AIMS For a better birth...

Failing to meet the standard

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The maternity unit in Bradford has published results of a three audits carried out over four years to measure how often they achieved the target of providing urgent caesarean sections within 30 minutes. The authors conclude: "the standard laid down nationally cannot be met in a considerable minority of cases".

The Bradford unit has about 5,500 births a year, with an emergency section rate of 9-12%. They point out that arranging a caesarean section is a complex procedure, for which a professional staff of 7 has to be assembled. The study lists 39 procedures which have to be carried out between decision and delivery, from getting consent signed, taking blood samples and getting them analysed, getting the anaesthetist, scrubbing up, getting the paediatrician, preparing drugs and so on.

In the first audit, delays in preparing spinal anaesthesia were identified, so they arranged for prepacked equipment. They also had to sort out and agree on different degrees of urgency.

The second audit identified delays in moving the woman to theatre and sorting out whose responsibility it was. Sometimes there were delays because the second theatre was not opened when it should have been

The third audit showed that women who arrived in the theatre within 10 minutes of the decision had the best chance of being delivered quickly. Since delay in moving the woman was again an issue they proposed that "consent could be obtained once the patient had been moved and*it was also felt that increasing a woman's awareness that she might need a caesarean section could reduce the time needed to obtain consent*" [our italics]. However the four cases of delay over the whole period were not because of women's reluctance to agree but because of long explanations. However they agree that "rapid transfer can be distressing for women".

At the time of the first audit 62% of urgent sections were done in 30 minutes. For the second and third audits this had gone up to 68% and 67%. The number who had to wait more than 50 minutes for a section fell from 6.2% at the first audit to 3.2 and 3.5% at the second and third audits.

For women who get to theatre within 10 minutes of the decision, 80% or more are delivered in 30 minutes, and almost all within 40 minutes. For those who take more than 10 minutes to reach theatre, figures have not improved - a third or less are delivered in 30 minutes and two-thirds in 40 minutes.

Babies who had to wait longest for delivery were more likely to be admitted to special care (14% at 30 minutes, 16% at 41-50 minutes and 31% at over 50 minutes). However when the babies admitted to special care for prematurity were omitted, there was no difference in rates of admission for full term babies - though the number was small and results could not have been statistically significant.

Reasons for delay of more than 50 minutes were studied. The commonest was multiple attempts at spinal anaesthesia. In 12 of 29 cases of delay of more than 50 minutes, the cause was multiple attempts at spinal anaesthesia - evidence of reluctance to convert to general anaesthetic.

There were also cases of delay in moving to theatre, delay in getting consent, awaiting epidural top-up and delay because staff were doing another section. They point out that "regional anaesthesia is often as quick to administer as general, but no trial has looked at the time taken with each method. The decision to convert to general anaesthesia is one that trainees in particular may be increasingly reluctant to make."

AIMS Comment

Congratulations to Bradford on carrying out the audits and publishing the results. They have provided some useful practical information on causes of delay, and how they can be avoided. Their problem with anaesthesia delays is echoed in the anaesthesia report (see page x) which highlights the problem of lack of training for providing general anaesthetics. Unfortunately they do not say how many women, if any, had general anaesthesia.

Non-availability of a theatre (because other caesareans are in progress) has come up in several AIMS cases) and we are keen that enquiries should be made as to how necessary those other caesareans were.

However, their sole measure of outcome for the baby - admission to special care - is crude, and they have not even included or analysed Apgar scores. They give no data on mortality. Their figures on outcomes for full term babies are too small to be statistically significant. And what about differences in outcome with length of delay for premature babies, who are the most vulnerable of all?

We are particularly concerned at their recommendations on consent, since both lack of valid consent and having an emergency section are clearly related to post traumatic stress disorder in the cases we see. The midwife who knows and can communicate with the woman to sort out consent before she goes to theatre is doing an important job. This is a subject we shall be watching with interest.

Unfortunately, like so much other maternity care research, the approach is tainted by the philosophy "we must produce evidence to protect ourselves from litigation" and is the poorer for it.

Reference

Tuffnell D. et al, Interval between decision and delivery by caesarean section - are current standards achievable? Observational case series, BMJ, 2001; 322: 1330-2