Correspondence

Postoperative complications

To the Editor:

There are several points of general interest which Dr. Cohen and her colleagues do not tell us in their excellent report in the January issue of the Journal.[1]

It should be noted that an overall postoperative complication rate (undefined) of ten per cent is likely to represent considerable under-reporting since study of control groups in drug and therapeutic trials always reveals very much higher specific rates (sometimes more than 50 per cent). It is our experience in Cardiff (where we do not have the strategy of the billing link to help us) that the duration of stay in hospital after operation and the occurrence of death in hospital are items which are both worthy of study and, since they are recorded by clerical staff, reliable. Stay in hospital is too difficult to summarize here but, in 1985, amongst 23,936 anaesthetics (99.5 per cent were either followed by no complication or the complication was not ascertained) the hospital death rate was 1.36 per cent (1 in 73).

That complication rate is not believable but I am not yet convinced that the Winnipeg study is any more so. Where, for example, are the postoperative chest infections? A classification of complications to enable comparability between countries and even institutions which might be acceptable is:

- *Major* – permanent disability or disfigurement;
- *Intermediate* – serious distress and/or prolongation of hospital stay;
- *Minor* – moderate distress without prolongation of hospital stay or permanent sequelae.

Clarity of definition bedevils clinical studies and the Winnipeg group have gone a considerable distance towards that goal and it is to be hoped that this letter will stimulate them further.

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REFERENCE

1 *Cohen MM, Duncan PG, Pope WDB, Wolkenstein C.* A survey of 112,000 anaesthetics at one teaching hospital (1975–83). Can Anaesth Soc J 1986; 33: 22–31.

REPLY

We would like to thank Dr. Lunn for these comments. He raises several important points that are common concerns to all studies of the outcomes of anaesthesia and surgery.

1 *Underreporting of postoperative complications: it is likely that the postoperative complications were underreported in our study because the anaesthesia follow-up nurse made only one visit (within 24–48 hours) to each patient. Therefore some postoperative complications, such as respiratory infections, would not have developed by this time. However, complications of interest to anaesthetists were the focus of this postoperative visit, and it was felt that anaesthesia-related complications would be apparent within the time-frame of the visit. Second, complication rates in our study would be much lower than those reported in drug or therapeutic trials since those studies are generally of sick patients receiving therapy over a longer time (usually weeks) whereas our population included a large proportion of ASA physical status 1 and 2 patients undergoing minor surgery. Finally the incidence of chest infections (relative to the traditional view of this complication) may indeed be lower than commonly believed, as supported by a recent study from Boston.*[1]

2 *Operative mortality and length of stay: we agree with Dr. Lunn that length of hospital stay and operative mortality are reliable outcome measures. Length of stay may vary according to bed availability (particularly true in Canada) and hospital policy over time and between institutions, but would be reliable for a study conducted in one hospital over short periods of time. With regard to operative mortality, this will be a subject of a future report based on our study. Preliminary results have found that a substantial number of patients died after discharge from hospital. However, we will be able to record these deaths using vital statistics information.*

3 *Classification of complications: again we strongly agree with Dr. Lunn that an agreement is needed to enable comparability between countries and institutions with regard to definitions of complications and mortality due to anaesthesia as opposed to complications and mortality due to surgery or other factors.*

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REFERENCE

1 *Beard K, Jick H, Walker AM.* Adverse respiratory events occurring in the recovery room after general anesthesia. Anesthesiology 1986; 64: 269–72.

Consent for epidural anaesthesia

To the Editor:

The letter by Slusarenko and Noble regarding information given to patients to enable them to give informed consent for epidural anaesthesia is timely. Many departments of anaesthesia are wrestling with the same problem. Following this letter is the text of an information sheet about epidural analgesia that is given to patients having deliveries in the Dr. Everett Chalmers Hospital, a tertiary obstetrical unit.

The information sheet is given to the patient by the obstetrician toward the end of the pregnancy, along with other information regarding her anticipated delivery. The sheet is also available in the obstetrical unit for patients who did not receive it prior to hospital admission. This approach is not the final answer to informing our patients but we feel that it is a step in the right direction.

The initial experience (since January 1986) with the information sheet has been very positive. Most patients seem to appreciate the specific information plus the opportunity to ask questions. To our knowledge, only one patient has refused an epidural anaesthetic because of the infomation sheet. We plan to conduct a prospective examination of the value of the information sheet.

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Department of Anaesthesia
Information about epidural analgesia

All women experience a certain amount of discomfort during labour and delivery. Some women experience extremely severe pain and may require large doses of pain relieving drugs.

If it is indicated, we may be able to relieve your pain by "freezing" the nerves that carry the pain sensation from your womb. This is done by placing the freezing drugs around the nerves in the spinal canal, using an epidural catheter. This is a small tube placed in your back, outside the spinal cord. This procedure is performed by an anaesthetist who is requested by your obstetrician to do so.

The procedure is normally a perfectly safe way of providing pain relief. However, like all medical procedures, it carries with it the risk of certain complications, which usually cannot be anticipated.

These complications are not usually life-threatening, provided they are recognized and treated immediately. Your anaesthetist, who is a specialist physician, is trained to manage all of the complications associated with this procedure, just as your obstetrician will recognize and treat complications that may arise during your pregnancy and labour.

Certain women may not be suitable candidates for epidural analgesia. Occasionally (one per cent) the epidural catheter enters the space around the spinal cord. If this is not recognized, anaesthesia to a higher level in the body than is needed can occur. This is not a serious complication provided it is treated appropriately.

If the needle that is used to place the catheter or the catheter itself enters the space around the spinal cord, the patient may experience a headache in the days following delivery. Certain things can be done to reduce the likelihood of a severe headache if the situation arises.

Some women experience backache after having an epidural. This is the result of bruising of the tissues during the placement of the catheter in the epidural space. It may last for up to 14 days but is not disabling.

Very occasionally, the freezing may enter directly into a vein. If this occurs, you will notice a peculiar sensation in your head. Your ears will ring and you will have a "tingling" feeling in your face. You may also have a metallic taste in your mouth and throat. If this occurs, inform your nurse immediately.

If you are having an epidural for labour and delivery, you may have a continuous infusion of the freezing drug into the epidural catheter. You will experience relief of your pain but you will still be able to move. In fact, you will be required to move yourself from side to side every so often. If you cannot do this, your nurse should be notified immediately.

Other complications may arise which are more severe, but which occur very rarely. The most