# PLACE OF DUHRSSEN'S INCISIONS IN GENITAL PROLAPSE IN LABOUR

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### U. D. SUTARIA,\* M.D., D.G.O.

From 1976 to 1980, 18 patients of prolapse were admitted to Sassoon General Hospitals, Poona during labour. Four of these patients could be delivered vaginally after Dührssen's incision. These 4 patients are described in details below.

Case 1

A 26 years old gravida 3 para 0 was admitted on 11-10-1976 with amenorrhoea for 9 months, leaking for 4 hours—15 minutes and labour pains for approximately 8-10 hours. She gave no history of prolapse. During the current pregnancy she had had an encerclage operation done during the fifth month of gestation. Her pregnancy thereafter was uneventful. The stitch had been removed about 12 days prior to the present admission.

Her first pregnancy had terminated prematurely at 7 months gestation and she had lost the child soon after birth. The second pregnancy had ended in an abortion of 5 months' gestation 2 years prior to the current pregnancy.

She was in established labour. The uterus was 36 weeks' gestation size. It was contracting and relaxing well. The foetus was presenting by vertex in LOA position, the vertex being deeply engaged. The foetal heart rate was 120/ min, regular and good in intensity.

On local' examination the cervix was found to be outside the vagina—it was well effaced and 5 cms. dilated, and through it a tightly applied vertex could be seen as the membranes were absent. However there was no caput.

Without delay, cervical incisions were made at 4 and 8 o'clock positions under local paracervical block and the patient delivered a male baby

\*Professor of Obstet. & Gymaecology B. J. Medical College, Poona.

Accepted for publication 2-6-82.

2250 gms by weight. The incisions were repaired by interrupted catgut sutures and vagina was packed to repose the cervix.

The patient made an uneventful recovery under cover of oral chloromycetin given for 7 days.

No prolapse was seen at the time of discharge.

### Case 2

A 24 years old gravida 3 was admitted with amenorrhoea of 6 months, abdominal pain and prolapse cervix for 1 day. She had 2 full-term normal deliveries in the past. The second baby was lost on the fourth postnatal day.

She was carrying a pregnancy of 34 weeks. The foetus was presenting by vertex in ROL position. The head was fixed and foetal heart rate was 160/min regular.

Locally the cervix was 4 cms dilated, it was thick and there was no prolapse at the time. The membranes were present.

For next 7 hours the patient continued to get moderate contractions. By the end of this period the cervix could be seen at the introitus.

Further 5 hours showed no progressive change in the cervix which remained thick and 5 cms dilated. She was therefore given epidosin at hourly intervals for 3 doses.

A further period of 6 hours' observation showed no progress. Hence artificial rupture of forewaters was done. The liquor was clear. Simultaneously pitocin drip was started with 2.5 units in 500 ml of 5% dextrose.

In another 1½ hours the cervix was still 5 cms although it had become quite thin and stretched over the head with a thick external os. Maternal distress had set in.

Forceps (Short) was applied through the partially dilated cervix and cervical incisions were made at 4 o'clock and 8 o'clock positions, while giving slow traction on the forceps.

The incisions were resultured with chromic 00 catgut. Vagina was packed. The pack was removed after 6 hours. The patient was given a blood transfusion postoperatively. She had an uneventful postnatal recovery and was discharged on 7th day.

#### Case 3

A 20 years old gravida 2 with one previous normal delivery was referred from another hospital where she was given sedation and antibiotics for labour pains and leaking for approximately 6 hours. She had a third degree prolapse for one and half months for which she had not sought any antenatal advice. She had a 34 weeks pregnancy with foetus presenting by vertex in LOA position. The head was engaged and foetal heart rate was 140 per minute regular. There were good regular uterine contractions. Vaginally the whole cervix was outside the interoitus and although fully effaced the lips were oedematous and congested. It was about 5-6 cms dilated. The membranes were absent. There was a moderate sized caput and a vertex so low down that the biperietal diameter was almost outside the interoitus. The perineum was lax and oedematous.

Two and half hours later the caput had increased but the dilatation was the same as on admission. No further change was observed over next 3 hours.

