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J. M. Beazley
M. O. Lobb

ASPECTS OF CARE IN LABOUR

Churchill Livingstone

J. M. Beazley
MD, FRCOG
Professor of Obstetrics and Gynaecology, University of Liverpool.

M. O. Lobb
MRCOG, FRCS (Ed)
Lecturer, Department of Obstetrics and Gynaecology, University of Liverpool

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TOM LIND

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Aspects of Care in Labour

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MRC Human Reproduction Group, Princess Mary Maternity Hospital, Newcastle upon Tyne

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Foreword

In the Foreword to the first book of this series I indicated that authors would be encouraged to give clear opinions which even if not accepted by everyone, would at least stimulate readers to question the basis upon which their own views were founded. This book is an excellent example of that principle because the authors rarely equivocate. Issues which seem to affect the blood pressure of some minority groups such as birthing rooms, home confinement and GP units are dealt with briefly but clearly while the mechanisms controlling cervical dilation and myometrium activity are discussed and illustrated in detail.

After a couple of years training in obstetrics most doctors feel confident about their labour ward skill and patients in normal labour are usually 'relegated' to the midwives. But this attitude has fossilised much of our thinking about the management of normal healthy women having uncomplicated pregnancies and hence anticipated to deliver without difficulty. Why for example has pubic hair been completely shaved off for so many years? Should all induced labours start by rupturing the membranes? is there an 'optimum' maternal position for delivery? A chapter discussing the management of spontaneous labour may appear superfluous but 'conventional' aspects of labour ward care are discussed and concepts both ancient and modern are challenged. The chapters concerned with fetal well-being, controversies in fetal management and operative methods of delivery are equally well-balanced and informative.

The Department of Obstetrics and Gynaecology of Liverpool University has produced many papers concerned with various aspects of labour ward management ranging from the choice of opiate analgesics through agents for 'ripening' the cervix to the use of microcomputers for collating maternal and fetal data during labour.

But Professor Beazley and Dr Lobb have not produced a 'standard' book which discourses at length about the bizarre shapes the female pelvis may assume, or the horrendous manoeuvres needed to deliver an infant piecemeal. Instead of attempting to deal with every facet of management they describe aspects of care concerning the mother in labour, her infant *in utero* and finally her newborn baby and in a manner which could only be achieved by those who have taken a considerable personal interest in making labour a safe, comfortable and as far as possible enjoyable experience for the mother. Doctors training for higher examinations in obstetrics will benefit from reading this book both for its factual content and its challenging style. However, because it is well referenced obstetricians of all grades will be able to bring themselves up to date for the many debates which seem to be occurring concerned with present-day obstetric practices. So often we are faced with a situation in which, for example, someone argues that patients can be safely selected for home confinement. While perhaps wishing to refute the argument, the actual references containing the necessary data cannot always be recalled; an 'aide-memoire' is now to hand. This clearly structured and easy to read book will be a useful addition not only to the bookshelves of libraries and departments but to the personal bookshelves of all who care for expectant mothers.

1983 Tom Lind

Preface

We should like to express our pleasure at being invited to write this short book, hopefully a balanced appraisal of common labour ward situations, for postgraduate trainees. The editor, who has welcomed personal viewpoints, has also encouraged us to provide a reasonable and broadly based evaluation of current opinion.

Obviously, within the constraints of such a publication, selection was necessary and it was not possible for us to discuss all the aspects of modern labour ward management. In consequence we have omitted to comment on some of the more unusual problems, like ruptured uterus, the delivery of gross fetal malformations, or unusual maternal illnesses associated with parturition. Instead we have concentrated upon situations which are likely to enter the labour suite every day.

We should feel well satisfied with the result of our efforts if readers enjoyed the text, and found it in something to stimulate their own views about today's controversial issues. It is fair to say, we believe, that 'flexibility' has probably been the theme of our approach to the task. Certainly we have tried to avoid such extremes as advocating high technology, intensive care for every one, and have attempted more to keep sight of all that has been learned over the years about how babies may be delivered safely. We have had in mind, too, that the patients' view of childbirth now, as always, is especially to be held in care, and we have sought to express how their wishes can be safely fulfilled without loss of obstetric efficiency.

