

## ACUTE PUERPERAL UTERINE INVERSION

C.V. HEGDE • ASHA R. DALAL

### SUMMARY

In a retrospective study over a period of 5 years (1984-1988) there were 3 third degree acute inversions in 14,473 deliveries. There was an incidence of 1 in 4824. Two resulted from premature unopposed cord traction. One was attributed to a placenta accreta. This study was undertaken at the B.Y.L. Nair Charitable Hospital, Bombay.

### INTRODUCTION

Inversion has been classified acute, when it has occurred without contraction of the cervix (Kitchin et al, 1975) It is classified third degree in which the fundus is inverted and is outside the vulva (Watson, 1980). Acute third degree inversions following delivery are increasingly uncommon and are usually attributed to premature forceful unopposed cord traction or morbidly adherent placenta.

### MATERIAL AND METHODS

Between January 1, 1984 and December 31, 1988, there were 14,473 deliveries. There were 3 acute puerperal inversions (1 in 4824).

### RESULTS

Table I shows that all 3 acute inversions occurred following cord traction upon spontaneous vaginal delivery. All patients were mul-

tiparous and the confinements were full term. Clinical attributes were as listed in Table II. All were immediately recognized as third degree inversions. Visual observation showed that placental attachment was fundal in two cases and anterior in the third. All were hypotensive, shocked and in severe discomfort.

Management as shown in Table III consisted of rapid manual replacement and resuscitation. In patient 1 and 2 it was possible to detach the placenta without aggravating bleeding prior to replacement. In patient 3, since detachment was not easily possible manual removal was performed with some difficulty after initial manual replacement. Here the cause was a morbidly adherent placenta accreta. Supplementary treatment included intravenous fluids, blood replacement and antibiotics. Puerperal sepsis was not a sequel to any of the cases.

### DISCUSSION

Several predisposing factors to acute inversion are adherent placenta (Kitchin et al 1975),

Dept of OBS and Gyn, B.Y.L. Nair Hospital, Bombay.

TABLE I

Patient No.	Gest. Age	Type of Delivery	CT	Parity
1	FT	SVD	Yes	2
2	FT	SVD	Yes	2
3	FT	SVD	Yes	3

SVD:- Spontaneous Vaginal Delivery

FT:- Full Term

CT:- Cord Traction

TABLE II  
CLINICAL ATTRIBUTES

Patient No.	Recognition	Site/How Determined	Degree
1	Immediate	Fundal/V.O.	3
2	Immediate	Fundal/V.O.	3
3	Immediate	Ant. Wall/V.O.	3

V.O.:- Visual Observation

TABLE III  
MANAGEMENT

Patient No.	Replacement	Blood Replaced	Pathology	Antibiotics	Sepsis
1	Manual/P.D.	1 U	-	Yes	-
2	Manual/P.D.	1 U	-	Yes	-
3	Manual/P.R.	1 U	P.Accreta	Yes	-

P.D.:- Placenta Detached    P.R.:- Placenta Retained

improper fundal pressure (Bunke and Hofmeister 1965, Das 1940), Kitchin et al 1975, traction on the cord (Bunke and Hofmeister 1965) Das (1940), Kitchin et al 1975, fundal implantation (Das 1940, Kitchin et al 1975) etc. Hasty unopposed cord traction of fundally implanted placenta in the early third stage caused inversion in patients 1 and 2. Even though the incidence of placenta accreta is attributed to be 1 in 17,988 pregnancies (Read et al 1980) inversion due to this cause should be prevented by treating a delayed expulsion of placenta by a gentle Brandt Andrews cord traction followed by manual removal under anaesthesia, if required.

### CONCLUSION

Acute puerperal inversion is preventable and can be reduced to a rarity by sensitive post-delivery care. On occurrence, however, the

mainstay of treatment consists of prompt recognition, resuscitation, replacement of the inverted uterus and blood replacement. Sepsis should be prevented with antibiotics.

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