

# CERVICAL DYSTOCIA IN MID-TRIMESTER ABORTION

by

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## Introduction

Cervical dystocia is a well known entity of labour and if not diagnosed in time and adequate measures taken, may lead to cervical injuries, fistula or even annular detachment of cervix. This has also been recorded during induced midtrimester abortions.

Since legalisation of M.T.P. act, (1971) there is an increasing resort to mid-trimester abortion by instilling various agents by intra-amniotic and extra-ovular technique. Trauma to cervix may result from uterine overactivity where cervix fails to dilate properly. As a result of this product of gestation forcefully

come out through some artificial rent either in the cervix or in lower uterine segment.

A number of cases were reported by various authors where abortions occurred through posterior cervico—vaginal fistula bypassing the undilated cervix after extra-amniotic administration of soapy paste (Skajaa, 1961); Intraamniotic Prostaglandin (Shearmann, 1971) Prostaglandin and urea (Bradly-Watson, 1973).

## Material and Methods

In Eden hospital, during the period from June, 1972 to November, 1976, 2120 mid-trimester abortions were performed by various agents as detailed in Table I. I.V.

TABLE I  
Incidence of Cervical Fistula in Different Methods of Midtrimester Abortions

Methods	No. of Patients	Cervical Fistula	Incidence
1. I.A.H.S.	227	1	1 in 227 (0.44%)
2. I.A.H.S. + I.V. Oxytocin	1501	13	1 in 115 (0.87%)
3. I.A.N.S. with or without Oxytocin	319	-	-
4. Prostaglandin (Intraamniotic and Extraamniotic)	48	1	1 in 48 (2%)
5. Unacredil (Extraamniotic)	25	1	1 in 25 (4%)
Total:	2120	16	(0.75%)

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Oxytocin drip, when necessary, was commenced within 2 hours of initial procedure. The dose of oxytocin was fixed in all cases i.e. 10 units/500 ml. of 5% Dextrose solution. A curettage was carried

out in all cases after abortion. The cervix was examined and repaired if cervical rupture was detected. The follow up was done on 1st and 3rd month.

### Results and Analysis

Cervical dystocia leading to cervical fistula was observed in 16 cases (0.75%). The incidence of cervical fistula after IAHS alone was 1 in 227 cases (0.44%), and IAHS with I.V. oxytocin was 1 in 115 (0.87%). In a series of 101 cases of midtrimester induced abortion with IAHS, Berk *et al* (1971) reported the incidence of 1 in 93 (1.07%) with IAHS alone, and 1 in 9 (10.19%) with IAHS and I.V. oxytocin. The incidence reported by them was much higher than that of ours, probably due to the fact that they had studied only 101 cases, whereas our study was based on 1728 cases.

The percentage of cervical tear with Prostaglandin (2%) in the present series was found more or less similar to reports (2.7%) published by Kajanoja (1974). The percentage of cervical tear after Unacredil (4%) in our series is exactly the same (4%) with Nabriskis *et al* (1971).

No cervical tear has been found to occur in I.A.N.S. alone or with I.V. oxytocin.

fistula occurred in 93 cases treated with IAHS only, whereas the incidence was 10 times more (1 in 9) among patient treated with IAHS + I.V. oxytocin.

In the present series (Table II) the induction abortion interval was 35.6 hours in IAHS alone and 20.4 hours in IAHS + I.V. oxytocin. The percentage of cervical fistula was almost double (0.87%) with IAHS + I.V. oxytocin than that of IAHS alone (0.44%). It was also found that the mean abortion time diminishes with the use of Prostaglandin (16.4 hours) and Unacredil (18.6 hours) with an increase incidence of cervical fistula i.e. 2% and 4% respectively. No doubt there will be further increase of cervical fistula if oxytocin is used along with these drugs (Kajanoja, 1974). This is not used in our series.

Although Skajaa in 1961 observed that young women were more likely to develop this complication, it was observed by Caffier (1928) among older primigravidae. In the series of Kajanoja (1974) all the 5 patients who developed cervical tear, were primigravidae under 20 years of age.

In our series we could not find any correlation between the age and parity with cervical fistula though the youngest

TABLE II  
Relation of Induction Abortion Interval and Cervical Fistula in Different Methods

Methods	Mean Abortion time (in hours)	Incidence of Cervical Fistula
1. I.A.H.S.	35.6	1 in 227
2. I.A.H.S. + I.V. oxytocin	20.4	1 in 115
3. Prostaglandin	16.4	1 in 48
4. Unacredil	18.6	1 in 25

Infusion of high dose of oxytocin has been found to reduce the induction abortion interval (Seppala *et al*, 1972) and increases the chance of cervical fistula. In a study of Berk *et al* (1971) one cervical

member of our series has become the victim of this complication. It can only be presumed that some degree of genital hypoplasia may exist in younger patients which may be the cause of it.

TABLE III  
Analysis of Cases of Cervical Fistula

Methods	No. of Patients	Age in years	Parity	Type of tear
I.A.H.S. + I.V. Oxytocin	13	18-30	P <sub>1</sub> -P <sub>3</sub>	Posterior—10 Posterolateral—3
I.A.H.S. only	1	14	Single	Posterior
Prostaglandin	1	19	P <sub>1</sub>	Posterior
Unacredil	1	28	P <sub>2</sub>	Posterolateral

In the present series the cervical fistula was mostly in posterior aspects (in 12 patients) and posterolateral in 4 cases. Similar incidence was also observed by other authors (Kajanoja, 1974, Berk *et al* 1971).

#### Comments

Cervical fistula is presumably due to cervical dystocia which is a known entity in labour, the cause of which may be in the cervix itself or due to incoordinate uterine action.

The authors presumes that those who develop cervical dystocia during midtrimester abortion may also show the same during their future deliveries. A follow up of these cases during their future deliveries may reveal some interesting findings.

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