MANAGEMENT OF BRADYCARDIA IN SMALL ANIMALS

Bradycardia may occur during general anaesthesia for many reasons; and it may not always be appropriate to treat it with anti-muscarinic drugs such as atropine. Inappropriate use of anti-muscarinics may lead to tachycardia, hypertension and arrhythmias.

This flow chart may help in the decision making process (note that opinions differ on the use of anti-muscarinic drugs, even between specialists! Suggestions here are my opinion only).

![Flow chart of Bradycardia Management](image)

**Anti-muscarinic therapy**

- Contra-indicated if alpha-2 adrenoceptor agonists not reversed; and/or animal is hypertensive
- Atropine 0.01 - 0.02 mg/kg (0.04 mg/kg in CPR) IV - rapid onset, short duration
- Glycopyrrolate 0.005 - 0.01 mg/kg IV - slower onset, longer duration not available in emergency situation (e.g. CPR)
- Fewer non cardiac anti-muscarinic effects
- May be less likely to cause unwanted tachycardia

Vet Anaesthesia Tips

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