

## Management of Unstable Lie in Pregnancy and Labour

by

**Dr. O. H. Yeo.** MBBS, (MALAYA) MRCOG.

KANDANG KERBAU HOSPITAL, SINGAPORE.

Before I begin, I wish to point out that I am only dealing with the management of unstable lie where no definite cause can be found. For those with a cause, they are treated accordingly; for example, in the cases associated with placenta praevia or disproportion.

There is as yet no general agreement as to the management of unstable lie. Different authors have put forward reasons for the preference of one method over another.

Generally speaking, there are 2 main methods of approach:

1. Those who believe in stabilizing the lie of the foetus in late pregnancy or at term by surgical rupture of the membranes after correction of the lie of the foetus.
2. Those that believe that surgical rupture of the membranes should not be performed until the patient is in early labour. They believe that surgical rupture of the membranes in late pregnancy adds to the hazards and complications already existing in the case of a transverse lie.

Browne and Browne (1960) recommend repeated external cephalic versions after the 36th week of pregnancy. If the condition persists the membranes are ruptured at the end of the 38th week after version, to stabilize the head.

Percival (1959) admits his cases into hospital a few weeks before term and keeps the head over the brim by means of pads and binders. When term is reached and the lie is still unstable, he ruptures the membranes artificially and applies a firm abdominal binder.

Gibberd (1960) advocates artificial rupture of the membranes after the 36th week. He considers that interference is preferable to the risk of allowing labour to start with the shoulder presenting.

Garland (1959) belongs to the other school of thought. He admits his cases and observes them until they go into labour spontaneously. During the wait, the lie is corrected repeatedly. When in labour, external version is done and the membranes ruptured. His objections to rupture of the membranes before the onset of labour are:

1. Labour may not immediately ensue. Pads and binders do not stabilize the lie of the foetus and the cord may therefore, prolapse.
2. Interference is often unnecessary. He did not elaborate further on this point and I presume that he means many cases will become stabilized near term and deliver normally without treatment.

Chassair Moir (1956) also believes in treatment only at the onset of labour. Both authors however, made no mention of the stage of pregnancy at which they admit their cases into hospital.

**Rupture before labour:** In order to find out for myself whichever was the better method of treatment, I had the opportunity to study the results of the first method of treatment: namely artificial rupture of the membranes before the onset of labour. In the West Middlesex Hospital in London, this was the method of treatment for all cases of unstable lie. I went through 6 years of case records, during which there were 19,177 deliveries, and I managed to collect 42 cases where this method was used. (Table 1) Pads and binders were not used but the patient was kept in bed all the time. The membranes were ruptured between the 38th week of pregnancy and term. Both methods of high and low rupture of the membranes were employed in the cases.

TABLE I  
UNSTABLE LIE  
ARTIFICIAL RUPTURE OF THE  
MEMBRANES  
(42 Cases)

VAGINAL DELIVERY	26 Cases	(62%)
CAESAREAN SECTION	16 Cases	(38%)
Maternal Death	0	
Perinatal Death	0	

TABLE 2  
Caesarean Section After Artificial Rupture of the Membranes  
(16 Cases)

Reversion to Transverse	Prolapsed Cord	Foetal Distress	Failed Induction	Accidental Haemorrhage
9 Cases (56%)	3 Cases (19%)	2 Cases (13%)	1 Case (6%)	1 Case (6%)

Table 2 shows the indications for Caesarean sections in the 16 cases.

**Commonest complications** in this method of treatment was the reversion of the lie into transverse—56%. In one case the reversion was accompanied by severe tetanic contraction of the uterus. The foetus was delivered with difficulty through a T shaped incision. In some cases, the reversion did not occur until 1 or 2 days after rupture of the membranes.

**Prolapsed cord:** There were 3 cases of prolapsed cord. In one case, the cord only prolapsed after 2½ days of ruptured membranes although the lie remained longitudinal throughout.

In view of the high incidence of complication rate, I do not view with favour this method of treatment. It is said that this method of treatment has the advantage that it is a planned procedure at the most convenient hour for the obstetrician. However, it has just been shown that complication may set in at any time, and the case will have to be dealt with as an emergency.

**Rupture at labour:** The advantage of the second method of treatment, namely, artificial rupture of the membranes with the onset of labour, is that a good proportion of the cases

become stabilized in late pregnancy or early labour. Daitch and Gustafon (1957) quoted an incidence of 27% that underwent spontaneous cephalic version. Stevenson (1949) of America in a series of 52 cases found that 52% had turned to cephalic presentation either spontaneously or after external cephalic versions; and 11.5% were breech presentations, at the onset of labour.

