



Earlier neutering principles



Kitten Quad

An app enabling UK vets to calculate doses of an unlicensed quad anaesthetic combination.



- Keep healthy:** Younger animals with juvenile immune system so best to do earlier in the day, before other operations
- Keep fed:** Withhold food for three hours only before surgery; do not withhold water. Offer food early in recovery
- Keep calm:** Keep littermates together, including recovery and reduce stress from noise, handling etc
- Keep accurate:** Weigh accurately and calculate doses based on BSA
- Keep warm:** Don't clip or wet excessively when prepping, warm ambient temp, keep insulated throughout and express bladder

Anaesthetic considerations:

CP recommends that female cats are intubated for neutering and maintained on O₂. Also, that at least 20 minutes elapses after initial i/m medetomidine/ketamine injection before administering atipamezole

Quad protocol:

Use equal volumes of: Medetomidine 1mg/ml, Ketamine 100mg/ml, Midazolam 5mg/ml and Buprenorphine 0.3mg/ml. Can mix in same syringe and give at same time.

| Bodyweight (kg) | Body Surface Area (m ²) | Volume Anaesthetic Drugs* (ml) | Volume Reversal Agent 5mg/ml (ml) | Volume Meloxicam* 2mg/ml (ml) |
|-----------------|-------------------------------------|--------------------------------|-----------------------------------|-------------------------------|
| 0.50 | 0.07 | 0.04 | 0.020 | 0.05 |
| 0.60 | 0.07 | 0.04 | 0.020 | 0.06 |
| 0.70 | 0.08 | 0.05 | 0.025 | 0.07 |
| 0.80 | 0.09 | 0.05 | 0.025 | 0.08 |
| 0.90 | 0.10 | 0.05 | 0.025 | 0.09 |
| 1.00 | 0.10 | 0.06 | 0.030 | 0.10 |
| 1.10 | 0.11 | 0.06 | 0.030 | 0.11 |
| 1.20 | 0.12 | 0.06 | 0.030 | 0.12 |
| 1.30 | 0.12 | 0.07 | 0.035 | 0.13 |
| 1.40 | 0.13 | 0.07 | 0.035 | 0.14 |
| 1.50 | 0.14 | 0.08 | 0.040 | 0.15 |
| 1.60 | 0.14 | 0.08 | 0.040 | 0.16 |
| 1.70 | 0.15 | 0.08 | 0.040 | 0.17 |
| 1.80 | 0.15 | 0.09 | 0.045 | 0.18 |
| 1.90 | 0.16 | 0.09 | 0.045 | 0.19 |
| 2.00 | 0.17 | 0.10 | 0.050 | 0.20 |



*Off Licence – Obtain informed owner consent.