

GUIDELINE 12

CAESAREAN SECTION IN DOGS AND CATS

Registered veterinary practitioners should ensure they are familiar with the contents of this Guideline. The Board considers this Guideline to be the minimum standard expected from a registered veterinary practitioner exercising reasonable skill and care in the course of providing treatment to animals.

Practitioners should read this Guideline in conjunction with the Definitions listed in the introductory pages.

12.1 PREAMBLE

12.1.1 The Veterinary Practitioners Registration Board of Victoria has received numerous complaints from members of the public regarding the unsatisfactory outcome of caesarean section in the dog and cat. Most of the complaints involve death of either the dam and/or neonates during or following the procedure.

12.1.2 The Board's inquiries into such complaints have shown that the anaesthetic protocol used by the registered veterinary practitioner contributed to the unsatisfactory outcome in most cases.

12.1.3 Another reason for an unsatisfactory outcome in some cases was an unnecessarily prolonged delay between the diagnosis of a dystocia and the performance of the caesarean section.

12.1.4 The viability of the foetus may be compromised by the excessive administration of oxytocin to the dam prior to caesarean section.

12.1.5 The Board recognises that it is a combination of all the events surrounding the procedure and not just the anaesthetic technique which determines the outcome.

12.1.6 There are many different protocols for anaesthesia that can be successfully used in a caesarean section.

12.1.7 The Board acknowledges that many experienced registered veterinary practitioners use anaesthetic regimens that may not be considered ideal but which work well in their hands. An inexperienced registered veterinary practitioner is likely to need advice and/or assistance.

12.1.8 Further the Board acknowledges that there may be occasions, such as emergencies, where all the appropriate facilities for this procedure may not be available.

12.1.9 Elective caesareans should only be performed after careful consideration of all relevant factors.

12.1.10 Should a complaint come before the Board regarding a caesarean section, and it is determined that the procedure has differed markedly from these guidelines, then the Board may have to consider a charge of Unprofessional Conduct.

12.2 GUIDELINES FOR ANAESTHETIC AGENTS DURING CAESAREAN SECTION

- 12.2.1 All general anaesthetic agents cross the placenta and will affect the foetus to some extent.
- 12.2.2 All general anaesthetic agents and surgical procedures may induce hypotension.
- 12.2.3 Some anaesthetic agents have a greater depressive and/or hypotensive effect than others. Therefore, the registered veterinary practitioner should carefully consider the following factors in the choice of anaesthetic medication.
- 12.2.4 Drugs which may have prolonged anaesthetic recovery time or which may be poorly metabolised by the foetus/neonate should be avoided.
- 12.2.5 Short acting barbiturates such as pentobarbitone are unsuitable for caesarean section where live offspring are desired or expected.
- 12.2.6 Ultra-short acting thiobarbiturates such as thiopentone are unsuitable when used as the sole anaesthetic agent due to their cumulative effects. Even when ultra-short acting thiobarbiturates are used for the induction of anaesthesia for caesarean section, they may lead to undesirable depression of the neonates as they are poorly metabolised in the very young.
- 12.2.7 Gaseous anaesthetic agents should be used for maintenance of anaesthesia.
- 12.2.8 Drugs with known adverse cardiovascular and/or respiratory depressant effects, for example alpha 2 agonists such as xylazine and medetomidine HCl, should either be avoided or extreme care taken with their use.

12.3 OPERATIVE PROCEDURES AND SUPPORTIVE MEASURES

- 12.3.1 The dam should be intubated and oxygen should be available for use both during the surgical procedure and post-operatively to both the dam and neonates.
- 12.3.2 Intravenous fluid therapy is recommended to maintain blood pressure and tissue perfusion and to provide rapid intravenous access for emergency medication. Hypotension is a common cause of surgical shock and death during caesarean section.
- 12.3.3 Adequate monitoring of the respiratory and cardiovascular function of the dam and neonates is essential. Rapid corrective measures may need to be taken in the event of adverse anaesthetic complications. A suitably trained assistant is necessary for this to be performed adequately.
- 12.3.4 A suitable source of external heat should be available to prevent hypothermia in both the dam and neonates.
- 12.3.5 Observance of sterile techniques for the preparation of the patient, instruments, surgical packs and drapes and both the registered veterinary practitioner and their assistants are considered mandatory for any surgical procedure.
- 12.3.6 All animals that have been anaesthetised should remain under veterinary care until they are conscious and suitable for discharge to the owner's care.