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Clinical profile of pregnant women with uterine rupture

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Abstract

The occurrence of uterine rupture varies in different parts of the world. The incidence is very low in developed nations, but continues to remain high in developing countries. The incidence varies from 0.3/1000 to 7/1000 deliveries in India accounting for 5% to 10% of all maternal deaths. The rising cesarean section rate leads to an increase in number of women exposed to the risk of ruptured uterus. This was a prospective study of all the pregnant patients are taken according to the inclusion criteria, detailed history including the name, age, address, contact number and history pertaining to the various factors associated with uterine rupture will be noted in the form of questionnaire. The presenting symptoms, signs, maternal outcome and fetal outcome and any associated complications will be duly noted. In the present study, majority of the rupture involved previously scarred uterus, among which 18 cases (51.4%) were due to previous caesarean scar rupture, next predisposing factor being obstructed labour (28.6%), uterine anomaly contributes to 5.8% of cases.

Keywords: Uterine rupture, maternal deaths, obstructed labour

Introduction

Uterine rupture is a major obstetric complication associated with high maternal and perinatal mortality. It is one of the most serious complications encountered in obstetrics, threatening the pregnant women and her fetus; more so in developing countries. Survivors are often encumbered with morbidities such as obstetric fistulae, psychological trauma, severe anemia and septicemia, which make the recovery process a prolonged and turbulent one. Even after recovery, the impaired reproductive functions that result from surgical management predispose patients to marital disharmony^[1].

The occurrence of uterine rupture varies in different parts of the world. The incidence is very low in developed nations, but continues to remain high in developing countries. The incidence varies from 0.3/1000 to 7/1000 deliveries in India accounting for 5% to 10% of all maternal deaths. The rising cesarean section rate leads to an increase in number of women exposed to the risk of ruptured uterus^[2].

Uterine rupture stands as a single obstetric accident that exposes the flaws and inequities of health systems and the society at large due to the degree of neglect that it entails.

An early diagnosis and prompt treatment of the rupture uterus is the most important factor in the improvement of maternal and perinatal outcome, although the mortality can be preventable. Despite the increasing public concern and support, the most vulnerable: the poor illiterate women from rural communities and their babies hardly get the needed attention^[3,4].

Methodology

Source of data

Data collected from all the pregnant women being admitted for delivery at tertiary care hospital

Study subject

All the pregnant patients who fulfill the inclusion criteria.

Inclusion criteria

1. All pregnant women of >28 wks of gestation with diagnosis of rupture.
2. All cases of uterine rupture confirmed at laparotomy.

Exclusion criteria

1. Suspected cases of uterine rupture found negative at laparotomy.

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Methodology

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Necessary investigations and resuscitation are carried out before the surgery.

A total of 19,605 deliveries were conducted during the two year study period at a tertiary care hospital. There were total of 35 cases of uterine rupture managed in the hospital during this period.

Results

Table 1: Distribution of the patients based on symptomatology (n=35)

Symptom	Frequency	Percent
Bleeding P/V	8	22.9
Pain abdomen	27	77.6
PV leak	1	2.9
Diagnosed as a case of rupture uterus	1	2.9
Referred as obstructed labour	1	2.9
Brought dead	1	2.9

In this present study, table no-1 shows out of 35 cases of rupture uterus, 27 cases (77.6%) came the complaint of pain abdomen, 8 cases (22.9%) with bleeding per vagina, 1 case (2.9%) with p/v leak, 1 case (2.9%) diagnosed as a case of rupture, 1 case as obstructed labour (2.9%) to labour room.

Table 2: General physical and per abdominal examination findings among the patients

Findings	Frequency	Percent
Hemodynamic stability		
Brought dead	1	2.9
Stable	23	65.7
Unstable	11	31.4
Uterine contour		
Uterine contour altered	14	40
Uterine contour maintained	21	60
Fetal heart sounds		
Present	5	14.3
Absent	23	65.7
Variable FHS	7	20
Loss of station		
Yes	9	25.7
No	26	74.3

In this present study table no-2 showed, most of the patients presented with hemodynamic instability (31.4%) with classic features of rupture uterus (uterine contour altered- 40%, absence fetal heart sounds- 65.7% n variable FHS-20%, loss of station-25.7%.

Table 3: Distribution of the patients based on Interval between admission and operation

Interval	Frequency	Percent
≤ 1 hr	20	57.1
1.1 - 6.0 hrs	12	34.3
> 6 hrs	3	8.6
Total	35	100

In this study, table no-3 shows 57.1% cases were operated within one hour of admission and reduced the maternal morbidity, 34.3% cases operated within 6 hours of admission and 8, 6% cases operated more than 6 hours of admission.

