Attitudes towards parental presence at induction of anaesthesia

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Objective. To determine the attitudes of South African anaesthetists with regard to allowing parents to be present during the induction of anaesthesia in children, and to determine the source and extent of resistance to this controversial practice.

Design. Questionnaire survey consisting of three parts and based on a previous study.

Setting. Southern Africa.

Participants. All practising anaesthetists, specialist and non-specialist, on the mailing list of a major pharmaceutical company.

Results. Responses were obtained from 222 anaesthetists from 80 different localities in southern Africa. The majority of the respondents were specialist anaesthetists from 80 different localities in southern Africa. The majority of the respondents were specialist anaesthetists in private practice with between 5 and 15 years' experience. Of the respondents 55% agreed that it was acceptable to allow parents to be present at induction and that this did not compromise the child's safety; 117 claimed that there was resistance to the practice, perceiving the matron and nursing staff as the major source of resistance, both currently and in the past. Lack of facilities and loss of operating theatre sterility were cited as the main reasons for resistance.

Conclusion. Although the practice is still controversial, the majority of anaesthetists who responded to the survey would be happy to allow parents to accompany children at induction. It should be catered for and encouraged according to certain guidelines.


Allowing parents to accompany their children during induction of anaesthesia is controversial and is not universally encouraged. Opinion among anaesthetists remains divided. A young child undergoing surgery is potentially at risk of experiencing psychotrauma, particularly following separation from the parent and/or a 'stormy' induction of anaesthesia. Many paediatric anaesthetists today would agree that parental presence at induction is both desirable and beneficial for the child. Others feel that it may jeopardise the conduct of safe anaesthesia.

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We sought to assess the attitudes of South African anaesthetists with regard to allowing parents to be present during the induction of anaesthesia in children.

Method

A questionnaire based on a previous study but modified for local conditions was approved by the Ethics Committee of the Faculty of Medicine, University of Natal. This questionnaire was sent to all practising anaesthetists in southern Africa who were on the mailing list of a major pharmaceutical company involved in continuing education in anaesthesia. It consisted of three sections.

Section 1 sought information with regard to training in anaesthesia, anaesthetic experience with particular regard to children, place of practice, and paediatric anaesthetic commitment in terms of the number of children anaesthetised per month. Section 2 sought to define personal attitudes to parental presence, perceived benefits for the child and parent, and negative perceptions, including anxiety and the influence on the subsequent possibility of litigation. In this section the respondents were required to study each statement separately and indicate on a scale of 1 to 10 their degree of disagreement (1) or agreement (10); a score of 1 indicated strong disagreement with the statement, and a score of 10 strong agreement. For purposes of analysis those scoring less than 3 were regarded as disagreeing with the statement, those scoring from 8 to 10 were regarded as in agreement, and those scoring 4 - 7 were equivocal. Section 3 sought information regarding current practice with regard to parental presence at induction, whether there was, or had been, any resistance to this practice, and the reasons for this resistance. On completion the respondents were invited to offer any additional comments.

Statistical significance ($P < 0.01$) was determined using the $\chi^2$ goodness of fit test for a single sample to compare the number of respondents who disagreed with each statement to those who agreed.

Results

Two hundred and twenty-two anaesthetists (10%) from 80 towns or cities representing all regions in southern Africa (Fig. 1) responded to the survey. The majority (116) were specialist anaesthesiologists who had either the Fellowship of the Faculty of Anaesthetists (F.F.A.) or Master of Medicine (M.Med.) from their respective universities or an equivalent qualification. Forty-eight respondents had the Diploma in Anaesthesia (D.A.) and 58 were general practitioners with no further anaesthetic qualifications. Most of the anaesthesiologists (specialist anaesthetists) (108) were in private practice and the majority of the respondents (164) worked in a city. Two-thirds (148) were in full-time anaesthetic practice.

Although the respondents had between 5 and 15 years of anaesthetic experience, only about half admitted to any formal paediatric anaesthetic training. Of these the majority had a training period of less than 6 months. Of the respondents 25% anaesthetised more than 30 children in an average month, 24% less than 10 children per month, and the majority (51%) between 10 and 30 children per month.

The majority of the anaesthetists (123) agreed that it was acceptable for parents to be present at induction ($P < 0.001$) (Fig. 2). However, 32 strongly disagreed with this practice; 60% of these had been trained at the same university ($P < 0.001$). Most (107) disagreed with the statement that the presence of a parent increased the anaesthetist's anxiety ($P < 0.001$). The response did not vary with overall experience of the respondent (number of years' practice of anaesthetics), but those who did not have formal paediatric anaesthetic training or had little experience did feel intimidated and stressed by parental presence ($P < 0.01$). Most (136) felt that the child's safety was not compromised ($P < 0.001$) (Fig. 3).

Statistical significance ($P < 0.01$) was determined using the $\chi^2$ goodness of fit test for a single sample to compare the number of respondents who disagreed with each statement to those who agreed.

Fig. 1. Map of southern Africa illustrating towns and cities where the respondents practised.

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Fig. 2. Responses to whether there are real advantages to children and parents in having parents present during induction.

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The response to whether anxious parents may actually negate any positive aspects by their presence was equivocal (P = NS). There was a similar equivocal response to whether respondents thought that there was an increased risk of litigation if parents are present.

