

ONE HUNDRED UNSELECTED CONSECUTIVE OBSTETRIC CASES 1962-64

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OBSTETRICAL series usually consist of patients selected for hospital or home confinement. In this small series no selection was possible. Consultant advice was obtained when necessary but the overall responsibility remained with the general-practitioner obstetrician.

The unit and routine management

The obstetric unit was in the Royal Naval Hospital, Mauritius, and served the families of naval and associated employees. Full general-practice cover and hospital care were managed by two naval medical officers—an F.R.C.S. and a D.Obst.R.C.O.G. All obstetrics was the responsibility of the latter doctor and his function was that of a general-practitioner obstetrician with the difference that there could be no selection of cases. If consultant advice was required it was usually derived from civilian doctors on the island.

Antenatal period

When possible patients were booked between the ninth and 12th week of pregnancy. They were next seen at the 16th week, then four-weekly up to the 28th week, fortnightly until the 36th week and weekly until confinement. At all visits each patient was weighed, blood pressure checked, abdomen palpated and urine tested for albumen. At the first visit the mother was given a full medical and pelvic examination and haemoglobin, blood group and WR were done. At the 16th week she had a full-plate chest x-ray (unless she had had a normal film within the last 12 months) and iron supplement was started. Haemoglobin was reassessed at the 28th week and the 36th week. If the haemoglobin had not shown any increase by the 28th week and was also below 80 per cent then folic acid 5 mg tds. was given. Any mother with a haemoglobin below 80 per cent at the 36th week was given five intravenous injections of 5 ml of 'ferrivenin' on alternate days after an initial test dose. The blood of

rhesus-negative mothers was checked for antibodies at the 20th week, 28th week and 36th week. Weekly relaxation classes were held by a midwife and a physiotherapist. Towards the end of pregnancy the mothers were shown round the obstetric unit.

Labour

The doctor was notified when a mother was admitted. Although he saw her periodically during the first stage if necessary, and was nearly always present for most of the second stage and all the third stage, routine management and delivery were normally left to the midwife. Ergometrine 0.5 mg (usually with hyalase) was given intramuscularly with the birth of the anterior shoulder. As soon as the uterus contracted and there was a sign of placental separation the placenta was delivered by cord traction with a simultaneous upward displacement of the uterus.

The stay in hospital was seven to eight days. Mothers were ambulant after the first day. Breast feeding was encouraged but no obsession was made of this. A postnatal examination was done during the seventh week of the puerperium.

The analysis

The word 'unselected' needs a little qualification. The income of all families was above a reasonable minimum. The average parity was a little lower than that to be expected in a cross-section of an English community and there were no unmarried mothers.

There were 44 primiparae ranging from 17–36 years of age, with an average of 23 years. The 56 multiparae consisted of 31 para 1, 19 para 2, five para 3 and one para 4. The age range was 21–44, with an average of 27 years.

Significant past history

Obstetrical. Eighteen per cent of the multiparae had had some previous obstetrical complication. There had been four forceps deliveries, three manual removals of placenta, two caesarian sections and one postpartum haemorrhage.

Non-obstetrical. One presacral neurectomy (for dysmenorrhoea), one lumbar laminectomy, one recently healed case of pulmonary tuberculosis, one healed case of tuberculosis of the thoracic spine and meninges—one epileptic, one asthmatic and one recently cured syphilitic.

During the antenatal period

Two primigravidae were found to be expecting twins.

Ten breeches were turned after the 33rd week.

Three mothers required x-ray pelvimetry.

Five cases of pre-eclamptic toxæmia occurred (two with albuminuria).

Fifteen women were given chlorothiazide for oedema at some time during the last weeks.

Twelve mothers required a course of folic acid, five of these went on to have 'ferrivenin' and one mother, with a haemoglobin of 68 per cent at the 36th week, was given a two-pint transfusion of packed cells.

Twelve cases of vaginitis were treated; eight for monilia, three for trichomonas and one for *Escherichia Coli* infection.

There were three cases of varicose veins of the vulva and three of the legs, and two incidents of superficial vein thrombosis.

Seven women developed cystitis with moderate or heavy bacilluria and two others had pyelitis. One mother required admission in late pregnancy for red degeneration of a fibroid. The two mothers that carried twins developed extensive and intolerable maculo papular rashes which proved impossible to alleviate to any great extent. Only one mother developed a positive Coombs' test but the baby was unaffected.

There were two cases of antepartum hæmorrhage:

(1) A 23-year-old gravida 3, para 2, presented with profuse, bright red, bleeding per vaginam at her 38th week. She had last been seen at the antenatal clinic two days before with a vertex presenting, normal foetal heart and no signs of toxæmia. She was severely shocked, no foetal heart could be heard and a catheter specimen of urine was loaded with albumen. Immediate transfusion was started. Examination under anaesthetic in theatre by a consultant revealed a dilating cervix but no placenta prævia. The membranes were ruptured and a syntocinon drip was started. Six hours later she was delivered of a fresh stillborn infant and a heavily infarcted placenta with a large retroplacental clot. The mother received five pints of blood and her haemoglobin was 67 per cent by the 12th day of the puerperium.

(2) A 26-year-old gravida 2, para 1, had a small vaginal bleed at the 30th week. Her clotting time was prolonged but the fibrinogen content was normal. The presenting part was deeply engaged by the 36th week but x-ray at term showed it to be an extended breech. Consultant assistance was requested. The breech was disengaged and an external version performed. A syntocinon drip was started while the 'lie' was favourable and she was delivered of a normal 8 lbs 3 oz infant 2½ hours later.

Induction of labour

Fourteen labqurs were induced, three medical, seven surgical and four by syntocinon drip. Ten were for post maturity, two for pre-eclamptic toxæmia and one was for a multipara 48 hours after spontaneous rupture of membranes at the 39th week.

