# Puerperal Rupture Uterus in A Primigravida: A Rare Case

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### Abstract

Rupture uterus is a dreaded obstetric complication. It is a very rare event in an unscarred uterus of a primigravida. We present a case of rupture uterus in a primigravida diagnosed late in puerperium. She was managed conservatively without the need of any laparotomy. Such case is yet not reported in literature. Primigravidas are not immune to rupture uterus and many a times it can be treated without any surgical intervention.

Keywords: Rupture Uterus; Primigravida; Puerperium.

### Introduction

Traditionally, the primigravid uterus has been considered almost immune to spontaneous rupture. Uterine rupture in an unscarred primigravid uterus is a rare event, the estimated occurrence being one Department of Obstetrics & in 8000-15000 deliveries [1]. Gynaecology, North Eastern Moreover such rupture diagnosed late in puerperium has not been reported in literature yet. Herein we present a case report of a lady with ruptured uterus which was diagnosed one month after childbirth and treated conservatively.

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## Case Report

An 18 years old lady attended casualty with pain abdomen since eight days. She had a history of home delivery one month back by a traditional birth attendant.

According to the patient the duration of labour was almost ten hours and the baby cried after birth. She was absolutely normal till eight days back, when she suddenly developed pain abdomen following lifting of a heavy bucket. Gradually her pain increased and she got admitted in a local hospital. She was referred subsequently to our hospital after two days. On admission she was found to be very pale but her vitals were stable. On per abdominal examination, a soft, non tender mass of 28 weeks size was found in the hypogastrium. On per vaginal examination, uterus could not be accessed separately from the lump. At the time of admission her hemoglobin was 7.6 gm%, platelet count 5 lakh/cumm and total leukocyte count was 13,800/cumm. Emergency ultrasonography showed rupture of uterus in the posterior fundal region with collected blood clot without hemoperitoneum. The patient was under close monitoring and her vitals remained stable. Conservative treatment was done with antibiotics and anti-inflammatory drugs. The lump gradually decreased to 14 weeks size after two weeks of treatment. Repeat sonography showed a normal uterus with no blood clot or hematoma after another 2 weeks. She was then discharged home with iron supplements and also advised follow up after 2 weeks.

### Discussion

Rupture of the uterus usually presents as an acute life-threatening condition with symptoms and signs that makes diagnosis relatively easy particularly when there is history of obstructed labour and other risk factors. The main risk factor is a scarred uterus, usually secondary to a previous cesarean delivery. Besides cesarean section, inappropriate prostaglandin and oxytocin usage, previous instrumental abortion,

vacuum extraction delivery, and vigorous fundal pressure are the other risk factors for uterine rupture [1, 2]. Chisara et al reports a case of rupture uterus in a primigravida secondary to abdominal manipulation by a traditional birth attendant, similar to that in our case[3]. These cases are usually diagnosed intrapartum or shortly after delivery and managed with immediate repair of the ruptured site or subtotal hysterectomy. Few cases of rupture discovered in the postpartum period are described in the literature. There is a reported case of rupture uterus in Vaginal Birth After Caesarean diagnosed two days after delivery[4]. Hruska et al described a patient who presented to the Outpatient Obstetric Clinic with worsening left lower quadrant abdominal pain 4 days postpartum of an uncomplicated vaginal delivery involving low dose oxytocin stimulation. She underwent hysterectomy due to defect in the lower uterine wall [5]. In our case, the patient presented very unusually after one month of uneventful vaginal delivery. She was a primigravida with unscarred uterus and no other known risk factors of rupture uterus. Since she was hemodynamically stable inspite of a low hemoglobin concentration, we could successfully treat her with conservative management alone.

### Conclusion

This case of rupture uterus is first of its kind ever

reported. The rupture in the primigravid unscarred uterus presented very unusually after 1 month of home delivery and could be successfully managed conservatively. Being primigravida and in late puerperium cannot exclude the diagnosis of rupture uterus. Also laparotomy is not always the answer to such kind of a rupture uterus.

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