GENERAL PRACTITIONER OBSTETRICS IN A MATERNITY HOME

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At the present time there is frequently heard the call that maternity beds in hospitals should be provided for general practitioners where they may attend their own patients. A survey of the work done in a maternity home at Leigh, Lancashire where general practitioners do attend their own patients may be of interest.

Leigh is an industrial town in south-east Lancashire with a population of about 47,500. Patients are accepted from the surrounding area, and it seems probable that the population of the " catchment area " is about 100,000. The home was first opened in 1928, under the auspices of the Leigh Corporation in a house in the centre of the town, provision being made for about 10 patients. Within two years the accommodation was found to be inadequate and larger premises were acquired in a mansion formerly occupied by a cotton magnate. This house was known as " The Firs " and the name is still used—The Firs Maternity Home. The accommodation is 21 beds in 5 wards, although this can be increased should occasion arise.

With the advent of the National Health Service, the home was placed under the Wigan and Leigh Hospital Management Committee of the Manchester Regional Hospital Board. In 1949 a consultant obstetrician was appointed who visits the home regularly and is on call for emergencies. A second appointment was made in 1957. As a result the extent of the work undertaken in the home has greatly increased and expanded. All types of operative obstetrics are now carried out, whereas prior to the appointment of consultants, difficult cases had to be transferred to maternity hospitals, most often to Manchester or Bolton. Patients are admitted for antenatal treatment and emergencies of mother or child are accepted. Mothers who are Rh negative with antibodies in the blood are not admitted, such cases being dealt with at Billinge Hospital where there are facilities for transfusion of infants. The consultant obstetrician holds an antenatal clinic fortnightly to which general practitioners refer cases for his opinion. There is also a consultant pediatrician who visits regularly and in emergency. The period covered by this survey is the ten years ending 31 December 1959.

Admissions

7,009 patients were admitted to the home, four of whom were discharged and delivered elsewhere. Two patients were in labour but undelivered at the time of the conclusion of the period. The numbers according to parity were:

Primigravida		3,740	Para	VIII	18
Para	I	1,869		IX	10
	II	727		X	7
	III	340		XI	7
	IV	152		XII	1
	V	71		XIII	2
	VI	44		XIV	1
	VII	20			

Recently the criteria for admission of uncomplicated multiparae has been tightened up. Many patients seek admission on social grounds: such cases are " vetted " by the local health authorities before being booked. As a result there has been only a slight increase in the percentage of primigravidae. Abortions are not accepted, although one or two did slip through the net—cases of unsuspected twins.

Of the admissions 86 were " emergencies from district ". Reasons for admission were:

Antepartum haemorrhage	20	
Delayed labour	14	
Premature labour	9	
Breech presentation	5	
Premature infants	6	
Foetal distress in labour	4	
Retained placenta	4	
Toxaemia	4	
Eclampsia	2	(1 postpartum)
Transverse lie	2	
Face presentation	1	
Bad home conditions	3	
" Overdue "	2	
Others	10	

In a total of 7,089 infants born (80 sets of twins and 2 of triplets) there were 166 still-births. The causes of these were considered to be:

Congenital deformity	49
Maternal antepartum haemorrhage	21
Toxaemia of pregnancy	14
Macerated foetus	28
Prematurity	3
Prolapsed cord	3
Cause unknown	48

Still-birth rate 2.35 per cent

The most remarkable congenital deformity occurred in a patient, a para I, who, during pregnancy, showed a moderate degree of hydramnios. X-ray revealed no bony abnormality. There being delay in the second stage of labour, forceps delivery was undertaken. After delivery of the head, great difficulty was encountered with the shoulders and arms. Thereafter delivery was completely arrested and it was evident that there must be a large abdominal tumour of the infant. Specialist help was obtained and the foetal abdomen opened when an

enormously distended urinary bladder was found. This being opened and evacuated, the remainder of the delivery was easily accomplished. On examination, the infant's urethra was not occluded.

Maternal Deaths

These were four in number.

(1) Suicide—a woman of central European nationality hanged herself in the toilet. She had given no previous hint of mental derangement.

(2) From haemorrhage and shock in a severe case of pre-eclamptic toxaemia requiring manual removal of the placenta.

