# PUERPERAL INVERSION OF THE UTERUS

## (WITH REFERENCE TO PREGNANCY FOLLOWING SPINELLI'S OPERATION)

### (A Report of 2 Cases)

by

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Post-partum inversion of the uterus is not a common obstetric complication, with the result that there are few reports available in the literature on the operative treatment and results, especially in relation to management and the prospects of future pregnancies in such cases. The present paper deals with the management of eight cases of chronic puerperal inversion, five of which were treated by Spinelli's operation and in 2 of which successful pregnancies were achieved.

*Material and Procedure*

Between September 1962 and April 1968, 8 cases of chronic puerperal inversion were seen in our unit in the Zenana Hospital, Jaipur. All patients were of low socio-economic status and malnourished, with ages ranging from 20-25 years. Of these 2 were primigravidae and six were multiparae. In each instance, delivery had taken place at home and at term and were handled by 'dais', and fundal pressure was applied to deliver the placenta. In one case manual removal of the placenta was done by a dai. The patients came to the hospital from 1 month to 36 months after confinement (Table I).

TABLE I

*Age, parity and duration of inversion*

| No. | Age | Parity | Duration in months |
|---|---|---|---|
| 1 | 22 | 1 | 3 |
| 2 | 25 | 3 | 12 |
| 3 | 22 | 1 | 4 |
| 4 | 25 | 4 | 36 |
| 5 | 25 | 2 | 24 |
| 6 | 22 | 2 | 1 |
| 7 | 20 | 3 | 2 |
| 8 | 25 | 2 | 2 |

Anaemia was noted in every case, the haemoglobin ranging from 3 gms% to 7 gms%. Vaginal bleeding was the only symptom for which patients came to the hospital.

Fach patient had blood transfusions, antianaemic treatment and

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antiseptic vaginal douches before operation.

One case was treated by Haultain's operation, 5 by Spinelli's operation and two patients refused operation. The two cases who conceived and delivered normally are reported here.

**Case 1**

Mrs. B., aged 22 years, was admitted in the gynaecological ward of the Zenana Hospital on 7-8-65 with the complaint of continuous bleeding per vaginam since 2 years, which started after the last delivery. Past history revealed that she had had 2 full term normal deliveries; the last delivery was attended by an untrained 'dai' who had applied fundal pressure to express the placenta.

On examination, the patient was of fair build with severe anaemia. Her temperature was normal and blood pressure was 120/80 mm of Hg. Other systems did not reveal anything abnormal. Vaginal examination revealed a smooth, globular mass filling the vagina and protruding through the cervical rim. The body of the uterus was not felt and bleeding was present. Per speculum, a smooth fleshy mass was seen filling the vagina, which bled on touch. The uterine sound could not be passed beyond 1" all round the mass.

Diagnosis—Chronic inversion of the uterus following delivery.

Investigations—Haemoglobin 7 gms%; red blood cell 1.8 millions/C. mm., urine N.A.D.

After antianaemic treatment and one unit of blood transfusion, Spinelli's operation was done on 14-8-65. The postoperative period was uneventful and patient was discharged on 25-8-65.

The patient was readmitted on 29-7-66 at 5 p.m. as an emergency with the history of nine months' amenorrrhoea and labour pains since 8 A.M. of the same day. The uterine height was of 33 weeks' size; head was engaged, L.O.A., F.H.S. good; moderate uterine contractions were felt. Per vaginam, the cervix was effaced, 2/5th. dilated and stretchable; the head was just above the ischial spines, membranes were present. The pelvis was normal. The membranes ruptured at 10 P.M. A living female baby, weighing 6 pounds, was delivered at 10.7 P.M. The placenta with membranes was expelled spontáneously at 10.10 P.M. There was no post-partum haemorrhage and the uterus was well contracted. The puerperium was uneventful. She was discharged on 4-8-66.

**Case 2**

Mrs. K., aged 20 years, was admitted in the gynaecological ward of the Zenana Hospital on 21-1-66 with the complaint of continous bleeding since one month, following delivery at home. The past history revealed that she had had 2 premature deliveries of eight months' gestation of which the last delivery was attended by an untrained 'dai' one month ago when fundal pressure was applied to deliver the baby and placenta.

On examination, the patient was of fair build with severe anaemia. Her temperature was normal and blood pressure 110/80 mm. Hg. Other systems did not reveal anything in particular. Vaginal examination revealed a smooth, globular mass filling the vagina and protruding through the cervical rim. Body of the uterus was not felt. Per speculum, a smooth fleshy mass was seen filling the vagina, which bled on touch. The uterine sound could not be passed beyond ¾" all round the mass.

Diagnosis—Chronic inversion of uterus following delivery.

Investigations—Haemoglobin 4 gms%; red blood cells 1 million/C. mm., urine N.A.D.

