

Minerva's Story

Surviving Cleft Palate

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Few things will make a breeder's heart sink like weighing a neonate the day after birth and seeing a decline in weight. You quickly play over everything in your head: the temperature seems okay, she is vigorous, her mom seems to have plenty of milk, all of her siblings gained weight. So, you open her mouth to investigate further. Then you see, or in my case, I actually didn't see, a palate. There wasn't one. Where the roof of the kitten's mouth should have been, there was just an empty void.

My Calico Exotic Baby Had a Cleft Palate.

There are varying degrees of severity when a kitten has a cleft palate. Unfortunately, it's not uncommon for breeders to see some occurrence of this defect at some point in their career. Reasons for the defect vary. Incomplete closure of the palate is attributed to inherited, nutritional, hormonal, mechanical (in utero trauma) and toxic (including viral) factors.¹ Whatever the reason, it is a sad and potentially fatal situation to face just as you are rejoicing over a beautiful new life.

When I opened the mouth of my cleft palate baby for the first time, I felt sick. She had one of the worst-case scenarios; there was no palate present at all. I reached out to some other breeders for advice, as well as a veterinary technician friend who I knew had dealt with this in the past. The consensus was not encouraging. People expressed concern about potential other underlying conditions. There was also a fair amount of concern that the kitten would suffer from issues secondary to her care, such as infections, aspiration from tube feeding, etc. Euthanasia would not have been a wrong decision.

“Just one feeding. . .”

I picked up the little 72-gram kitten and took a good look at her. She was so angry! She screamed at me and waved her tiny paws. I needed to think about a course of action. Meanwhile, I felt the least I could do for the time being was to give her a tube feeding. That way she would have a good meal and a full belly while I decided what to do. (Luckily my mentor had made sure I could perform this skill before I started breeding.) A couple of hours went by, she slept and I worried. I did another tube feeding—and then one more. “Well, maybe I should just sleep on this before making any drastic decisions,” I thought.

Tube feedings every few hours through the night were easy and quick. Three days later I had a fat, full-bellied baby who weighed in at 114 grams. She also had a name: Minerva. And I wasn't going to let go of her.

I will admit the first few weeks were pretty uneventful, other than having to wake up constantly and bring her everywhere with me. I outfitted a small fabric carrier with a heating pad and some blankets and I took Minerva just about everywhere with me, as long as there was a plug for her heating pad. At around three to four weeks of age, she developed what I thought was an upper respiratory infec-



tion. According to our veterinarian, Dr. Jack Heller, it was actually a condition called chronic rhinitis, or inflammation in her sinuses. He explained the lack of palate meant there was no barrier between her mouth and her sinuses, so she had no built-in protection from bacteria, dander, dust, pollen or just about anything else in a normal environment. This irritated her sinuses and surrounding tissue, causing inflammation and excess mucous. I added Clindamycin into her tube feedings once a day and it immediately cleared up the issue. Two weeks later I took her off the antibiotics, but a few days later it started up again. Now I was worried. Minerva wasn't though, she just kept on thriving, just had some excess snot.

New Feeding Challenges

The five to six-week mark brought some more issues; sharp ones. Minerva's teeth were coming in. This is a huge issue when a kitten is being tube-fed because its teeth can cut through a feeding tube very easily, and that turns into a foreign body surgery. I was extremely lucky she was not biting the tube, but luck isn't enough.

Now I had to figure out how to feed a kitten with teeth and chronic nasal discharge, who also cannot have anything liquid in her mouth? That meant no soft food, no raw food, no water, no formula—nothing. I could not even put liquid medicine directly into her mouth because she would choke and it would come out her nose.

Minerva and I had fought too darn hard to for me to let her aspirate now. The easy answer to this is an Esophagostomy tube, or “E Tube,” a small rubber tube that enters the esophagus through a surgical incision on the side of the neck. This allows food to be placed directly into the esophagus so that it can flow down into the stomach, bypassing the mouth and pharynx.² This was not an answer I liked. Quite frankly, it scared me more than anything else I had dealt with up to this point. I knew of two kittens who had this procedure done; both responded negatively and needed the tubes pulled out within a matter of days. A third kitten I knew of died from the procedure. These are not necessarily normal reactions, and these kittens may have had other underlying issues. But now, I was more worried.



little spitfire calico...

I didn't have to worry. Minerva, my sassy, spitfire little calico, figured it out for me.