In terms of their current practice, of the 222 respondents only 95 denied any resistance to parents being present at induction. The rest (117) claimed that there was resistance to this practice (10 failed to complete this section). The source of this resistance was the anaesthetist (39), the surgeon (25), and, in the majority, the matron and/or nursing staff (94). Reasons most often cited were the loss of operating theatre sterility and lack of facilities to allow parents into the theatre complex.

Of the 95 who denied resistance, 24 noted that there had been resistance in the past. The theatre matron was again blamed as the main source of the previous opposition (22). Many (42) did not know what the previous policy had been.

**Discussion**

Conflicting views continue to be held about the emotional hazards associated with general anaesthesia. Some see these as exaggerated and suggest that the experience may even be positive for emotional growth, but current opinion among paediatric anaesthetists is that the presence of parents at induction minimises the psychological stress of the surgery and lowers anaesthetic risk.

Although only 10% of anaesthetists surveyed returned the questionnaire, we considered that they reflected the policy and attitude at the centres at which they worked. Opinions expressed in this survey were not dissimilar to those expressed on this subject by British and Australian anaesthetists.

Of the anaesthetists in favour of the practice, one suggested that he 'used the parents as a premed' rather than using drugs, while another suggested that the parents had a supportive function ('I like to see families care about their children'). Those opposed to the idea had strong feelings. 'To me this survey is nonsense. To have relations of the patient present is not acceptable under any circumstances. I refuse to anaesthetise... if family present... my concern is for my patient and cannot be diverted.' Others wanted to maintain the status quo. 'I don't think anybody around here has ever thought about the idea or that such a practice exists - I would like to keep it that way!'

One respondent found it 'inexplicable and unacceptable that kids, who need support when they come to theatre, faced with strangers in odd clothing and hiding their faces behind masks, do not have this support. These same kids are brainwashed on TV about the hazards of being lured by strangers with promises of good. We do the same when we separate them from their parents.'

The teaching at a particular university may influence the attitude of practitioners and hence affect the options available to the public in the regions in which its graduates practise. Although it is difficult to draw conclusions from this survey, the majority of those who were against parents being present trained at the same university.

Perhaps the most disturbing finding of the survey is the source of the resistance to allowing the parents to be present at induction. While the majority of the anaesthetists would be happy to allow the parents into theatre, they were prevented from doing so, or at least their perception was that the matron or nursing staff would not allow it because it was 'against hospital policy'. The matron and nursing staff are duty-bound to uphold the hospital policy and should not be targeted for derision. However, they are certainly able to influence change in hospital policy.

The argument that many theatres are not designed to allow parents to accompany their children, particularly on busy days, does not appear to be valid. This argument was once used to prevent parents from staying in hospital with their children and to prevent fathers from being present at their child's birth, but as attitudes changed ways were found to accommodate them.

Arguments that the presence of a parent intimidated the anaesthetist and placed him under further stress were not supported in this survey. However, the inexperienced anaesthetist was clearly more intimidated and preferred not to have the parents present. Experience has been shown to make a difference, and the attitudes of anaesthetic residents undergo a positive change over a 2-month training period. The safety of the child should, of course, be uppermost in the mind of the anaesthetist.

Previous studies have shown that the majority of parents wish to be present, since they felt that it relieved their child's anxiety and that it was their duty as a parent. Appropriately concerned parents should be allowed to accompany their children, while highly anxious parents, who are more disturbed by the experience, should be excluded and offered additional counselling and support. In a multicultural society such as South Africa it is important to be sympathetic towards the differences that exist.

There are situations where the anaesthetist may prefer to exclude the parents. No anaesthetist should feel obliged to allow parents to be present with a very young infant or neonate, where separation anxiety is not a problem, or when anaesthetising a critically ill child or in an emergency.
The efficacy of two bupivacaine hydrochloride injection products

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Objective. The relative efficacy of two bupivacaine hydrochloride injection products was investigated in patients who were undergoing intra-ocular eye surgery.

Design. Patients took part in this double-blind, randomised, parallel-group study and received either Macaine (Keatings) or Regibloc (Intramed), according to the randomisation schedule.

Setting. The study was carried out in the ophthalmology operating theatres of National and Pelonomi Hospitals, Bloemfontein, South Africa.

Patients. Thirty male and 74 female patients who needed extra-capsular lens extraction plus intra-ocular lens implantation, extra-capsular lens extraction, or trabeculectomy were selected for the study.

Outcome measures. Akinesia was evaluated after 10, 15 and 20 minutes. In the event of incomplete akinesia after 20 minutes, an additional injection was administered, and after 5 minutes another evaluation of akinesia was done. Anaesthesia was evaluated at the beginning of surgery.

Results. The proportions of patients who received no additional anaesthesia were 57.7% for Macaine and 70.8% for Regibloc (difference 13.1%, 95% confidence interval CI -5.5 - 31.7%). The proportions of patients with adequate akinesia (possibly after additional anaesthesia) were 90.4% for Macaine and 89.6% for Regibloc (difference -0.8%, 95% CI -12.6 -11.0%).

The proportions of patients experiencing no pain or discomfort at the beginning of surgery were 88.2% for Macaine and 87.5% for Regibloc (difference -0.7%, 95% CI -13.6 - 12.1%).

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SAMJ Volume 86 No. 6 June 1996 667