1983

J. M. Beazley
M. O. Lobb

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Attitudes to labour

In this opening chapter we briefly consider a number of obstetric developments which, in the last decade, have influenced the attitudes of doctors, nurses, patients, educators and economists, towards the subject of pregnancy and parturition.

Obstetric attitudes to labour

The process by which the products of conception are expelled from the mother around term is called labour. The usual course of this event, when it begins spontaneously, is considered by most people to be normal parturition. Nature, however, is not always a reliable ally, and the natural course of spontaneous labour may vary considerably, not infrequently proving to be quite dangerous for both the mother and the baby.

In obstetric practice it is no longer considered sufficient simply to employ a policy of 'watchful expectancy' in the management of labour. Under such a policy normal parturition is only revealed as a retrospective fact, whereas, most modern obstetricians would consider it their duty to promote a safer situation whenever they can.

Because the average risks of normal parturition are considered by many to be too great to be acceptable, considerable efforts have been made in recent years to promote low-risk obstetric situations. This has led in turn to the concept of controlled parturition, which fosters the idea that, in the labour room, minimal risk situations are based on national perinatal statistics, tempered by the experience of attendants familiar with local circumstances.

While aiming to achieve a programme for safe and sensible care, flexibility is essential to the concept of controlled parturition in order

to ensure kind and personal care to the individual. Failure to achieve, or even to pursue, such flexibility leads, inevitably, to justifiable criticism of 'conveyor belt obstetrics' (Robinson 1974).

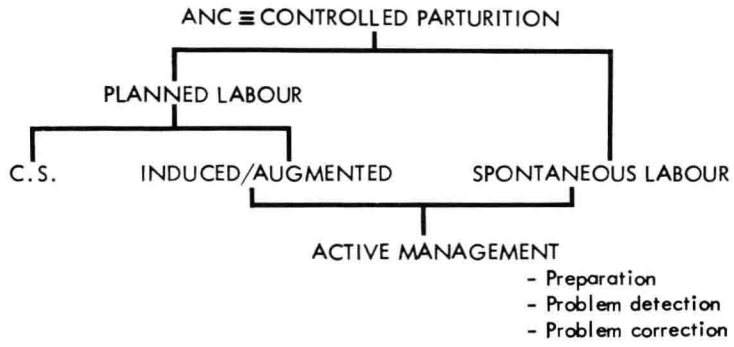

Fig. 1.1 Features of controlled parturition

Rather in the same way that a good record justifies a good record player, or a good film justifies a good projector, so good antenatal care finds its logical fulfillment in the safe control of parturition. As implied by Figure 1.1, the degree of control which needs to be exercised is largely determined by the extent to which a patient and her baby are considered to be 'at risk' at the onset of labour. In other words, the influence of antenatal events upon the usual course of labour can be considerable, and it is only sensible to consider in advance how labour might be altered by these circumstances. In some labour suites, this has led to the adoption of Labour Prediction Scores, of which an example from British Births 1970 is shown in Table 1.1. Such scoring systems, however, still await prospective confirmation of their value. Meanwhile, they do serve to concentrate the mind wonderfully well upon the nature of labour, and to re-emphasise that parturition is not a process which is separate from antenatal care, but the natural consequence of it.

The first decision in controlled parturition is whether to advise that labour should begin spontaneously, or be initiated as a planned procedure. Simply to allow labour to start without having considered whether this would be in the patient's best interests is no longer acceptable.