The cervix was incised at 5 o'clock position under general anaesthesia and a male baby 2300 gms was delivered immediately thereafter with an apgar score of five. The cervical incision was sutured by interrupted catgut sutures. The third stage was uneventful Vagina was packed for 24 hours and patient was given antibiotics for 7 days. Postoperatively the patient development bronchitis but no other complications and was discharged well after 7 days.

#### Case 4

A 35 years gravida 5 para 4 with 3 living children was referred from a primary health centre 35-40 kms from Pune, with history of labour pains for 20 hours and leaking for 8 hours. She also gave history of a third degree prolape for 3 years, for which she had taken no treatment, probably because she had had a full term normal delivery one and half years before this episode in the presence of the prolapse.

She was carrying a full term pregnancy with the foetus presenting by vertex in ROA position. The head was engaged. The bladder was distended and the lower segment was stretched. There were moderately strong, regular, uterine contractions. Vaginally the cervix was outside the introitus. It was 5 cm dilated and fully effaced and the lips were oedematous. The membranes were absent and vertex was at plus 2 station in ROT position. There was no caput and the pelvis was adequate.

One hour later the vertex had rotated posteriorly when under general anaesthesia cervicotomy was done with a single incision at 5 o'ciock position. Outlet forceps were applied and a full term female baby of 2500 gms delivered as face-to-pubes, after an episiotomy. The cervix was sutured by interrupted chronic 00 catgut sutures and the episiotomy closed in 3 layers.

The apgarcore of baby at birth was 2 put it was resuscitated easily and did well postoperatively. The mother also had no third stage complications.

### Discussion

Prolapse of the uterus with or without prolapse of adjacent organs is not a common condition associated with either pregnancy or labour. However, when encountered, specially during labour, it can create serious complications for both mother and the baby.

As mentioned earlier 18 patients of prolapse were encountered in labour during the last 5 years. During this period there were a total of 26,157 deliveries. The incidence of prolapse during labour is 1 per 1453 or 0.069%. This is higher than the incidence of 1 in 4,695 in pregnancy as reported by Ogubode and Aimakhu (1973) from Ibadan. But this is lesser than 0.27% and 0.57% reported by

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Rubovitz and Cooperman and Carrow (1960) respectively. With a minimal prolapse normal labour can occur. With a severe prolapse however, labour gets arrested usually in the first stage of labour because the cervix either does not efface and dilate at all or it effaces fully but dilatation ceases midway. In the latter instance caesarean section is the mode of delivery if dilatation is less than 5-6 cms but vaginal delivery is possible if dilatation is more. This can be effected by incising the undilated cervix.

Of the 18 patients, 7 (38.8%) delivered normally at fullterm. Four delivered vaginally but prematurely and 4 could be delivered by Dührssen's incisions. Thus vaginal delivery was possible in 83.34% patients and caesarean section was required only in the remaining patients i.e. 16.66%. The overall incidence of caesarean section at Sassoon General Hospitals is 8.45%. For prolapse the incidence is therefore double. Had cervical incisions not been done then the number of caesareans would be 7 and the rate would be 38.8 or almost 5 times the general incidence.

Thus although the incidence of prolapse with pregnancy or labour is quite low, when it does occur vaginal delivery is possible in the majority of cases, and Dührssen's incisions play an important role in achieving this mode of delivery.

These incisions were first described by Duhrssen in 1890. Carrow (1960) however believes that cervix which is less than 6 cms can also be incised without increasing the complication rate provided other criteria are fulfilled. Most American authors advice anterior incisions at 2 and 10 o'clock positions and if not adequate a third incision at 6 o'clock position. We however feel that the posterior incisions at 4 and 8 o'clock positions are easier and safer as they are less vascular whereas anterior incisions can extend to injure the bladder. Incisions at 3 o'clock and 9 o'clock positions as advocated by Cope (1955) are hazardous if they extend to the base of the broad ligament and should be avoided.

Uncorrected perinatal loss is found to be high because of the inherent risk of preterm labour. The incidence of preterm births was 61.11% which is very high. There would therefore be no advantage gained if Caesarean Section was resorted to. Hence Duhrssen's incision help to avoid Caesarean Section in patients who are in preterm labour and when chances of saving the foetus are remote.

## Acknowledgements

I am grateful to the Dean, B.J. Medical College and Sassoon General Hospitals, Poona for permission to prepare and present this paper.

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