

Family Pet Clinic of Redondo Beach

Brachycephalic Obstructive Airway Syndrome (BOAS)

What to Expect Before and After Airway Corrective Surgery

BOAS airway corrective surgeries performed at Family Pet Clinic of Redondo Beach include stenotic nares repair, elongated soft palate resection, and excision of everted laryngeal sacculles. All patients are fully evaluated pre-op, and most BOAS patients receive pre-operative chest x-rays. Soft palate and laryngeal sacculle issues can only be diagnosed/confirmed at the time that the patient is placed under anesthesia, so the owner will always be called as soon as the patient is stable under anesthesia. The surgical plan will be discussed before any surgeries actually start. We pride ourselves on our full transparency on surgery day.

High level post-surgical nursing care at home is an intrinsic part of any successful surgery, and this is especially true for our brachycephalic patients after airway surgery. Often, pre-surgical dysfunction such as chronic regurgitation, esophagitis, gastritis, hypoplastic tracheas, sleep apnea, and sliding hiatal hernias predispose our patients to a more difficult recovery. We have created these guidelines to help you get ready for post operative care at home.

All breeds have a 0.17% chance of death during or after surgery. Brachycephalic breeds have a 3.3% peri-operative mortality rate. Brachycephalic breeds have a **20 fold** increased risk during and after surgery. The first 3 hours after surgery are the most worrisome. We release our patients in a relaxed state so that they are able to get home without anxieties and hyperventilation kicking in. Our main concern is regurgitation and subsequent aspiration pneumonia. 1.9% of brachycephalic patients experience regurgitation leading to aspiration pneumonia after surgery. Family Pet Clinic of Redondo Beach has developed many helpful measures that minimize these risks.

Regurgitation is a mechanical and physiological dysfunction secondary to chronic negative upper airway pressure. The lower esophageal sphincter (the muscle that controls food and water flow from the esophagus into the stomach) is often weak and incompetent in our brachycephalic patients. Most of our patients will already be receiving medications and dietary recommendations before surgery, and most will need to continue after surgery.

Since many of our clients travel long distances, please plan ahead and know where your nearest 24/7 emergency clinic is located. Approximately 1 in 10 post surgical BOAS patients require additional professional medical care in the first 1-3 weeks after airway reconstructive surgery. Some of them need to be hospitalized for an additional 1-3 days for 24 hour care. Family Pet Clinic of Redondo Beach closes at 6 pm so we are not able to supervise your recovery. Some patients require 1-3 weeks for the gastrointestinal issues to start to resolve. BOAS patients are prone to continued regurgitation and aspiration pneumonia. Surgery can resolve 25% to 100% of the regurgitation issues, but sometimes a few weeks are needed, and those few weeks can be rigorous and worrisome. We will do our very best to support you during this time via e-mail, text and phone conversations.

Brachycephalic breeds should never go more than 8 hours without eating. Frequent small meals are better than 1 or 2 large meals on a daily basis. This is why we recommend that our patients get a small meal or snack (often with previously prescribed medications) first thing in the morning before you leave the house to bring your dog to the hospital. After surgery, when you get home, please allow your dog to relax and recover for an hour or two, and then start offering sips of water and small bites of food. Again, small amounts frequently will be a huge part of the success of surgery after care at home.

Commonly prescribed medications:

Sucralfate (Carafate): Sucralfate is a mucosal “band aid”. This is a chalky pill that you place in a syringe, suck up 3-5 ml (cc) of water or broth to dissolve the pill, and then administer orally every 8-12 hours. Sucralfate must be given 2 hours before any other medications. Sucralfate is an intrinsic part of the healing process with chronically regurgitating and vomiting dogs.

Famotidine (Pepcid AC): Famotidine is an over-the-counter antacid. Stomach acids are destructive and will damage a dog’s stomach lining, esophagus, and even the throat and roof of the mouth. All of our patients receive this drug via injection first thing in the morning before surgery. Most patients will be placed on famotidine before and after surgery. You can purchase 10mg tablets at any human pharmacy. Famotidine is given once or twice daily.