Minerva's tube feedings were no longer providing enough calories for her to gain weight. She had hit a plateau. Not only was she hungry, she was mad about it. I decided to do a little experiment. I took a rather large, football shaped piece of kibble that I thought was too big to get stuck in the roof of her mouth, and I gave it to her like a pill, popping it right down her throat. She accepted it, then took about a dozen more. Instinct took over. Minerva could eat!! I had to hand her one piece of kibble at a time, but that little girl knew exactly what to do. She swallowed each kibble whole and kept going until she was nice and full. She needed hydration another way now that she was no longer on a liquid diet via tube, so I added in sub-cutaneous fluids twice a day.

Then, I came up with a better solution—a hamster water bottle! Minerva could lick the little ball and get water independently, but avoid aspirating because she was not taking in enough to flood her mouth. There was a little more of a learning curve for that trick, but by six to seven weeks old, my little girl was eating and drinking!

Planning for a Complicated Future

Minerva went to the vet for her first vaccines, and followed a typical kitten schedule. She handled everything without issue, other than the nagging inflammation in her sinuses. She came to work with me, traveled with me and became quite the companion. We were never apart. Me, Minerva in her little carrier, a baggie of kibble and her hamster bottle. When she was approximately eight weeks old, I took her into New York City to meet with the veterinary surgeon I had selected to do her future palate repair. The surgeon, Tomas Infernuso, DVM, DACVS, gave her a clean bill of health, and we were told to schedule the surgery when she reached eight to ten months of age. Dr. Infernuso explained that the surgery would be most successful when her head and adult dentition had finished growing. Doing the surgery on a baby would mean that the maxillary bones would pull the surgical repair apart as they widened. Until then, she just needed to be kept fed and healthy.

Now comes the hardest part. We breed to better our breeds. We also breed to provide loving companions to people who respect and love our particular breeds. That means letting kittens and retired adults go to loving homes to complete families. Minerva actually had a guardian angel who had been keeping an eye on her progress from day one. Ellen, a former kitten buyer who had been patiently waiting for a calico kitten from me, wanted Minerva from the second she was born, even with the cleft palate. She also wanted to pay for her surgery and provide a lifetime of love and care. We had kept in touch with regular updates through Minerva's life, and Ellen had become as attached to her as I was. So, I knew where she was going. The challenge was in letting her go.

Two more months went by and I booked a flight to Alabama so I could take Minerva home to Ellen and show her how to feed her. My miracle baby never even looked back for a second. She got on the couch with Ellen, ate her kibbles one at a time (she was now up to over 100 per feeding) and played with every new toy she could find. I flew back to New York in tears, but they were happy tears.

Minerva will be 10 months old in March, 2023 and her surgery is scheduled. Ellen will fly her up to New York and stay nearby while she has her pre-op exam and blood-work and the surgery itself. Once Minerva is stable enough, Ellen will take her home and complete the recovery process. I am incredibly nervous but this cat has proven me wrong so many times. I am hoping she does it again.

Afterword - March 15

Wednesday at 2pm the surgery coordinator called to tell me Minerva was getting sedated and prepped. About 10 minutes later my phone rang and my heart sank...I was afraid to pick up but I did. It was the surgeon. He told me that once sedated he could see much farther back, and it was worse than he ever thought. Absolutely no tissue was there. He said he could do the surgery but there was a 70% chance it would fail within 2 weeks.

Then he asked me how she was doing. I explained she was a totally normal cat in every way, even drinking out of a water bowl, she just needs to be hand fed her kibbles one at a time. He told me that it sounded like Minerva had figured out how to be normal, and he did not recommend the more serious surgery...which would consist of removing her teeth and then using that tissue to reconstruct the roof of her mouth. He said it would be multiple surgeries and she would need a feeding tube while healing.

I asked him what the risks were of her aspirating at some point and he said low, because Minerva knows what to do. He also explained how we can use q-tips to keep the opening clean.

So....this cat knew all along she didn't need me or some vet telling her how to live her life! I took her and Ellen to Laguardia today and they're on their way back to Alabama as I write this.

1. Hedlund, Cheryl DVM, MS, Diplomate ACVS, "Small Animal Surgery," Mosby-Year Book, 1997, p. 211-212

2. Williams, Krista BSc, DVM, CCRP "Esophagostomy Tube Feeding in Cats" VCA Animal Hospitals <http://vcahospital.com/know-your-pet/tube-feeding-esophagostomy-tubes-in-cats>