

Attendance at Labour and Delivery Guidelines for Obstetrical Care

These guidelines have been prepared by the Executive Committee of the Society of Obstetricians and Gynaecologists of Canada and approved by its Council (SOGC), the College of Family Physicians of Canada (CFPC) and the Society of Rural Physicians of Canada (SRPC)

The Canadian Anesthesiologists' Society (CAS) has reviewed and accepted the components of the guidelines involving anaesthesiologists

These guidelines supersede the guidelines published in September 1996

PREAMBLE

Recognizing that hospitals vary from Level I to Level III obstetrical care, and therefore care for labouring women having problems of different complexity, and that the qualifications of physicians and nurses in any given hospital will vary, these guidelines may be adopted or modified to the given circumstances.

Personal attendance by a physician for prompt review of any problem during labour and for delivery is the ideal. In Level III institutions, the presence of in-house physicians who are capable of dealing with problems, including the performance of Caesarean sections, is the most advisable arrangement. It should be recognized that it is not possible to predict all emergencies and that even when a physician is present the outcome will not always be guaranteed.

In all hospitals providing obstetrical care and birthing units, the attending physician must take into consideration the risk of each individual patient, the course of her labour, and the number of patients in labour. Physicians should use this information to make a judgement as to whether or not they need to be immediately available in the hospital. When summoned, the physician covering obstetrics or an alternate should be available to the labour and delivery suite in approximately 30 minutes.¹⁻⁶ Physicians should communicate their availability to their patients and discuss their coverage by other physicians. The importance of both individualized care and readily available care in case of an emergency is stressed.

DEFINITION OF HOSPITAL LEVELS

- Level I A community or rural hospital that provides maternity care for women with no major risk factors and normally without specialist support.
- Level II A community or regional hospital that provides care for low and high risk pregnancies with specialist support.
- Level III A tertiary hospital that provides care for low and high risk pregnancies, with perinatal, neonatal and anaesthetic services available on site.

These definitions are described in the April 2000 edition of the *Family-Centred Maternity and Newborn Care: National Guidelines*.⁷

The SOGC recognizes that in many rural or remote areas low risk pregnancies are cared for without Caesarean section capabilities. Protocols for emergency transfer to an institution with Caesarean section capabilities must be in place. In rural areas, the standard of physician availability has to be decided locally. Prompt attendance to problems as well as immediate transfer protocols for high risk cases should be adopted. A clear policy should be established and known to physicians, professional caregivers, and the general public.

There are presently no randomized controlled trials assessing the outcome of the time delay between the decision to do a c-section and delivery of the baby. The recommendations are based on ongoing expert opinion which may be revised when new knowledge is available.

The following points highlight the factors most crucial to the optimal care of a patient during labour or delivery.

1. Timely attendance by a physician.
2. Any known antenatal risk factors should be reviewed at the onset of labour. Intrapartum risk factors should be assessed on an ongoing basis and problems diagnosed and attended in a timely manner.
3. When participating in a call system the replacing physician should be of similar competence and informed of all important facts pertaining to a case when care is transferred.
4. Progress of the labour should be clearly identifiable from the records.
5. Monitoring of fetal heart, by auscultation or electronically, should be performed according to approved standards and interpreted consistently.⁸
6. The indication(s) for any intervention should be convincing, compelling, and documented at the time of the event(s). When a forceps or vacuum delivery is required, the SOGC recommends adherence to acceptable definitions of low or mid-forceps, as outlined in the SOGC guidelines on forceps.^{9,10}
7. For a planned vaginal breech or twin birth, anaesthetic personnel are to be informed as soon as possible.
8. Relevant aspects of labour and delivery should be clearly recorded contemporaneously and consistently by the healthcare personnel involved.
9. For planned delivery from the mid-pelvic cavity with forceps or vacuum, breech or twin vaginal birth, a Caesarean section should be immediately available. The presence and availability in the hospital of anaesthetic, obstetrical, neonatal, and nursing personnel trained in Caesarean delivery are essential.
10. Mid-cavity deliveries with forceps or vacuum, breech vaginal delivery and multiple gestations can be attempted in the delivery suite or the operating room.
11. For assisted low station and outlet delivery, the presence of an anaesthetist is not routinely required.
12. Cord blood gases should be routinely obtained. Immediately after the delivery the cord is double clamped and a specimen is drawn into a heparinized syringe and sent to the laboratory for blood gas analysis. Hospitals may adopt one of the three following procedures for this analysis:
 - 12.1 The preferred method is to send the cord blood to the laboratory for the analysis of a pH, pO₂, pCO₂ and base deficit. This should be performed in the same way as blood gas analyses are done for other hospital departments. This may require the on-call laboratory technician to do these analyses as equipment in the hospital laboratory is calibrated on a regular basis.
 - 12.2 A pH analysis can be done in the delivery suite by a physician or nurse. The equipment will have to be tested on a regular basis and calibrated to ensure that proper results

