

## A SUMMARY OF 100 VAGINAL DELIVERIES IN THE ROTUNDA HOSPITAL FOLLOWING PREVIOUS CAESAREAN SECTION

BY

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THESE notes concern the labours of 100 women between the ages of 19 and 45 years (average 32 years) who had been previously delivered by Caesarean section either in this hospital or elsewhere. A commentary sums up our present views on the use of primary Caesarean section and the problem of whether a repeat Caesarean or a trial labour should be chosen as the method of delivery in a subsequent pregnancy. The 100 cases are consecutive and a random sample.

### *Type of Operation*

We do not know what type of Caesarean section was performed in 16, but the lower segment technique was used in 76 cases, and 8 women had been delivered by the classical operation.

### *Indications for Previous Sections*

Breech primigravida ... ..	7
Placenta praevia ... ..	16
Inertia only ... ..	7
Eclampsia ... ..	6
Pre-eclampsia/inertia/occipito-posterior ...	3
Pre-eclampsia ... ..	10
Toxaemia/foetal distress ... ..	2
Severe anaemia ... ..	1
Foetal distress (cause unknown) ... ..	2
Accidental haemorrhage ... ..	1
Inertia/disproportion (occipito-anterior) ...	3
Unknown ... ..	4
Contraction ring ... ..	1
Disproportion only ... ..	23
Disproportion/foetal distress ... ..	4
Disproportion/occipito-posterior ... ..	1
Occipito posterior/inertia (no disproportion)	1
Occipito posterior/foetal distress ... ..	3
General peritonitis ... ..	1

Obstructed labour/fibroid ... ..	1
Prolapsed cord ... ..	1
Elderly primigravida/fibroids ... ..	1
Inertia/twins/toxaemia ... ..	1

### *Onset of Labour*

In the absence of disproportion or toxaemia indicating induction of premature labour or signs of overcarrying, 63 women were allowed to await a normal onset of labour. The methods of induction of labour were:

Medicinal only ... ..	12
Medicinal + puncture of membranes ... ..	21
Medicinal + bougies ... ..	3
Bougies only ... ..	1

The only uterine rupture occurred in a case (operated upon elsewhere) which was induced medicinally, but it is impossible to say whether or not the induction contributed towards the rupture. Two stillbirths occurred in the 37 induced cases. One, a baby weighing 6 pounds 3 ounces, was deadborn following puncture of membranes and medicinal induction, and another (5 pounds 13 ounces) after simple puncture of membranes. In neither case was there any obvious cause for the stillbirth. One neo-natal death (6 pounds 8 ounces) followed puncture of membranes for placenta praevia.

### *Course of Labour.*

Whether labour set in naturally or followed induction it was conducted conservatively unless progress ceased. Forceps

were used, or the breech extracted, if there was delay. The incidence of forceps delivery was 35 per cent as compared with our usual rate of 11 per cent. The average duration of labour was 14½ hours and the average weight of the babies 6 pounds 14 ounces. The longest labour was 96 hours, and the shortest 2 hours; the heaviest baby weighed 9 pounds 4 ounces. The long labour followed bougie induction and was terminated by forceps.

#### *Method of Delivery*

Fifty-nine labours ended spontaneously, and 4 babies were delivered without difficulty as breech presentations. The 35 forceps deliveries were straightforward, 27 low forceps and 8 midstrait applications. We do not apply forceps in the midstrait unless labour has ceased to produce advance, but when this happens we consider a slow forceps delivery indicated even if neither maternal nor foetal distress is present. When either occurs it is probably due to unjustifiable procrastination, and the delivery is then more hazardous for the baby.

The 2 remaining women were delivered by: (a) Caesarean section (the case of uterine rupture); and (b) by normal labour following perforation after death of the foetus during a labour with moderate disproportion.

#### *The number of Caesarean Sections prior to Vaginal Delivery*

Caesarean delivery had been used only once in 90 women; 8 had been operated upon twice, and 2 three times.