When delivery of the baby is to be a planned procedure, the next decision usually concerns the most advantageous method of delivery. Sometimes it is necessary to perform an elective Caesarean section

Table 1.1 Labour prediction score (From 'British Births' 1970 p 151). In a system of this kind, the purpose of which is to determine the type of care a patient requires, there is a choice of either using a score which is fixed at the onset of labour, or a continuing assessment which varies as labour progresses. The former is helpful; the latter more accurate. Note, especially, the influence of antenatal risk factors upon labour risk factors

		Score
Antenatal prediction score	0–2	0
	3–7	1
	8+	2
Duration of pregnancy	37–42 weeks	0
	43+ weeks	1
	Less than 37 weeks	2
Complications of this pregnancy		
Pre-eclampsia/hypertension		
Diastolic BP	< 90	0
	90–109	1
Antepartum haemorrhage, proteinuria and/or BP 100+		2
Duration of first stage of labour	< 12 hours	0
	12–24 hours	1
	24 hours +	2
Fetal distress		
fetal heart rate	120–160	0
fetal heart rate	< 120	1
meconium alone		1
fetal heart rate	160 +	2
any 2 signs of distress		2
Breech, twins or previous caesarean section		4

but, more commonly, vaginal delivery is advocated following induction of labour by artificial means. When vaginal delivery is anticipated, following either stimulated or spontaneous labour, a policy of active management now usually dictates what care should be offered to the mother and her baby.

Historical influences

For the first 30 years of this century the maternal mortality rate in England and Wales remained constant at 4.25 deaths per 1000 total births. The Minister of Health then appointed the Committee on Maternal Morbidity and Mortality, from which, in 1952, sprang the first of the series of triennial reports of Confidential Enquiries into Maternal Deaths in England and Wales. Based on their findings, these reports have always published recommendations for obstetric

care, and it is a mark of the confidence placed in them by the obstetricians of this land, that the latest report, 1973–1975, was able to analyse 94% of the maternal deaths. It would be a tragedy, indeed, for this country if, by some quirk of fate resulting in a breach of confidentiality, the Reports were to be abandoned.

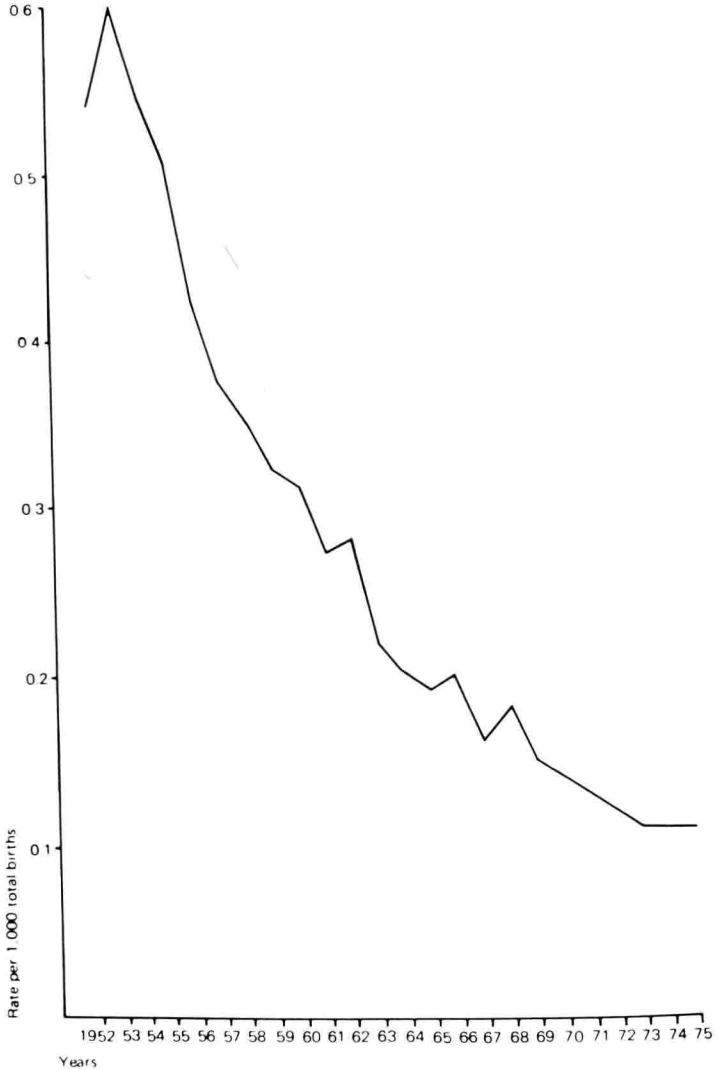

Fig. 1.2 Maternal mortality (excluding abortion) rate per 1000 total births 1952–1975 (from Confidential Enquiries)

Figure 1.2 shows the declining maternal mortality rate in England and Wales during the last 30 years, which reflects some of the impact of the recommendations resulting from the Confidential Enquiries. These reports, however, have fostered their safety first approach by basing their recommendations solely on an analysis of 'obstetric' failure. As yet, no such detailed analyses have been made into the positive aspects of maternal wellbeing either physical or emotional (Barron 1973).

