



A STUDY ON RUPTURE UTERUS IN A TERTIARY CARE CENTRE

Dr. B. Siri Chandana

Post Graduate UG & PG Girls Hostel, Kurnool Medical College, Kurnool. – 518002. Andhra Pradesh

Dr. T. Kumuda*

Asst.Professor Department of OBG, Govt. General Hospital, Kurnool – 518002. Andhra Pradesh *Corresponding Author

Dr. S. Venkataramana

Associate Professor Department of OBG, Govt. General Hospital, Kurnool – 518002. Andhra Pradesh

ABSTRACT

OBJECTIVE: To study cases of rupture uterus in pregnancy in a tertiary care centre.

METHODS: It is a Retrospective study conducted during period of 17 months from January 2018 to may 2019 in department of OBG, at GGH, Kurnool. All pregnant woman were included in study.

RESULTS : In the present study, total 17cases of rupture uterus were noted. All cases were un booked and referred from other centres. Out of which most of the cases are multiparous with scarred uterus. Out of 17cases 1case of maternal mortality noted and maternal outcome of remaining cases was satisfactory.

KEYWORDS :**INTRODUCTION**

- Uterine rupture is one of the life threatening obstetric complications with grave sequelae to both mother and fetus.
- In India it accounts for 5 to 10 % of all maternal deaths. The incidence in developed and developing countries varies from 1 in 2500 to 1 in 5000 deliveries.

TYPES OF UTERINE RUPTURE

- It may be Primary defined as occurring in a previous intact or unscarred uterus or may be Secondary associated with a preexisting incision injury or anomaly of myometrium
 - There are 2 types of uterine rupture
1. Complete- complete disruption of uterine layers, including the serosa
 2. Incomplete - incomplete and frequently occult, uterine scar separation where the serosa remains intact.

RISK FACTORS

1. Most common is previous scar giving away.
 2. Others include obstructed labour
 3. Injudicious use of oxytocics
 4. Previous myomectomy scar
 5. Uterine anomaly
 6. Direct trauma to uterus
 7. Concealed abruption
- Other risk factors include any
 - Previous operations that traumatize myometrium
 - Blunt abdominal trauma
 - Difficult forceps delivery
 - Breech extraction
 - Unusual foetal enlargement as in case of hydrocephalus.
- It manifests as fetal distress, fetal death ,maternal tachycardia, bleeding per vagina, hematuria and loss of station of presenting part.
 - The initial signs and symptoms are nonspecific making diagnosis difficult and delays definitive therapy.
 - The best chance of detecting uterine rupture lies in careful and continuous monitoring of uterine contractions and fetal wellbeing in labour.

MATERIALS AND METHODS

- It was a retrospective study conducted in the Dept. of OBG,GGH, KURNOOL, over a period of 17 months from January 2018 to may 2019. The study sample included 17 pregnant women who had rupture uterus.

INCLUSION CRITERIA

- The study included all pregnant women with all gestational age.
- Age of the mother , parity, mode of delivery were included in the study

RESULTS

- A total number of 17 cases of rupture uterus were reported for the period of 17 months. During this period total number of deliveries were 14550. Out of 14550, 4747 underwent emergency cesarean section.
- Majority of patients were second and third gravida and beyond. only one case was a primigravida.
- The rate of cesarean section in our hospital during this period was 43%. Incidence of VBAC was 0.07%.
- Results were analysed as follows:

Age

Age (years)	Number	Percentage
15-25	8	46%
25-35	9	54%

Antenatal care

Antenatal care	Number	Percentage
Booked	0	0
Unbooked	17	100

Gestational Age

Gestational age	Number	Percentage
20 weeks	1	5
28 weeks	1	5
> 37 weeks	15	90

Parity

Parity	Number	Percentage
Primi	1	7
Gravida2	7	41
>Gravida2	9	52

Types of rupture

All of them are complete type. Out of 12 cases of secondary rupture 5 were 2 prior c/s cases.

Type	Number	Percentage
Primary	5	30
Secondary	12	70

Mortality

Mortality	Number	Percentage
Maternal	1	5
Fetal	17	100

Site of rupture :

Site	Number	Percentage
Lower segment	14	82
Upper segment	2	12

- There is one case of rupture uterus in unicornuate uterus with pregnancy in no communicating horn, and rupture of non communicating horn.

DISCUSSION

- In the present study the incidence of uterine rupture is 0.1 %. As our hospital is a tertiary care centre , all complicated cases will be referred here.
- In 70 % of cases uterine rupture occurred at the previous LSCS scar . It's a matter of great concern.
- There was one case of bladder injury .
- Blood transfusions were done for all cases intra operatively and postoperatively for some cases.
- No case of sepsis was reported
- No cases were proceeded to hysterectomy
- There is lack of awareness in our population about the need for antenatal care and supervised hospital delivery., especially in case of women with previous caesarean delivery
- As the incidence of caesarean deliveries increased and trial of labour in this women became prevalent, uterine rupture in case of previous scarred uterus has been increased.
- The low maternal morbidity attributed to availability of blood transfusion, and round the clock services of competent obstetrician and anaesthetist enabling prompt management.

CONCLUSION

- In developing countries the incidence is high due to greater number of unbooked obstetric emergencies, often originating from rural areas with poor antenatal care.
- Good antenatal care, appropriate counselling of patient with previous cesarean section for hospital delivery, training of skilled birth attendant, avoiding injudicious use of oxytocics can decrease the incidence of this catastrophic but avoidable complication.

REFERENCES

1. Ofir K, Sheiner E, Levy A, et al. Uterine rupture: risk factors and pregnancy outcome. *Am J Obstet Gynecol.* 2003;189:4. doi: 10.1067/S0002-9378(03)01052-4. [PubMed] [CrossRef] [Google Scholar]
2. Gardel F, Daly S, Turner MJ. Uterine rupture in pregnancy reviewed. *Eur J Obstet Gynecol Reprod Biol.* 1994;56:107–110. doi: 10.1016/0028-2243(94)90265-8. [PubMed] [CrossRef] [Google Scholar]
3. Lydon-Rochelle M, Holt VL, Easterling TR, et al. Risk of uterine rupture during labor among women with a prior cesarean delivery. *N Engl J Med.* 2001;345:3–8. doi: 10.1056/NEJM200107053450101. [PubMed] [CrossRef] [Google Scholar]
4. Sahu LA. 10 year analysis of uterine rupture at a teaching institution. *J Obstet Gynecol India.* 2006;5(6):502-6.
5. Justus Hofmeyr G, Say L. Systematic review: WHO systematic review of Maternal mortality and morbidity: the prevalence of uterine rupture. *BJOG: An International Journal of Obstetrics & Gynaecology.* 2005;112:1221-8.
6. Mahbuba, Alam IP. Uterine rupture - experience of 30 cases at Faridpur Medical college Hospital. *Faridpur Med Coll J.* 2012;7(2):79-81.
7. Singh A, Shrivastava C. Uterine Rupture: Still a Harsh Reality. *Journal of obstetrics and gynaecology of India.* 2015;65(3):158-61.
8. Sunitha K, Indira I, Suguna P. Clinical Study of Rupture Uterus - Assessment of Maternal and Fetal Outcome. *Journal of Dental and Medical Sciences.* 2015;14(3):39-45.
9. Fofie CO, Baffoe P. A Two-Year Review of Uterine Rupture in a Regional Hospital. *Ghana Med J.* 2010;44(3):98-102.