(3) From haemorrhage and shock in a patient who underwent (repeat) caesarean section for contracted pelvis. At operation a type IV placenta praevia increta was found. Severe haemorrhage ensued and sub-total hysterectomy was required.

(4) A patient sent in from district following severe post-partum haemorrhage. She was moribund on admission and died before resuscitatory measures could rescue her.

Neonatal Deaths

72 infants died in the home. The causes based on information obtained from the registrar were as follows:

Prematurity	36
Congenital deformities (all types)	14
Respiratory infections	6
Neo-natal asphyxia	3
Atelectasis	5
Intracranial haemorrhage with or without injury	6
Congenital debility	1
Infantile convulsions	1

Results to infants under 5 lb. 225 infants born alive weighed less than 5 lb. at birth—3.25 per cent of all live births. They may be classified as follows:

TABLE I

	Total	*Lived*	*Died*	*Survival rate*
				per cent
Group A—4 lb. and over but under 5 lb.	152	143	9	94
Group B—3 lb. and over but under 4 lb.	53	44	9	83
Group C—2 lb. and over but under 3 lb.	11	6	5	55
Group D—under 2 lb.	9	—	9	0

There is no special premature baby unit in the home, only a

modern incubator and highly skilled and devoted nursing were responsible for these good results.

Antenatal Complications

Toxaemia of pregnancy. Included in this group are cases of pre-eclamptic toxaemia, essential hypertension, chronic nephritis, and albuminuria of pregnancy admitted for treatment prior to labour. Pre-eclamptic toxaemia was defined as a patient with a blood pressure of 140/80 or over with oedema and/or albuminuria. Cases in labour on admission are not included.

Total number admitted	191
Infants born	199
Still births	14
Neonatal deaths	3
Method of treatment employed:	
Caesarean section	7
Artificial rupture of membranes	34
Medical induction or spontaneous labour	150

There were four cases of eclampsia, three of which were postpartum (1 emergency admission). All recovered.

Antepartum haemorrhage. 101 cases were encountered. In 12 of these the diagnosis of placenta praevia was definitely established, either by being felt per vagina or visualized at operation; 11 being treated by caesarean section, with one still-birth. From the remaining 89 cases, 90 infants were born of these, 22 were still-born and there were 7 neonatal deaths.

Abnormal Presentations

Breech deliveries totalled 228, classified in table II.

TABLE II

BREECH DELIVERIES (COMPLICATED CASES ARE THOSE WHERE SOME OTHER OBSTETRIC ABNORMALITY WAS PRESENT SUCH AS A CONTRACTED PELVIS, ANTEPARTUM HAEMORRHAGE, TWINS, PROLAPSED CORD).

	Patients	*Infants born*	*Still births*	*Neonatal deaths*
Uncomplicated				
Primigravidae ..	79	79	3	2
Multiparae	54	54	20	1
Complicated	85	95	21	7

Face presentation occured in nine cases. One was delivered by caesarean section, the others delivered spontaneously. There was

one still-birth.

Brow presentation was encountered once and successfully dealt with by caesarean section.

Transverse lie was met with on 13 occasions. One was treated by caesarean section (uterine septum). The baby was still-born owing to the unlucky onset of antepartum haemorrhage a few hours before operation. The remainder were dealt with by external or internal version. Three infants were still-born.

Prolapse of the umbilical cord was met with on 9 occasions. Two were treated by caesarean section, 3 by forceps delivery, the remaining being delivered spontaneously. Three infants were still-born.

Forceps Deliveries

Total number of cases 131.

Indications	second stage delay	108	frequently both
	foetal distress	11	
	maternal distress	3	
	prolapsed cord	3	
	eclampsia	3	
	deep transverse arrest	3	Kielland's forceps used

There were 11 still-births.

Other Complications

Maternal heart disease. 20 patients were noted as suffering from valvular heart disease, none of which was severe. Most were admitted for rest and treatment prior to labour. All did well.

Manual removal of the placenta was required on 57 occasions, one of which was followed by maternal death—in a patient suffering from severe pre-eclamptic toxaemia. In three cases, placental fragments had to be removed after apparent conclusion of the third stage of labour, two some hours later and one on the fourth day.

Blood transfusion was required by 30 patients, mostly due to postpartum haemorrhage, although a few patients admitted with severe anaemia prior to the onset of labour received blood.

