions and the speed of treatment more than on the rupture itself. In almost 100% of cases, fetal death is constant. In our case the shock violence decapitated the fetus.

# CONCLUSION

Traumatic uterine ruptures are rare. Any pregnant woman involved in a road accident must be actively sought because the clinical picture upon admission may not be clear.

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