

Catastrophic Uterine Rupture: Retrospective Analysis of Eight Cases in Rural Area

Katastrofik Uterus Rüptürü: Kırsal Kesimde Sekiz Olgunun Retrospektif Analizi

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Dear Editor;

We want to pay attention to uterine rupture cases via presenting our maternal and fetal results in eight cases. Uterine rupture is a serious, life threatening condition, and is still common in developing countries and rural settlements (1). Grand multiparity, prolonged labor and malpresentation were predisposing factors for uterine rupture (2). Also in rural areas with low socioeconomic status, delay in transportation to hospitals seems to be an important factor (1).

We retrospectively evaluated eight cases who were perinatally admitted to Batman Women's Hospital between 01.12.2011 and 31.01.2014. Mean age of the patients was 33 (20-42), mean gravidity was 4.5 (1-9), six had previous vaginal deliveries, two had previous cesarean deliveries, and one of the vaginally delivered patients also had previous myomectomy. Home delivery was initially tried by all patients four of whom were administered intramuscular oxytocin and two of whom were applied fundal pressure (Kristeller maneuver) in those trials. In hospital and in the active phase of the labor, two patients were operated for previous cesarean, one patient for previous myomectomy, and one patient for obstructed labor. Laparotomy was applied to four postpartum admissions, three patients with postpartum vaginal bleeding, and one patient who had abundant bleeding and shock at the time of admission. Of the four patients who undergo cesarean section, two patients had dehiscence of the previous cesarean scar, one anterior wall dehiscence at the probable myomectomy site, and one had lateral wall rupture.

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All four patients were treated with primary sutures and internal iliac artery ligation was applied to one patient. No postoperative complications necessitating surgery were encountered in this group. Two out of the remaining four patients were treated with hysterectomy (25%), and two with primary sutures. Posterior and lateral rupture including vagina was observed in one, and anterior rupture was observed in the other patient undergoing hysterectomy. Iatrogenic ureter ligation was caused in two patients. Disseminated intravascular coagulation and maternal death (12.5%) was observed in one patient who delivered at home. Total complication rate was 37.5%. Total of three internal iliac artery ligations were applied.

Total of 22 units of red blood cells, 28 units of fresh frozen plasma were transfused to 7 patients. In neonatal point of view, one of the pregnancies had polyhydramnios and omphalocele; one of the delivered babies was 4000 grams, one patient with previous cesarean had non-viable fetus at admission, and one postnatal death (12.5%) was observed in a primary rupture case, demonstrating a maternal mortality rate of 12.5% similar to previously reported 13.5% (1). We think that iatrogenic ureteral ligations we faced were possibly a consequence of the rapid interventions in order to control hemorrhage and maintain hemostasis.

Especially, from the perspective of patients and families, resistance against cesarean section is common and even patients with previous or repeat cesarean deliveries attempt home delivery ignoring maternal and fetal consequences. As indicated in the report from Turgut et al., procedures such as fundal pressure and oxytocin injection without medical supervision might have been applied in order to force labor which seems to be the most important risk factor for uterine rupture in this area. Severe morbidity and mortality is obvious even in this small series.

Supporting patients and families with options of mode of deliveries such as vaginal birth after cesarean under medical supervision rather than forcing unattended home deliveries via pushing patients to repeat cesareans may help in reducing catastrophic outcomes.

As seen in above, instant intervention under medical supervision may significantly improve outcomes in such cases of this important and ongoing problem. Besides, it is worth mentioning the importance of increasing the levels of awareness and knowledge about birth and ameliorating transport to hospital in underdeveloped rural areas, such as Southeast Region of Türkiye.

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