Omeprazole (Prilosec): Omeprazole is an over-the-counter antacid. Some bulldogs do not respond well to omeprazole so we will often recommend famotidine in these cases. Omeprazole is given once or twice daily.

Metoclopramide (Reglan): Metoclopramide is a “pro-kinetic” drug that promotes normal muscle tone in the esophagus and the stomach. This drug helps food and water go “south” instead of “north”. All of our patients receive this drug via injection first thing in the morning before surgery. Most brachycephalic dogs will already be on the tablet form of metoclopramide before surgery, it is often sent home after surgery, and it is given every 8-12 hours.

Ondansetron (Zofran): Ondansetron is an anti-nausea drug. All of our patients receive this drug via injection first thing in the morning before surgery. Some patients will go home with it in pill form. Ondansetron can be given every 8-12 hours.

Cerenia: Cerenia is a powerful anti-nausea medication. All of our patients receive this drug via injection first thing in the morning before surgery. Many of patients will go home with the pill form. Cerenia is given once daily and should be given 1 hour before other medications or food.

Gabapentin (Neurontin): Gabapentin is a pain medication and also a mild relaxant. We heavily rely on gabapentin after surgery for both effects. Gabapentin has a very safe, broad dose range and is given every 8-12 hours.

Trazodone: Trazodone is an “anxiolytic” (anti-anxiety) drug and it is used to keep patients calm and relaxed before and after surgery. Anxious and over heated brachycephalic dogs experience many destructive physiological effects. Keeping these patients calm and relaxed is an intrinsic part of the healing process. Trazodone will likely cause mild sedation, it is very safe, and all patients go home with it. Trazodone is dosed every 8-12 hours “as needed” for relaxation.

Carprofen or Meloxicam: These two drugs are non-steroidal anti-inflammatory drugs and may be sent home depending on a number of different variables. These drugs prevent pain and inflammation.

Helpful home tips to facilitate brachycephalic success before and after surgery:

Pet Ramps and “hamster-bottles” — you can purchase these products on-line or at pet stores. All brachycephalic dogs must eat and drink with their heads and bodies in an elevated position. Regurgitating patient can learn to drink from a **“hamster- bottle”** (i.e. Vannon dog water dispenser) which is fixed in an elevated position in front of an incline, so a dog has to lift and extend the head to drink. Dehydration is a major hindrance in getting our patients to overcome chronic regurgitation. Hamster water bottles make it less scary for the dogs to drink, because they are in the optimal position utilizing the assistance of gravity. Water and broth can be placed in the bottles.

Thermometer (rectal) — Please have a digital rectal thermometer handy along with KY jelly or petroleum jelly.

Elevated Food and Water Bowls need to be placed high enough to reach your dog’s shoulders. Our goal is for the dog to not have to lower the head to eat and drink.

Blender — Some patients will need pureed food for post operative feeding until we are satisfied that eating and drinking can resume normally.

Summary:

Dr. Kimberly Daffner has been a “bulldog expert” for over 30 years. She has performed thousands of airway corrective surgeries on brachycephalic dogs and even a few cats. Her success rate is far above average and she prides herself on her client education, transparency, patient triage/care and post-operative support.

The popularity of the brachycephalic breeds and the indiscriminate breeding practices for profit have lead us to these desperate and unfortunate circumstance whereby a very high percentage of sweet, funny, affectionate furry family members require aggressive surgical intervention in order to lead even a semblance of a normal life.

Family Pet Clinic of Redondo Beach does not condone or facilitate the breeding of English or French Bulldogs. The available gene pool has been so diminished that these breeds are reaching the “end point” of their success as a breed.

Some patients are so incapacitated with their physical deformities that even basic “life” is a risk. Unfortunately, surgical correction of the airways will always carry risk and often be very difficult, but the surgical risks quite frequently out-weigh the risks of just trying to stay alive, and breath, go for a walk, keep food and water heading “south”, and sleeping without apnea.

Family Pet Clinic of Redondo Beach has a highly educated and talented team dedicated to the transformation of brachycephalic breeds into healthier, heartier, thriving family members.

Sincerely,

Dr. Kimberly Daffner

“Bulldog Expert” (310)376-0072