After one unit of blood transfusion and antianaemic treatment, a Spinelli's operation was done on 12-2-66. The patient had hyperpyrexia for 5 days post-operatively for which broad spectrum antibiotics were given. On 28-2-66, the patient started having purulent discharge per vaginam. On examination, it was found that the pus was coming through the external os. On 2-3-66, dilatation of cervical canal was done and it was seen that the lower part of cervical wound had not healed. Secondary suturing of the gaping cervical wound was done on 12-3-66. On discharge, the uterus was found to be anteverted, anteflexed, of

normal size and mobile; fornices were free. Speculum examination revealed that the cervix had healed well. Patient was discharged on 23-3-66.

The patient was readmitted on 27-3-68 at 12 noon as an emergency with the history of 8½ months amenorrhoea and pains since 2 days. On examination, the fundal height was of 36 weeks' pregnancy, the head was floating, L.O.A., F.H.S. good. No uterine contractions were felt. Per vaginam, the cervix was 1/5th dilated, partially effaced and stretchable; membranes were bulging; the head was at the brim, promontary was reached easily, but the head could be pushed down into the cavity. As there were no pains, the patient was kept under observation. On 29-3-68, 8 P.M., the patient started labour pains. Membranes ruptured at 11.52 P.M. A female living baby, weighing 4¾ pounds, was delivered at 11.55 P.M. The placenta with membranes was expelled spontaneously at 11.58 P.M. There was no post-partum haemorrhage. The uterus was well contracted. The puerperium was uneventful. She was discharged on 4-4-68.

*Discussion and Conclusion*

The incidence of inversion of uterus varies from country to country. It is not possible to have a correct estimate of the incidence of uterine inversion in India, as the majority of deliveries in rural areas are still performed by midwives at home. These cases generally come to the hospital in the chronic stage, as was seen in our study, when manual reposition of the uterus was not successful and an operation was required.

Jardine found 3 cases in 51,290 deliveries at the Glasgow Maternity Hospital, giving an incidence of 1 in 17,000. Zangemeister puts the incidence as 1 in 400,000 for Germany. Das, in his review of the subject, gave the incidence for India as 1:23,127 deliveries. Jhirad recorded from the Cama Hospital, Bombay, 10 cases of puerperal inversion with the duration ranging from 4 months to 2 years in 7 cases and over 4 years in 3, the maximum being 10 years (Masani). Heera and Do Rosario (1966) recorded from Safdarjang Hospital, Delhi, 2 cases of puerperal inversion in 4 years, while Samarrae of Baghdad (1965) had 11 cases between 1939 to 1963. In the last 6 years we have seen 8 cases of puerperal inversion with the duration ranging from one month to 3 years.

It has been suggested that sterility is common after replacement of inversion (Millander quoted by Das) for the following reasons: (1) Constant stretching and kinking of the tubes. (2) Irritation, ulceration and destruction of endometrium after prolonged exposure. (3) Prolonged dilatation of the region of the isthmus and internal os may lead to an incompetent os.

The results of operative correction of uterine inversion have been found satisfactory, and pregnancy with normal vaginal delivery has been reported by several workers, Chandra and Rathee (1964), Samarrae (1965). Heera and DoRosario (1966) and Agarwal and Olyai (1966). Miller (1927) reported 42 deliveries following post-partum inversion of uterus (Chassar Moir). Of the present paper 2 out of 5 cases treated by Spinelli's operation became pregnant and delivered normally, thus indicating that there is no interference with fertility after replacement of the inversion.

This would appear to indicate that: (1) Prolonged stretching of the cervix before operation did not leave permanant damage. (2) Spinelli's

operation did not interfere with the competency of the cervix. (3) The long uterine incision did not interfere with uterine contractions, and healing was sufficient to withstand labour. It was suggested that a uterine incision made at this time heals better than a similar one made at the time of labour because of post-delivery contraction and retraction of the uterus during the puerperium in the latter case.

In case 2, in spite of severe post-operative intrauterine infection, the patient became pregnant, indicating that constant exposure, irritation and destruction of endometrium does not interfere with sterility.

Among the different operative procedures available for correction of inversion, Spinelli's and Haultain's techniques are popular. In the present series, all had Spinelli's operation except one, in whom Haultain's operation was done. Spinelli's operation has given good results and it has not interfered with normal pregnancy and delivery as is seen in this paper. Samarrae (1965) also suggested that Spinelli's operation was better since it was not found to preclude future pregnancy and delivery. Some authors, as Agarwal (1966), Chandra and Rathee (1964), Heera and DoRosario (1966), found that Haultain's operation is also satisfactory, as all these patients subsequently became pregnant and had a normal delivery.

*Summary*

Eight cases of chronic puerperal inversion are presented. Spinelli's operation was found to be a satisfactory treatment in women of the reproductive age and did not preclude the possibility of future pregnancies and normal delivery.

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