
Contessa


Anna


Abigail

Premature Cria Care - Three Success Stories

By Susan Buser

Preemie crias are both a challenge and a blessing. They require a tremendous commitment of our time and energy to get them up and going, but they reward us with the opportunity to interact very closely and form a very special relationship with a member of this gentle species. Nothing could be more satisfying than saving the life of one of these precious little ones.

I am going to share with you some general advice on dealing with preemies as well as some information on three specific cases of preemies we cared for who are now very healthy juveniles or adults. Hopefully this will help you to have the confidence that with your vet's help, you can properly care for a preemie if and when one arrives.

How do I prepare for the possibility of a premature cria?

First of all, learn all you can on the subject from good sources. There are many experts in the camelid world, but two of my personal favorites in the alpaca industry for sound, detailed information on this topic are Dr. Toni Cotton and Dr. Steve Hull.

Attend seminars when possible and purchase books on general camelid care as well as specifically on birthing and preemie care. Take responsibility for the health and care of your animals and prepare yourself accordingly.

Establish a good working relationship with your vet if you have not already done so. Provide them with educational materials if they are not familiar with camelids and establish communication and trust so that they will listen to you in a crisis (and vice versa) and that they will be ready to drop what they are doing for you and your cria.

Have the proper supplies on hand. Some of the items needed: stethoscope, nasal aspirator, iodine solution, towels, cria jacket, Pritchard teat, thermometer, blow dryer, light Karo syrup. Have the following items on hand or know where to get them quickly: Naxcel (antibiotic), frozen colostrum, frozen plasma.

Commit yourself to a rigorous watching schedule when you have an upcoming birth. We begin checking on the dam every two hours during daylight, and once before bed, at 10 months and continue that until the cria is born. Even before that, you need to be watchful of the dam and her behavior in case you should have an extremely early birth, as we learned with our preemie Anna, who was born at almost a full three weeks early. We were not expecting a cria yet, so were not checking with regularity. When we found her, Anna was already hypothermic and hypoglycemic, in addition to her other problems of prematurity.

With any cria, it is best that you be present at the birth, but this is especially important with preemies. They may need immediate assistance in order to survive.

How do I know if I have a premature cria?

A "normal" gestation seems to be about 11 months in the fall, and closer to 11 1/2 months in the spring. On our farm, we treat any cria that shows visible signs of prematurity or any cria that is premature by date of delivery (regardless of appearance) as premature. Why? Because it is possible for a cria to look fine, and to do reasonably well for several days, and then begin to crash due to immature organs, septicemia (infection), or other problems.

This was the case with a sweet little cria named Abigail. She was weak when born, so her owners made the proper commitment to her and had stayed with her in the barn around the clock, helping her to stand and nurse, supplementing her with a bottle, seeking vet advice and making sure she was going to be alright. She seemed to be improving for a couple of days, but then on the third day began to go downhill very rapidly. They decided to bring Abigail to us and our vet since their vet was not immediately


Abigail

available. On the ride over, Abigail did not move at all and the owners were afraid they were going to lose her before they could get her here.

Examination by the vet and bloodwork results revealed that Abigail's problem was immature organs (specifically the liver and kidneys) that were not functioning at full capacity yet. Toxins were building up in her body and could not be flushed out and she was becoming very seriously ill, very rapidly. Without quick action on the part of these owners, this little cria would have been lost.

At birth, Contessa was extremely weak, small and lacking in muscle tone. She wanted to lie on her side and had no desire to try to get up. Even when put into a cushed position, she was weak and unable to hold the position well. She also had bright red membranes, often symptomatic of septicemia. (Healthy membranes are bubble gum pink.)

Soft cartilage in the ears can cause ears that are almost flat and bend backwards or "flop". This is temporary.

The epidermal membrane may be attached at toes, feet, mouth, and other locations.

Some crias will exhibit one or even several outward signs of prematurity. These include: weakness and overall lack of muscle tone; low body weight; epidermal membrane that is still attached at mouth, toes, or vulva; bright red membranes on nose and ears; incisors that are not fully erupted; weak pasterns; rear legs and hips that look like they are not fully "unfolded"; soft cartilage in ears; weak suckle reflex; breathing problems.

What do I do when my cria is born?

First, as with any cria, clear the airways. You can use your finger to check the mouth for any obstructions and a nasal aspirator to clear any mucous from the nose. Some open-mouthed breathing may be normal at first, due to the constriction the cria has experienced during birth. But if this does not resolve within 10 minutes, or if the cria is struggling for breath when born, seek vet attention as quickly as possible. The preemie may have underdeveloped lungs and could need oxygen and further immediate attention. Continued open mouthed breathing could also be sign of choanal atresia; a permanent obstruction of one or both nostrils.