We have been influenced towards allowing normal labour when dealing with our own cases whose convalescence was known to have been afebrile following lower segment section, especially when the section was performed without the prolonged trial of labour which inevitably leads to overstretching of the lower segment. Elective

lower segment operations, regardless of the period of pregnancy at which they are performed, offer the best hope of perfect union of the wound; the elective section, carried out quietly and without the anxiety attached to an emergency operation, also yields better results. The woman who has already had several lower segment operations runs an increasingly greater risk of rupture if subjected to labour, for the unavoidable formation of scar tissue at the site of operation weakens the lower segment.

#### *Parity*

The parity is shown in the following summary:

2 paras	...	...	41	6 paras	...	...	4
3 "	...	...	24	7 "	...	...	3
4 "	...	...	18	9 "	...	...	1
5 "	...	...	7	11 "	...	...	1
				15 "	...	...	1

In the lower parity groups the Caesarean sections had been performed mainly for disproportion, toxæmia, and foetal distress, before vaginal delivery was possible. Age, primiparity and breech presentation with extended legs and reduced pelvic measurements, especially if the pregnancy has been delayed for some years after marriage, are considered important when assessing the indications for operation. In the higher parity groups obstructed labour (with or without primary occipito-posterior positions and some disproportion) and placenta prævia, become frequent indications for Caesarean section. We now regard a major degree of placenta prævia as an absolute indication for section delivery even if the foetus is dead, if there is severe bleeding or if the patient's condition is unsatisfactory.

#### *Morbidity*

Seven women showed morbidity during the puerperium; 1 was morbid by the B.M.A. standard and 6 were morbid by

both B.M.A. and Rotunda standards. Three of the 7 morbidities were known to be of genital tract origin alone, 1 was of urinary tract origin, another due to general health, and the seventh was from urinary tract and genital tract infection. In no instance was the morbidity serious, and in all it was of brief duration.

*Rupture of the Uterus*

Although this accident is to be feared when the uterine wall has been injured by operation (myomectomy or Caesarean section) it only occurred once. The woman was a 2-para, aged 36 years, and the lower segment section performed elsewhere at 38 weeks was for eclampsia, but we do not know any details about her convalescence. Her uterus ruptured completely with obvious signs and symptoms during labour, but she and the baby did well following Caesarean section with subtotal hysterectomy. The rupture occurred when the cervix was three-quarters dilated, and it involved the entire old scar.

*Foetal loss*

Ten babies were lost, 8 being deadborn and 2 dying in the neonatal period. One neonatal death was due to prematurity (labour set in at the 32nd week in a case of toxæmia), but the second followed a spontaneous delivery at term, and was unexplained.

The babies' deaths were due to:

Erythroblastosis	...	...	...	...	...	1
No cause evident	...	...	...	...	...	4
Foetal abnormality	...	...	...	...	...	1
Toxæmia (at 29 weeks)	...	...	...	...	...	1
Cerebral haemorrhage	...	...	...	...	...	1

We could not trace the cause of death in 4 cases, and it would be unfair to attribute them to the fact that Caesarean section had been performed previously.

*Maternal Complications.*

The following list contains the complications which occurred:

Rupture of the uterus (complete)	...	...	...	...	1
Retained placenta with moderate P.P.H.	...	...	...	...	1
Erythroblastosis foetalis	...	...	...	...	1
Mitral stenosis (Grade I)	...	...	...	...	1
Cerebral haemorrhage	...	...	...	...	1
Puerperal peritonitis	...	...	...	...	1
Recurrent P.P.H. (moderate)	...	...	...	...	1

The only further comment regarding these concerns the case of puerperal peritonitis which apparently resulted from renewed infection of an old sinus track connecting the uterine cavity with an extra-peritoneal organized haematoma of the left side, which must have existed since the Caesarean delivery. This mass was drained above Poupart's ligament and the subsequent convalescence was normal.

SUMMARY

The fact that a random sample of 100 consecutive vaginal deliveries were conducted without a maternal death, with one uterine rupture, and with a gross foetal loss of only 10 per cent (including 2 neonatal deaths), is a reassurance that vaginal delivery following Caesarean section is not an unduly hazardous venture provided that the facilities of an adequate maternity hospital or properly equipped maternity nursing home are available throughout labour. This further strengthens the claims of the lower segment Caesarean operation as the method of delivery when such is urgently needed for foetal or maternal reasons, or when the natural forces of labour have done their best and delivery is indicated before it can be accomplished with safety to mother and child *per vias naturales*.

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