Labour

There was one caesarian section. This was an elective operation

for disproportion in a 5 ft multigravida and she was delivered of a 9 lbs 6 oz child. She had had a previous section in England after a failed trial of labour.

1st stage. The time taken for primiparae ranged from two to 48 hours, with an average of 10 hours. Multiparae varied from 25 minutes to 18 hours, with an average of six hours. One primipara required a pint of 10 per cent dextrose intravenously because she developed acetone in the urine during a prolonged first stage.

We were not niggardly in the use of analgesia during the first stage of labour but remarkably little was necessary. Eight primiparae and 23 multiparae needed no analgesia, while 15 primiparae and only five multiparae required anything more than one injection of 100 mg of pethidine.

2nd stage. The time for primiparae ranged from 20 minutes to over three hours (twins) with an average of one hour. Multiparae varied from a precipitate 2nd stage to two hours, with an average of 15 minutes.

There were three breech deliveries. Two occurred in multiparae and it was decided to deliver them as such. The third occurred some time after the 36th week in a primigravida and was not discovered until labour had commenced. All deliveries were satisfactory for mother and child.

There were eight forceps deliveries, all conducted under pudendal block. Only one occurred in a multigravida and she was 44 years old. Three were for deep transverse arrest, two for maternal distress and one for foetal distress. The other two were for the second baby in each case of twins.

3rd stage. There were five cases of manual removal of placenta under general anaesthetic. Three were still completely adherent, one was partly separated and the other was merely incarcerated.

There were four cases of postpartum haemorrhage and two required transfusion.

Complications of the puerperium

Acute left ventricular failure in a mother of twins; one manic-depressive psychosis; one epileptic fit in a woman who had ceased drug therapy some years previously but who had concealed her history; one puerperal sepsis; one neurodermatitis in the woman whose baby died of hydrocephaly; one perineum requiring secondary suture and two cases of bad divarication of the recti requiring physiotherapy.

The babies

Of the 102 babies born there was one stillbirth (abruptio placentae)

and two babies died within a week with gross congenital abnormalities. Another baby had a spina bifida occulta but no other defects were detected and there were no cases of erythroblastosis foetalis. Birth weights ranged from 4 lbs 6 oz to 9 lbs 6 oz. Six babies were under 5 lbs 8 oz; two had been born prematurely, two were from mothers with pre-eclamptic toxæmia and the other two were the smaller of each set of twins.

Consultant assistance

Obstetrical. Four cases. The caesarian section, the management of abruptio placentae, the management of breech at term in a woman who had had a small antepartum haemorrhage and the woman who required secondary suture of the perineum.

Other consultations. Seven cases. A consultant physician's opinion was required to exclude rheumatic heart disease in a woman in whom aortic stenosis was suspected. A chest consultant's opinion was obtained concerning the management of the woman with recently healed pulmonary tuberculosis. During the puerperium consultant help was required to manage the mother who developed cardiac failure and electro-encephalogram assessment was needed for the epileptic who fitted on her sixth day. A psychiatrist was required to manage the acute puerperal manic-depressive mother and paediatric opinions were obtained on the two babies with severe congenital abnormalities. Seven general anaesthetics were given.

Discussion

This article shows the analysis of 100 unselected obstetric cases when a general-practitioner obstetrician had to be responsible for all of them. When one examines the past history and antenatal developments of this series not more than 50 would have been fit for home confinement and if one excludes all primiparae then not more than about 30 would have been left for the general practitioner.

While agreeing with the usual criteria that exclude a woman from home confinement there are still a number of mothers that could be managed by the general practitioner in a well-equipped unit. Consultant advice during the antenatal period would often be required but the responsibility would remain with the family doctor.

The big advantage to the patient is that more expectant mothers would have their own doctor to look after them throughout pregnancy and labour. It is likely to be easier to persuade the mother unsuitable for home confinement to have her baby in the local general-practitioner hospital than in a more remote consultant unit. She is no longer bewildered by management from two sources and her subsequent labour may run more smoothly. In this series the continuous management of the expectant mother by the same staff

helped to build up a mutual confidence and trust. No mother missed an antenatal appointment and their labours were usually easy and short.

The success of this scheme would depend on a good liaison between the general-practitioner obstetrician and the local gynaecologist. The consultant would realize the capabilities and limitations of the local doctors and know which obstetrical cases, while unfit for home confinement, could safely be left to the general practitioner if booked in a suitable unit. More doctors are entering general practice with postgraduate obstetrical experience but facilities must be available if their skill is to be realized. Midwifery is one of the corner stones of family medicine and the general practitioner who is keen on this aspect should be allowed as much as he can safely manage. I am sure the patient would appreciate it, I know the family doctor would and the consultant and his staff could spend more time on the established abnormal midwifery—while leaving the general practitioner more scope for the potentially normal.

Summary

One hundred unselected consecutive obstetric cases are analysed and reasons are given for the desirability for more general practitioner maternity units.

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Survey of general-practitioner maternity units in England and Wales. M. S. J. HOBBS, M.B., M.R.A.C.P. *Brit. med. J.* 1967. 4, 287.

This paper analyses replies to a postal survey of general-practitioner maternity units in England and Wales. Two hundred and seventy four of the 288 units approached replied. Less than five per cent of units were integrated with, or in close proximity to, a consultant unit. Almost half were more than ten miles from such units. Forty-three per cent had no formal arrangement for antenatal consultation with a consultant obstetrician. About one unit in five did not have facilities for giving an anaesthetic safely, and one in three did not have equipment for intubating the newborn. It is suggested, on the basis of these findings, that "in self-contained general-practitioner maternity units both formal arrangements for contact with a consultant obstetrician and the existence of antenatal clinics are highly desirable".