In the West Middlesex Hospital series, 220 cases of transverse lie diagnosed after the 34th week were analysed and 45% were found to have remained longitudinal after a single or repeated external cephalic versions. This did not include those cases that had artificial rupture of the membranes before the onset of labour. A figure of around 50% would be a fair estimate of the number of cases that would remain longitudinal at the onset of labour. In other words, active treatment need only be considered for only half the cases of unstable lie, if we wait till the onset of spontaneous labour.

**Outpatient treatment:** Can patients with unstable lie be treated as outpatients and be admitted only with the onset of labour? Perhaps, in countries where there is a better standard of education and where the ambulance service is efficient and adequate, this may be justifiable. In this country where there is a problem even in

persuading pregnant women to attend for ante-natal care, let alone come regularly for check-ups, and where there do not exist even a flying squad service, this form of management is, in my opinion, highly dangerous. To prove my point, I looked up the case records of all emergency admissions into K.K. Hospital with transverse lie and in labour. In the whole year of 1962, I

managed to collect 26 cases. (Table 3). Unfortunately 3 of the case records were not available for further study and I had to rely upon only brief information. I have excluded all cases of antepartum haemorrhage, second twins, babies of less than 4 pounds in weight, and prolapsed cords where the lie was not transverse. All the cases except one were unbooked.

**TABLE 3**  
**Mode of Delivery 26 cases of Transverse Lie**

<b>1. CAESAREAN SECTION</b>		
As primary treatment	...	16 cases (62%)
<b>Types:</b>		
Lower segment transverse incision	...	8 cases
Lower segment longitudinal incision	...	2 cases
Upper segment longitudinal incision	...	4 cases
T-shaped incision	...	2 cases
Maternal Death	...	1 case
<b>2. INTERNAL VERSION &amp; BREECH EXTRACTION</b>		6 cases (23%)
Successful	...	3 cases
Failed; Caesarean Section	...	1 case
Ruptured Uterus; Hysterectomy	...	2 cases
Maternal death	...	2 cases
<b>3. EXTERNAL VERSION</b>		2 cases
Spontaneous breech delivery	...	1 case
Prolapsed cord; Caesarean Section	...	1 case
<b>4. SPONTANEOUS EVOLUTION</b>		2 cases

**Caesarean Section:**

There was one **Maternal death** from Mendelson's syndrome. Another case collapsed one hour after operation and only after vigorous resuscitative measures did the patient recover. She was in a hypotensive state for 12 hours.

**Internal Version and Breech Extraction:—**

There were 6 cases. This method was employed because the cervix was found to be fully or near fully dilated. In 2 of the cases, the foetus was already dead on admission: one was successfully delivered, the other ended with a ruptured uterus and the mother died thereafter.

As a primary method of treatment, it failed in half the cases. The tragic part of the matter was that 2 of the 6 cases ended with ruptured uteri and both the mother subsequently died.

**Case 1:** She was a 32 year old woman, para 8 at 37 weeks pregnancy. She was admitted with transverse lie, os fully dilated and the membranes intact. Under pudendal block,

internal version and breech extraction was performed 2 hours later. There was post-partum haemorrhage and the placenta was manually removed. A tear was found in the left side of the vagina and lower part of the uterus. This was confirmed at laparotomy and total hysterectomy was performed. The left ureter was inadvertently cut and had to be transplanted into the bladder. 12 hours after the operation, the patient developed fits and went into coma. She died 4½ hours later. No postmortem was done.

**Case 2:** She was a 27 year old woman, para 4 at 33 weeks pregnancy. She was admitted in premature labour with ruptured membranes, shoulder presentation and os almost fully dilated. Under general anaesthesia, an internal version and breech extraction was performed. A fresh still born baby weighing 5 pounds 4 ounces was delivered. The placenta was manually removed, and subsequently the uterus was found to be ruptured. Hysterectomy was performed but the patient failed to recover from the shock and died

22 hours after the operation. No autopsy was performed.

Internal version and breech extraction in the management of transverse lie is fraught with danger and must be condemned.