Quickly evaluate your cria for prematurity. If you think you have a preemie, call your vet. Let him or her know that you will need a farm visit or that you will be bringing the cria in for an evaluation. If the cria seems weak or sickly, get the vet there as quickly as possible. Move quickly to save this cria's life.

Dry the cria with towels, and if the cria is chilled, gently blow-dry her, keeping your hand in the stream of air to make sure it is not hot enough to burn her delicate skin.

Check the cria's temperature. It should be around 100 to 102 degrees. If the cria is hypothermic (has a below-normal body temperature) do not feed her any milk until you raise her temperature. Milk given to a hypothermic cria will curdle in the stomach and cause further complications. If the cria is extremely weak, put a little light Karo syrup on your finger and put it in her mouth to give her a little glucose to hold her over while you work quickly to try to raise her temperature.

Check the cria's heart rate (about 90 to 100 beats per minute is normal in alpacas) and listen for any abnormalities in the heart rhythm. Listen to the lungs for normal breath sounds on each side. Rattling sounds may indicate fluid in the lungs.

Feed your cria. If the cria is able to stand with assistance, assist her to nurse every 30 minutes. If she is not able to stand (and her temperature is normal), milk the dam and begin feeding the cria.

If the dam will not cooperate and the cria is weak and in need of food, you can use canned milk or whole milk. You can

Dry your cria with towels. Blow dry your cria gently if the cria is chilled and then put your cria in a soft, warm cria jacket. Remember that the cria cannot thermoregulate well, so keep her warm and comfortable. Drape additional towels over her if she is still cold, or hold her close to your body to warm her. Insulate her from the cold ground or stall floor with hay or blankets.

A Pritchard teat will fit on a water or soda bottle. Rinse the bottle and nipple well before use and after each feeding.

add a little Karo syrup to the milk if the cria is weak and seems hypoglycemic. Warm the milk and put it into a bottle with a Pritchard teat and offer it to the cria. Most crias will take to the Pritchard teat with some help on your part, but if the cria has an unusually small mouth, you can try another option. Take a small size zip-lock bag, put a couple of ounces of milk into it, cut a small opening in one corner, and put the corner of the bag into the cria's mouth. The bag is soft and shaped much like a teat, and sometimes easier for a very small preemie to grasp.

If your cria has an underdeveloped suckle reflex, you can use an oral syringe to get milk into her. Just be careful… give a little bit at a time (so as to not overfill her small stomach) and make sure the cria is swallowing (so that the cria will not aspirate the milk into her lungs).

Patience is the key here. Regular small feedings are more appropriate than large feedings because of the small stomach capacity of the cria and her need to maintain an even blood sugar level. She will probably need feedings every 30 minutes if she is weak (more often at first if she is critical). You will need to continue this until she is able to get on her feet and nurse directly from mom. Once you reach this stage, make sure she is actually getting milk. Strip all the teats and check each for milk before putting the cria under the dam. Then make sure the cria is actually latching on and taking in milk, not just sucking in the area of the udder.

If your cria was at a crisis point and you started her on cows milk, as soon as you have her somewhat stabilized and have the time to focus on mom, get help if necessary and milk the dam. The cria needs the colostrum from mom as soon and as often as possible. The first 12 hours are especially critical. If the dam has no milk at first, use a substitute colostrum (frozen lama colostrum is best) until you can get milk from mom.

If you need to heat any type of colostrum, remember to gently heat the bottle in a bowl of hot water. Direct heat will destroy the vital proteins.

If the cria is very sickly, weak and not on its feet, stimulate the cria by massaging her legs and body and interacting with her. As she gets stronger, help her to stand and learn to balance.

Now, evaluate your cria for further problems. If your cria has bright red membranes (and especially if her temperature is elevated which could also be a sign of infection), we suggest starting her immediately on an antibiotic appropriate for addressing septicemia. We use Naxcel; consult your vet concerning the dosage.

If the cria is trying to nurse and seems to gasp and "splutter" when trying to nurse, the cria could have choanal atresia. Check to see if breath is coming out of each nostril and if you suspect a blockage, have the cria examined by your vet.

Proceed with normal cria care: dip the umbilicus in iodine or dilute Nolvosan (once the first day, once for 2 or 3 more days), look for the meconium (first bowel movement to pass), etc. Constantly be evaluating your cria's energy level and needs so that you can give it the best care possible.

Commit yourself to doing whatever it takes to save this cria. Your preemie may need to go to a hospital. Be ready to transport it right away if the vet feels this is the best course of action. Or, your cria may be able to be cared for at home, with vet oversight. Be ready to do what needs to be done.

If you can, keep the cria with mom. Move yourself out to the barn and heat the stall if it is cool to keep the cria comfortable. If the cria is extremely critical, go ahead and move it inside and focus on saving its life. You can worry about rejoining it to mom later.

