Paediatric Policy: Paediatrician Attendance at Caesarean Sections

INTRODUCTION

Much debate and discussion has occurred since the mid 1990s relating to "who should attend a caesarean section?"

The practice of a paediatrician attending all caesarean sections arose in an era when caesarean section deliveries were usually the consequence of unexpected preterm births\(^1\) and were usually carried out under general anaesthesia.

The contemporary question has occurred in response to improvements in obstetric anaesthesia and antenatal monitoring technology.\(^2\)

The concerns that have been raised relate to best practice, resource allocation and value in training.\(^3,4\)

This policy paper is the result of a collective opinion of Australian and New Zealand paediatricians and a review of relevant literature available.

DEFINITIONS

The accepted practice-based definitions of caesarean section are:

- **Low risk/elective caesarean section**
  - Does not indicate any immediate fetal or maternal risk but vaginal delivery would affect maternal or fetal outcome.

- **Medium risk/semi-elective/semi-emergency caesarean section**
  - Indicates that fetal or maternal factors have evolved in the short-term creating risk which necessitates delivery best undertaken by caesarean section.

- **High risk/Emergency Caesarean Section**
  - Indicates a significant risk to mother and or fetus and time is critical.
NEONATAL RESUSCITATION

Effective resuscitation of the newborn requires adequate training and preparation of all staff involved in the care of women in labour.5,6

Acute cardiorespiratory compromise at the time of birth cannot be predicted in a majority of cases, hence staff involved in the delivery of infants should be skilled in resuscitation of the newborn.5,6 There should be clear protocols for anticipation and recognition of the need for resuscitation and application of resuscitation techniques.

Training should be based on the appropriate national guidelines5,6 and should include provision to update and maintain skills in addition to a mechanism for accreditation.7

Resuscitation skills include:5,6

- Familiarity with resuscitation equipment and drugs
- Awareness of environmental factors
- Skill in recognising the clinical signs of hypoxia and respiratory distress
- Ability to clear the airway and maintain it patent
- Ability to assist ventilation using bag and mask, endotracheal intubation, or an infant resuscitator device as appropriate
- Ability to perform external cardiac massage
- Skill in performing or assisting with parenteral access

Under circumstances where general anaesthesia is used or there is considered to be a medium or high risk then an appropriately trained practitioner should take sole responsibility for the care of the neonate. The primary responsibility of the anaesthetist is the mother.8

In institutions where there is no skilled trainer then it is imperative that training in neonatal resuscitation be obtained from other institutions.

ATTENDANCE AT CAESAREAN SECTION

The evidence indicates that with regional anaesthesia, in the absence of fetal distress or other significant perinatal factors, the need for vigorous resuscitation is no different from that which occurs in an uncomplicated vaginal birth.1,9,10,11,12

General anaesthesia however, increases the frequency of the need for vigorous resuscitation.9,10 Non cephalic presentation may also be associated with an increased risk of requiring resuscitation.12
RECOMMENDATIONS

1. An appropriately-trained practitioner, in addition to the obstetrician and the anaesthetist, whose responsibility is to administer appropriate resuscitation to the newborn, should be present at all births by caesarean section.

2. Health care facilities must ensure that staff attending births have adequate and appropriate training in newborn resuscitation.

3. An individual practitioner or resuscitation team with a suitable level of experience and practical skill(s) in neonatal resuscitation should attend all medium and high risk births. The choice of personnel should be based on appropriate communication between obstetrician and paediatrician on matters of risk analysis and procedure planning to achieve optimal neonatal outcome.

4. The obstetrician must take responsibility for categorisation of risk on each separate caesarean delivery and plan accordingly.

5. An elective caesarean section with no maternal or fetal risk factors is a low risk birth and requires the same care as any other low risk birth. There is no evidence that a paediatrician/trainee paediatrician/other junior medical staff member is required to attend an elective caesarean section where there are no identified maternal or fetal complicating factors that would predict the need for vigorous resuscitation.

REFERENCES:


3 Personal Communication: Professor Colin Morley, Professor/Director of Neonatal Medicine, Royal Women's Hospital, Melbourne.

4 Advisory Committee of the Australian & New Zealand Neonatal Network. A survey on opinions regarding attendance of specialist paediatricians at elective non-emergency caesarean section.


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