

Manchester Terriers and Anesthesia

Updated by Regina R. Allen DVM

Manchester Terriers, both the Toy and Standard variety, have a sighthound ancestor (greyhound or whippet), and thus should be treated like them in terms of anesthetic regimes. They are lean, muscular dogs with low body fat, and metabolize anesthetic agents more slowly like sighthounds.

Manchester Terriers tolerate premedication well prior to anesthesia with acepromazine/opioid combinations given IM or SQ, provided that acepromazine is used at the lowest effective dose. Barbiturates used for induction are metabolized slowly and will prolong recovery time; however small dosages of IV Thiopental used to effect are safe and do not result in excessive recovery time. Ketamine/diazepam IV or propofol IV following premedication are also effective induction agents. Anesthesia should always be maintained with an inhalant gas such as Sevoflurane or Isoflurane, as additional doses of induction agents will unnecessarily prolong recovery. After working extensively with both Sevoflurane and Isoflurane in small animal practice, I strongly prefer Sevoflurane because of its fast onset and offset due to its low solubility in blood. Sevoflurane can also be used for mask induction prior to intubation because of its fast onset and low irritation of mucous membranes. Additionally, Sevoflurane results in a faster recovery and a “clearer-headed” patient after an anesthetic episode than Isoflurane. However, in the absence of Sevoflurane, Isoflurane is an acceptable alternative.

Manchester Terriers, like other sighthounds, are prone to heat loss and hypothermia due to low body fat. Keeping the anesthetized and recovering patient warm and hydrated via IV fluids will promote a quicker recovery. Additionally, initial research suggests that the Toy variety of Manchester Terrier is prone to atrioventricular block and should be monitored via EKG throughout the anesthetic episode whenever possible. The EKG should be printed out and become part of the dog’s permanent record, and any abnormalities analyzed either in-house or with an outside specialist. Although this predisposition to AV block may not be related to juvenile dilated cardiomyopathy of Toy Manchester Terriers (which causes acute death without warning in individuals less than one year of age either at rest or during general anesthesia), it bears careful consideration in light of a known heart disease that is acutely lethal in the breed.

Veterinarians: For questions regarding individual EKG printouts and juvenile cardiomyopathy, contact Etienne Côté DVM, DACVIM (Cardiology, Small Animal Internal Medicine), University of Prince Edward Island, at (902) 566-0950

Breeders: Contact Michelle Barlak, Juvenile Dilated Cardiomyopathy Study Liaison, at michelle@bleusprings.net or (585) 329-4317

Important Points to Remember:

- Treat both varieties of Manchester Terriers as small Sighthounds in terms of anesthesia
- Premedication with an acepromazine/opioid combination is safe and effective as long as the acepromazine is used at the lowest effective dose
- Induction with Ketamine/Diazepam, Propofol, or Thiopental IV, followed by maintenance with Sevoflurane or Isoflurane is the preferred anesthetic regime
- Keep the patient warm and hydrated with IV fluids during anesthesia and recovery to promote a faster recovery
- The Toy variety of Manchester Terrier is prone to AV block and should be monitored via EKG during the anesthetic episode whenever possible
- The EKG should be printed out to become part of the dog's permanent record, and analyzed for any abnormalities
- Juvenile Dilated Cardiomyopathy is an emerging problem in the breed, and EKG abnormalities should not be taken lightly given the acutely lethal nature of the disease