Two cases were of great interest. The first of these was a patient admitted with a history of having taken very little nourishment for many weeks before labour commenced. She was profoundly anaemic and suffering from bleeding from the gums. She was considered to be suffering from scurvy. After an easy labour, her haemoglobin was found to be 20 per cent. She was given four pints of blood, large doses of ascorbic acid and other dietary deficiencies corrected. She made a good recovery.

The second was apparently a case of afibrinogenaemia. After normal first and second stages of labour, there was a little delay in the third which lasted 45 minutes. The placenta was then

expressed. Bleeding occurred, and, in spite of the normal measures for postpartum haemorrhage, it continued. In all, 13 pints of blood were given as well as plasma and other intravenous fluids. She was desperately ill for about a week but eventually recovered. She has since emigrated, with best wishes from the staff!

There is a " flying squad " based on Billinge Hospital (7 miles away), but it was always possible to obtain blood from Leigh Infirmary at very short notice, thereby avoiding unnecessary journeys for the squad, and possibly the consultant obstetrician too.

Caesarean Section

89 cases were treated by caesarean section, the operation being performed by the consulting obstetricians, assisted by the general practitioner. The indications were:

Pelvic disproportion	38
Foetal distress early in labour	17
Placenta praevia	11
Inco-ordinate uterine action	5
Breech presentation elderly primigravidae	3
Prolapsed umbilical cord	2
Cervical fibroids obstructing labour	2
Ovarian tumour obstructing labour	1
Cancer of rectum, secondaries in pouch of Douglas	1
Eclampsia in elderly primigravida	1
Brow presentation	1
Face presentation	1
Deep transverse arrest, large baby	1
Rigid cervix, elderly primigravida	1
Previous plastic vaginal repair	2
Anterior sacculation, premature rupture of membranes	1
Transverse lie (uterine septum) accidental haemorrhage	1

There was one maternal death (already described). 5 infants were still-born: 2 due to antepartum haemorrhage; there was 1 neonatal death; 2 due to congenital malformation (emergency cases). The 7 cases of toxaemia of pregnancy treated by caesarean section are included in the above series, there being other indication for operation.

Conclusion

It is often said that statistics are a bit of a bore but the purpose of making this summary is to show what can be done in a " general practitioner maternity home " where there are consultants willing to accept emergency calls, and deal with difficult cases beyond the scope of the general practitioner. That the doctor does not lose sight of the patient and can assist in the treatment of difficult cases greatly adds to the interest of his work. It is worth while putting on record that relations between consultants and general practitioners are absolutely first class. Another inducement to publish these figures was the fact that few practitioners, and—dare it be

added—few of the officials outside the immediate area are aware of the scope of the work done at " The Firs ".

Acknowledgments

I am indebted to Mr R. L. Hartley and Miss B. Hargreaves, for their advice and encouragement in the preparation of this report, and also to the matron and staff of The Firs Maternity Home for their assistance.

EARLY AMBULATION

At a discussion at the Section of General Practice of the Royal Society of Medicine held 20 January 1960, Dr L. Dulake spoke about the development of enlightened views on bed rest after illness or operation, and listed many drawbacks of confinement to bed—a humiliating, unnatural situation leading to atrophy of muscle, increased susceptibility to infection, retention of urine, constipation, distension, thrombophlebitis and embolism, psychological disturbance, osteoporosis, disturbed nitrogen balance, and hypostasis of the lungs. The sitting posture had been shown to reduce the load on the heart by 23 per cent compared with the recumbent position.

After dealing with conditions in general practice and hospital, he commented, " Geriatric patients die if kept in bed." The over-solicitous sympathy of relatives must be counteracted by the general practitioner, and he must also be the one to persuade unwilling relatives to have their oldsters home again when the hospital stage of treatment was complete.

Mr B. N. Brooke discussed the four stages of convalescence: injury, the turning point, restoration of strength, and fat gain. The turning point was often indicated by the patient's return of interest, as shown by the application of lipstick in women and the desire to shave in men.

Mr Brooke also detailed the advantages of good liaison with the patient's general practitioner, so that early return to home was possible (with a promise of rapid re-admission if complications occurred). It was then possible to shorten waiting-lists, reduce infection rates, and treat patients more efficiently.

REFERENCE

The Practitioner, 1960, **184**, 374.