Table 4: Predisposing factors among the patients

Predisposing factors	Frequency	Percent
Injudicious use of oxytocin	1	2.9
Malpresentation	3	8.6
Obstructed labour	10	28.6
Obstructed labour with malpresentation	1	2.9
Previous LSCS	18	51.4
Uterus anomaly	2	5.8
Total	35	100

In the present study, table no-4 shows majority of the rupture involved previously scarred uterus, among which 18 cases (51.4%) were due to previous caesarean scar rupture, next predisposing factor being obstructed labour (28.6%), uterine anomaly contributes to 5.8% of cases.

Discussion

The clinical features were extremely variable and most of patients presented with classical signs of rupture uterus, which is comparable with the study by Ibha *et al.* in 2002 [5].

In this study there were more of anterior transverse lower segment rupture 65.7% which is comparable with the study done by jyoti sinha and shanty Roy at patna medical college during 1987-1982 [6].

There were 3 cases of posterior wall rupture, of which one was associated with vertical colporrhesis, so in cases of repeat section or in cases with impending rupture, it is important to examine the posterior wall too for dehiscence or tear or else one might miss the site of haemorrhage in such cases.

Out of 35 cases, in this study 6 cases had associated injuries. Most common association was bladder injury(8.6%) followed by rupture extension with broad ligament haematoma 5.7% which is similar to study done by Ganesh *et al.* [7] hence, modern obstetrician should be well versed with uterine artery and internal iliac artery ligation procedures which at times will be of immense help in women willing to preserve the uterus [8, 9].

The decision to perform uterine repair or hysterectomy in cases of rupture uterus is influenced by the condition of the uterus, age, fertility wishes, parity, extent of the rupture and general condition of the patient. Repair of uterine rupture is a logical approach and should be performed in women with scar rupture in whom tear is linear. 23 cases (77.2%) had undergone uterine repair with or with out ligation. Singh A had 75% cases in which scar repair was done [10]. 20% women underwent hysterectomy with repair of associated injuries like bladder repair. Nevertheless 1/3rd of patients lost their reproductive and menstrual function. Loss of such functions in our country is usually considered as loss of womanhood and increased incidence of marriage breaks with social trauma.

Conclusion

Most of the cases presented with classical signs of rupture uterus. Most common cause of rupture uterus was due to previous caesarean scar 18 cases (51.4%) out of 35, followed by obstructed labour were 8 cases (28.6%). most common site of rupture seen in this study was in anterior lower uterine segment.

References

1. Foffie CO, Baffoe P. A two year review of uterine rupture

- in a regional hospital. *Ghana Med J.* 2010; 44(3):98-102.
2. Eze JN, Ibekwe PC. Uterine rupture at a secondary hospital in Afikpo, Southeast Nigeria. *Singapore Med J.* 2010; 51(6):506-511.
 3. Fedorkow DM, Nimrod CA, Taylor PJ. Ruptured uterus in pregnancy: A Canadian hospital's experience. *CMAJ.* 1987; 137:27-29.
 4. Anklesaria BS, Savaliya MV. Rupture Uterus. In Krishnan U, Tank DK, Daftary S. *Oregnancy at risk: current concepts.* 4thed. New Delhi; India: Jaypee brothers Medical Publishers, 2001, 468-71.
 5. Ibha K, Poonam G, Alka S, Devikamla. Experience at an urban medical centre in Northern India. *J Obstet Gynecol Ind.* 2003; 53(6):558-62.
 6. Sinha J, Roy S. Retrospective study of rupture uterus at Patna medical college Hospital during five years period 1978-1982. *J Obstet GynecolInd.* 1986; 36(2):241-5.
 7. Shinde G, Pawar A, Jaisal P, Jadhav B. Maternal and perinatal outcome of rupture uterus at tertiary care centre. *Bombay Hospital Journal.* 2011; 53:3.
 8. Leung AS, Leung EK, Paul RH. Uterine rupture after previous cesarean delivery: maternal and fetal consequences. *Am J Obstet Gynecol.* 1993; 169(4):945-50.
 9. Menihan CA. Uterine rupture in women attempting a vaginal birth following prior cesarean birth. *J Perinatol.* 1998; 18(6-1):440-3.
 10. Abha S, Srivastava C. Uterine rupture still a harsh reality. *Journal of Obstetrics and gynaecology India.* 2015; 65(3):158-61.