are consistently obtained.

- 12.3 Delayed analysis of the cord blood may be used in a hospital in which 24 hour access to blood gas analysis is not available. Unanticipated deterioration or neonatal death can occur hours after normal course of delivery. This delayed method of analysis can provide important information for the unforeseen compromised newborn. This method requires the cord blood to be placed in a heparinized syringe and placed on ice, refrigerated, and later analyzed at a variable time up to 60 hours postpartum.¹¹⁻¹⁵

Many hospitals already integrate these procedures into their obstetrical care plans. Routine cord gases may help provide appropriate care of the newborn. Studies are ongoing to evaluate perinatal outcome with such a strategy.
13. **Timing of emergency Caesarean section:**

It is the hospital's responsibility to ensure adequate operating room time, as well as nursing, anaesthetic, obstetrical, and newborn resuscitation personnel to deal effectively with obstetrical emergencies.

Problems may occur suddenly and unexpectedly even in patients thought to be at low risk. Hospitals must always be ready to respond to such emergencies.
- 13.1 **Emergency Caesarean section:** Emergency Caesarean section must be considered and implemented whenever acute fetal compromise is suspected and vaginal delivery is not imminent.
- 13.2 **Urgent Caesarean section:** Obstetrical cases where acute fetal and/or maternal compromise is not yet evident but the patient's clinical situation or progress of labour is such that a Caesarean section is indicated.

Provided the fetal heart rate is reassuring and pain control is adequate, the Caesarean section should be initiated expeditiously in collaboration with anaesthetic and other necessary support personnel. Reasons for delay should be documented in the chart by obstetrical, anaesthetic, and nursing personnel.
- 13.3 **Caesarean Section for a failed trial** of vaginal delivery of breech, multiple gestations, and mid-forceps: When there has been a trial of vaginal delivery, a Caesarean section should be performed without delay.¹⁵
- 13.4 **Communication Policy:** There must be timely communication of case loads between the operating and delivery room units. This policy will optimize appropriate time response for patient care needs.
- 13.5 **Surgical back-up for emergency cases:** Each hospital should develop a policy concerning the necessity of a second surgical team available for emergency cases.
14. **Time availability for defined hospital levels:**

Level I hospital — For a community or rural hospital a physician must be available for the labour and delivery room in approximately 30 minutes and must

- be prepared to respond promptly to requests from hospital personnel.
- Level II hospital** — A physician should be available for the labour and delivery room in approximately 30 minutes and must be prepared to respond promptly to requests from hospital personnel.
- Level III hospital** — Continuous on site presence of obstetric, anaesthetic, and paediatric personnel for women in active labour is required.

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CONCLUSION

Governments and hospital institutions should provide adequate physician and financial resources to achieve these standards necessary to ensure optimal care to Canadian women and their newborns while preserving an acceptable working schedule for physicians and other healthcare providers.

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