Fifty years ago, pregnant mothers were frighteningly aware of the hazards of pregnancy, because maternal deaths were common. Women were thankful, therefore, to accept professional advice which helped to avoid death, and they did not think to express much dissatisfaction at the standards of obstetric care. Maternal morbidity has always been more difficult to assess than maternal mortality, but generally its trend has parallelled that of maternal mortality. Thus, former generations of mothers were content to survive pregnancy in good health, and seemed less occupied with emotional satisfaction. Today, such are the improvements which have been brought about, that maternal morbidity is uncommon, and a maternal death is rare enough almost to herald a reflex call for litigation.

At the turn of the century, the maternal mortality rate had remained static for 30 years, despite improvements in transport, the introduction of antenatal care, and an increase in the number of obstetricians and midwives. The hazards of obstetric emergencies in the home were seen as preventable, by arranging for confinement in hospital (Russell 1979, Reilly 1979). The move towards hospital confinement was encouraged by successive enquiries (Cranbrook 1959, Peel 1970) and blessed by government.

As the rate of maternal mortality steadily declined, the emphasis of obstetric care shifted to anxiety about fetal and neonatal mortality. The baby was no longer seen as a by product of pregnancy, but as the end product. The analysis of perinatal mortality provided the index of satisfactory care, yet, as in the case of maternal deaths, Perinatal Mortality Reviews were based chiefly on hospital perinatal meetings, or occasional national surveys and reports (British Births 1970, Short 1980). Once again the approach has been statistical and based more on the advent of failures than upon any promotion of fetal good health.

Whilst not complacent about current statistics, obstetricians and midwives might, perhaps have expected some credit for the enormous reduction in maternal and perinatal mortality rates. As it turns out, the British obstetrician recently finds that he is discredited by

international comparison, and often condemned for destroying the emotional satisfaction of mothers, and their sense of achievement in the normal delivery of a live baby (Raeburn 1981, Lancet 1980). Such criticism may be well founded, since management has been orientated towards avoiding mortality and morbidity in patients, rather than towards helping them to enjoy their success. Nevertheless, criticism has tended to be somewhat emotional and generalised. The romantic notion of childbirth is said to have been ruined by wicked obstetricians and midwives (Rayner 1979). Midwives are portrayed as authoritarian, uncaring, even sadistic, individuals, more interested in knitting than patients. 'Hospital midwifery today', it has been said, 'is surely enough to sour even the freshest milk of human kindness' (Lancet 1979). Obstetricians and midwives are accused of regarding parturition as a medical crisis, and are requested not only to restore the anticipation of childbirth, but also to minimise obstetric interference, and thus restore to mothers the marvellous experience of natural, pain-free labour (Lancet 1980).

Such criticism is not to be ignored. Currently, the medical needs of patients are well cared for, but their emotional needs must not be neglected. Research is needed into the emotional aspects of parturition. The key to maternal satisfaction, perhaps, is more flexibility, with safe care.

Labour — an intensive-care situation

No matter how uncomplicated the antenatal period has been, and despite all expert assessment of the probable course of labour, there remain five aspects of parturition which cannot be evaluated until labour begins. These unknown factors are:

1. The efficiency of the uterine contractions
2. The 'give' of the pelvic ligaments
3. The moulding ability of the fetal head
4. The resiliance of the mother to the natural stresses of labour
5. The adaptability of the child to the ever changing circumstances of parturition.

Because these factors cannot be assessed before labour, it follows that each labour, including spontaneous parturition, is attended by a variety of potential problems. These include prolonged labour due to some form of uterine inertia, unexpected maternal or fetal distress, and postpartum haemorrhage, as well as other unexpected problems