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FRENCH BULLDOG ANESTHESIA PROTOCOL

As suggested by Veterinarian Dr. Lori Hunt, DMV

Introduction

French Bulldogs are a brachycephalic breed and present an anesthetic challenge. This is not news to their devoted fanciers! Sometimes, however, it can be to their veterinarians. Their lovely plush heads give them short noses, small nostrils, narrow tracheas and thickened airways which in turn creates a different way of processing anesthesia. Unfortunately, we have all heard the horrific stories of someone's poor sweet Frenchie who died while under anesthesia. Lately, It seems, we have been hearing even more of this sort of story. This prompted me to share my personal anesthesia protocol which I use in my frenchies and my clients' frenchies.

About the Author: I am a practicing small animal veterinarian in Westlake, Ohio. I have a special interest in reproduction and brachycephalic breeds. Since 1999, I have been a French bulldog breeder and exhibitor, and veterinarian to several hundred regular frenchie patients and I consult worldwide on many French bulldog cases. This is in no way meant to be the only way to anesthetize a frenchie but I hope it will encourage owners to open a dialogue regarding anesthesia with their veterinarians and the idiosyncrasies of our breed.

Respectfully,

Lori Hunt, DVM

www.centerwestanimalhospital.com

French Bulldog Anesthesia Protocol

Requirement:

No food for 12 hours before surgery. This is crucial. If the dog eats the morning of surgery, cancel the surgery for that day. Vomiting and aspiration can have devastating effects in a Frenchie. In an emergency, it's possible your dog may have eaten. PLEASE tell your vet this info, as often it may affect how they recover your frenchie.

Recommendations:

- Do a clotting time, full blood chemistry work-up and complete blood count before anesthesia.
- Be sure an intravenous catheter will be placed prior to surgery.
- Ideally, all dogs will be administered IV fluids during surgery.
- Chest x-rays prior to surgery are always recommended by me for brachycephalic dogs, especially if the dog has had chronic breathing problems.

Optimum Choices:

Use **propofol** induction anesthesia, **intubate** (place a breathing tube in the trachea) and maintain on gas anesthesia (**isoflurane** or **sevoflurane**).

Satisfactory Options:

- **Dexdomitor** (reversible anesthesia/sedative and an excellent choice for pre-anesthetic in place of Ace).
- **Hydromorphone** (low doses work well).

(Author's note: the combination of the above drugs works excellently in Frenchies and can be incredibly useful during respiratory distress. This drug can cause excessive panting, so low doses to start are best.

Use Caution:

- **Butorphanol** (mild sedative for short procedures such as an x-ray). This is also called **Torbugesic** or **Torbutrol**.

(Author's note: I have found many Frenchies to pant in excess with this drug and have prolonged sedation and lead to respiratory distress - however used in combination with dexdomitor this effect is lessened).

- **Ketamine** combined with **diazepam (Valium)**.

Do Not Give Frenchies:

- **Acepromazine (sedative)**
- **Pentobarbital (injectable anesthesia)**
- **Xylazine (sedative)**
- **Halothane (gas anesthesia)**
- **Thiopental**
- **Telazol**
- **Alfaxan**

Author's note on Alfaxan: newest injectable, I've already had several reports of frenchie deaths after administration- this could be due to its newness. I will continue to monitor reports of this drug.

Anesthetic Extras:

(These would be in addition to the optimum anesthetic protocol listed above and are recommended for longer procedures)

- **Famotidine (Pepcid)** or **ranitidine (Zantac)** injection (helps cut down on nausea and post-op vomiting, decreases risk of aspiration)

- **Dexamethasone** can reduce post-op swelling and make recovery faster in cases where the dog's throat is irritated from the ET tube, when the dog's palate is very long, or following palate surgery. A single injection can be given in these cases.

- **Cerenia** (an antiemetic to help prevent post-operative vomiting) (Author's note: I routinely give this intravenously to all my brachycephalic patients pre-op)

Intubation vs. Masking/Coning Down:

EVERY brachycephalic dog that goes under anesthesia should have an endotracheal tube (ET) placed in his or her trachea. **Always!** The airway must be protected at all times. The endotracheal tube should be left in until the dog is awake. Use intravenous propofol (or one of the other satisfactory drugs listed above) to induce anesthesia (which puts them under) and allows sufficient time to place the ET tube. From then on, anesthesia is maintained with sevoflurane or isoflurane.

Brachycephalic breeds, such as Frenchie, should **NEVER be masked down** with anesthesia. Masking down is when a mask is placed on an awake or mildly sedated dog's muzzle. The mask is held in place by restraining the dog. The inhalant, which has a bad smell, is given at high levels. As the dog breaths more and more, he/she gets sleepy. The problem with masking down Frenchies is that they can become very anxious, fight the mask and not breath well. Most Frenchies have problems breathing in the first place, this just makes it worse, which results in lower oxygen levels. Ideally, injectable sedatives are used and an endotracheal tube placed which is then attached to an anesthetic machine. This gives them the optimum oxygen supply.

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