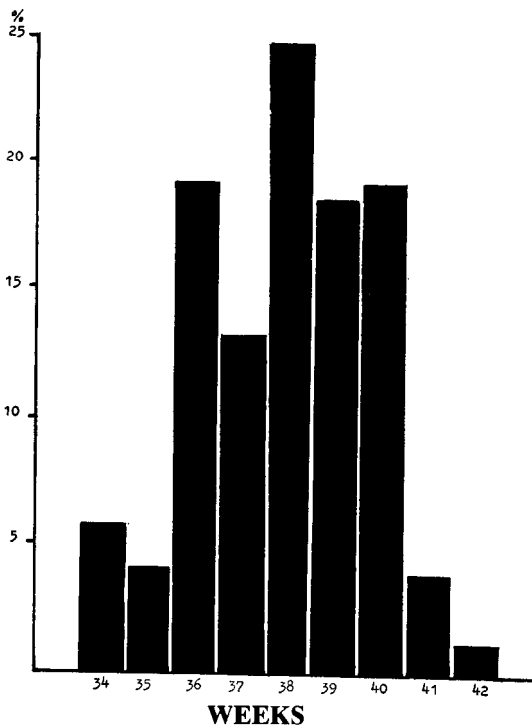
There were 3 maternal deaths out of 26 cases—12% mortality rate—an appalling figure for modern day obstetrics. Nowadays, neglected transverse lie should never be seen; and in my opinion, the only way to avoid them is to admit transverse lie or unstable lie into the ward before the onset of labour.

There were 5 still births—all were already dead on admission. There was only one case of neonatal death, birth weight 5 pounds 8 ounces who was delivered vaginally doubled up under G.A. in the theatre.

When to admit? The ideal method of treatment would be to admit all cases of unstable lie into hospital and await spontaneous labour. With the onset of labour, the appropriate treatment can be instituted with facilities for Caesarean section at hand.

At what stage of pregnancy should the cases be admitted into hospital? The variable maturity in the West Middlesex Hospital session is shown in Table 4.

**MATURITY ON ADMISSION**  
Table 4



Majority of cases went into labour after the beginning of the 36th week.

Similarly at K.K. Hospital, (Table 5) majority went into labour after the 36th weeks pregnancy. Gestation according to dates

**Maturity on Admission (K.K. Hospital)**

Table 5

Total:— 23 cases.

In Weeks	35	36	37	38	39	40+
No. of Cases	2	1	5	4	2	9

The beginning of 36th week of pregnancy would be an appropriate time for admission.

**Prospective Study:** I am now in the midst of a prospective study of cases of unstable lie. The purpose is to find out when they go into labour, what percentage will have become stabilized with the onset of labour, how well they respond to the treatment of rupturing of the membranes after version with the onset of labour, and the number of complications arising from the treatment. Later, I may use pitocin to ripen the cervix before rupturing the membranes in late pregnancy.

Up to date I have collected 15 cases:—

Only one case went into labour at 36 weeks pregnancy. The rest after the 38th week.

8 became stabilized before onset of labour; 1 at onset of labour; 5 remained unstable during labour, i.e. one third of cases.

No cause was found in 10 cases. There were 2 contracted pelvis, 1 placenta praevia, 1 hydramnios, 1 pendulous abdomen.

Of the 10 cases with unknown cause:—

5 became stabilized and delivered normally. (i.e. half the cases).

3 remained unstable and had external cephalic versions and artificial ruptures of the membranes with onset of labour—all 3 delivered normally.

1 had remained stable but membranes ruptured spontaneously for 5 days. Caesarean section had to be done.

1 remained unstable with P.E.T. and was sectioned.

**What is the cause of unstable lie:**

My view is that it has a lot to do with the shape of the uterine cavity, which is related to the taking up of the cervix and lower segment. When the cervix and lower segment are not taken up, the shape of the uterine cavity is spherical and

the foetus will go on swivelling no matter what one does, either external versions or releasing the liquor from the amniotic cavity. The moment the lower segment and cervix are taken up, and this some times may not even occur when the patient goes into labour, the uterine cavity changes into pear shaped and the lie will remain stable. There is a greater chance of the cervix and lower segment being taken up with the onset of labour and, therefore, safer to rupture the membranes then. Moreover, frequent uterine contractions and increased tone during labour may also help in stabilizing the lie. Whe-

ther pitocin can correct this factor will be left to be seen.

**In conclusion**, the ideal method of management of unstable lie is:—

- (1) Admit into hospital at 36 weeks.

Those that become stabilized can be discharged, i.e. about half of them before onset of labour. External Version is not necessary.

- (2) With onset of labour, if the lie remains unstable, do an external cephalic version and rupture the membranes.