

RUPTURE OF UTERUS ASSOCIATED WITH COLPORRHEXIS

by

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Colporrhexis, otherwise referred to as rupture of the vaginal vault is a rare, but dangerous complication of labour. The cervix may be entirely or partially torn loose from the vagina with colporrhexis in the anterior, posterior or lateral fornices Eastman and Hellman, (1966). Since the vaginal mucosa is reflected on the cervix, it becomes obvious that complete lacerations of the cervix almost always involve the vagina Singh, (1967).

Material and Methods

During the period from January 1963 to August, 1974, there were 12455 deliveries managed in Tirunelveli Medical College Hospital, Tirunelveli, India.

During this period there were 300 cases of rupture of uterus, giving an incidence of 1 in 42 deliveries (2.5 per cent). The rupture of uterus was associated with colporrhexis in eleven patients. The case records of these patients form the basis of this report.

Observations

There are several larger series of rupture of uterus in which association of colporrhexis has not been mentioned. The incidence of colporrhexis in cases of rupture of uterus varies from 3.5 per cent to 21.7 per cent, compared to 3.7 per cent in this study (Table I). The salient features of the cases reviewed in this paper

TABLE I
Incidence of Colporrhexis Associated with Rupture of Uterus

Year	Author(s)	Total No. of Rupture uterus	Colporrhexis				Per cent
			Anter.	Poster.	Lateral	Total	
1960	Patel and Parikh	41	6	0	-	6	14.6
1962	Shastrakar	55	6	1	-	7	12.7
1962	Devi	75	4	1	-	5	6.7
1963	Prabhavathi and Mukherjee	60	-	-	-	9	15.0
1964	Rao	60	13	0	-	13	21.7
1968	Mudaliar and Menon	164	12	8	-	20	12.2
1970	Paranjothy and Sumathy	57	-	-	-	2	3.5
1971	Gogoi	36	-	-	-	4	11.1
1973	Mitra	106	-	-	-	6	5.7
	Present series	300	1	6	4	11	3.7
Total:		954	42	16	4	83	8.7%

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appear in Table II. The average age was 28.5 years and the mean parity was 2.8. In two cases, rupture of uterus occurred spontaneously without evidence of any

TABLE II
Salient Feature of Cases Reported

Sl. No.	Age (yrs.)	Obstetric Code* G/1/A/LC	Cause of rupture	Site of Colporrhexis	Site of Rupture of uterus	Treatment	Birth weight (Kg.)	Maternal outcome
1	21	PRIMI	Forceps delivery (outside)	Posterior	Left lateral tear with broad ligament haematoma (left)	Subtotal hysterectomy	3.0	Febrile post operative period — survived.
2	23	PRIMI	Contracted pelvis	-Do-	Oblique transverse tear of anterior wall of lower segment extending to left lateral wall, cervix and vagina	Rent repair	2.5	Died on 2nd day (septic shock)
3	25	2/1/0/1	-Do-	-Do-	Oblique transverse tear of anterior wall of lower segment	Subtotal hysterectomy	3.0	Survived
4	37	4/3/0/2	Unknown	-Do-	As in case (3)	Rent repair with sterilization	2.75	Died on 7th day (septic shock)
5	22	3/2/0/2	Hydrocephalus	-Do-	As in case (3)	-do-	3.2	Died soon after operation (haemorrhage and shock)
6	35	4/3/0/3	Unknown	-Do-	As in case (3) with broad ligament haematoma (right)	Subtotal hysterectomy	3.0	Vesico-cervical fistula: survived
7	31	5/3/1/3	Brow presentation	Right lateral	As in case (6)	-do-	3.3	Survived
8	30	3/2/0/2	Neglected shoulder	Left lateral	As in case (3) with broad ligament haematoma (left)	-do-	2.5	Survived
9	35	5/8/0/6	Cervical dystocia with prolapse uterus	-Do-	As in case (8)	-do-	2.5	Died on 2nd days (shock and sepsis)
10	32	7/6/0/2	Disproportion due to big baby	-Do-	Oblique transverse tear of posterior wall of lower segment with broad ligament haematoma (left) and avulsion of cervix	-do-	4.0	Survived
11	22	4/3/0/3	Brow presentation	Anterior	Vertical tear of anterior wall of lower segment	Total hysterectomy	2.5	Survived

*Obstetric Code = Gravida/Para/Abortions/Live Children.

discernible contributory factor. In one primigravida forceps delivery had been attempted in a peripheral hospital. In her, the head was unengaged and the cervix was only 6 cm. dilated. The causes of rupture of uterus in the remaining cases were as follows: brow presentation (2), neglected shoulder (1), contracted pelvis (2), big baby (1), hydrocephalus (1) and cervical dystocia (1). In 55 per cent colporrhexis occurred posteriorly. Anterior colporrhexis occurred in only 9 per cent, a finding inconsistent with previous reports, as shown in Table I. Hysterectomy was performed in eight cases, with death of one mother (12.5 per cent). In three cases, rent repair was done and all these patients were lost. One patient developed vesicocervical fistula following subtotal hysterectomy for posterior colporrhexis associated with an oblique tear in the anterior wall of the lower segment. All babies were born dead. The average birth weight was 2.95 kg.

Comments

It is unfortunate that the management of colporrhexis still remains controversial. Mudaliar and Menon have stated that laparotomy, as in other cases of rupture of uterus, is the method of choice. They favour hysterectomy for all cases of colporrhexis. Our observations also show that hysterectomy is the best treatment with fair chances for survival of the mother. Conservative methods such as packing of the vagina, clamping the paracervical tissue and suturing the rest either per vaginam or per abdomen are associated with very high maternal mortality rates. It is disquieting to note that we have lost three mothers, including one primigravida, following suturing of colporrhexis. The age and parity alone, therefore, should not be given undue importance in deciding the type of treat-

ment. In all cases of rupture of uterus associated with colporrhexis, hysterectomy should be preferred.

Summary and Conclusions

Eleven cases of rupture of uterus associated with colporrhexis have been reviewed. The maternal mortality was 100% when treated by suturing of the tear and 12.5% when treated by hysterectomy. It is concluded that in all cases of rupture of uterus associated with colporrhexis, hysterectomy should be performed.

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