Remember that a preemie with almost no body fat will get cold much more easily than you, so heat the house or stall until the cria is comfortable. Any calories burned shivering and trying to stay warm are calories that could have been used to fight for life.

If your cria comes indoors or goes to a hospital, keep the dam on a regular milking schedule while the cria is absent if at all possible. A week of milking the dam is much easier than 6 months of bottle feeding!

Always remember to go ahead and run bloodwork (a CBC and Chemistry panel) at 24 to 48 hours, even if your cria seems to be improving. You will not know if there are internal problems that may cause your cria to crash later unless you run these tests. Keep a close eye on your cria for several weeks to make sure there are no changes in energy level, activity, etc. that might indicate a problem.

You may want to draw blood for an IgG as well (at 24 to 48 hours) to determine if the cria has received the proper antibodies from the dam. If she has not, you may want to consult with your vet about the possibility of doing a plasma transfer, but…remember that plasma transfers are not without risk, should only be done in a vet's office under careful supervision, and should only be done if medically necessary. They should never be used as a "cure-all".

What might I need to do for my preemie if I care for it at home?

Some preemies may get up on their feet and begin nursing within a few hours of birth, if you provide the feeding and care described above to get them going. Others may take an overnight vigil; some will take several days of intense care. (All of this should be under vet supervision.)

I personally will not leave a cria that has been weak and sick alone (even if it is doing better), for more than an hour or two for several days. If there is a relapse, I want to be able to act quickly and get the cria the help it needs.

Here are three examples of preemies, with different problems, and a brief description of how each was cared for.

Contessa

Contessa was very weak when she was born. It was on a holiday weekend, so we were unable to get a vet to come and evaluate her, and were pretty much on our own. We were still new in the business and were quite nervous about caring for her. We bedded her down in a stall in deep hay, put her in a jacket and put blankets over her. We warmed the stall with a space heater and began milking the dam and feeding Contessa. We started her on Naxcel right away due to her bright red membranes. It took 8 hours of feeding and constant stimulation and massage to

Observe your cria's body position. Notice the difference here between a strong, healthy cria and a weak, sick cria. The cria above is upright, alert, the ears are up and she is holding her cushed position easily. The cria below (Contessa) is slumped and barely holding up her neck or staying in a cushed position.

get her on her feet (and only weakly then).

We took shifts caring for Contessa. We helped her stand every 30 minutes to nurse and fed her mom's milk by bottle when she was too tired to stand, even with our help. She continued to be quite weak and required our constant attention and interaction just to keep her "with" us for several days. She went through several ups and downs over those days, was given a plasma transfer at a couple of days of age, and was finally doing pretty well by day 6, when we were able to go back to a normal schedule. We were able to care for her in the barn throughout this time, so she remained bonded with her mother and adjusted very well to a normal life. She is now a beautiful and healthy adult who is producing crias of her own and is a very special member of our herd.

Anna

Anna was weak and hypothermic when we found her, so we went into overdrive trying to raise her temperature. We blow-dried her, rubbed her, heated the room, bundled her up and held her next to our bodies and did everything possible to get her up to a normal temperature as quickly as possible. As she approached a normal temperature, we began giving her very small amounts of milk, with a little Karo syrup in it since she was extremely weak and hypoglycemic and every second was crucial if we were going to save her life.

She was still limp and nearly lifeless despite being warmed and being fed, so we called the vet and arranged for an emergency office visit. He started her on Naxcel, ran IV fluids in the office and sent us home with instructions to run IV fluids regularly.

We propped Anna's head up on an incline to help strengthen her neck muscles.

We ran IV fluids every 2 hours, and fed Anna every time she was hungry (usually about every hour) around the clock for 6 days. We then went to bottle feedings only, no IV fluids, still around the clock. We spent the first 2 days in the barn, but then moved her inside for the long haul. We stimulated and massaged her and took her to our vet almost every day for tests and evaluations. Her bloodwork showed that her internal organs were functioning fine, which was a relief. She was just extremely weak and lacking in muscle tone or body fat and so was completely limp and helpless.

She required a plasma transfer on day 3 and was on antibiotics for a couple of weeks. It was 6 days before Anna could even lift her head, and 10 days before she took her first wobbly steps. We were on around-the clock care for several weeks with her, and it was a month before she could live outdoors even during the day.

We worked with Anna constantly to exercise and strengthen her muscles—first her neck, and then her legs-- as well as interacted with her very intensely to help to give her the will to survive. We felt that she needed that closeness to another living being if she was going to make it. I held her most nights (and days) on my chest and covered us both with a blanket—she needed the warmth as well as the closeness since she would shiver even if well bundled up. She would nuzzle me when she was hungry, I would feed her and then we would both go back to sleep.

It was a long several weeks, but eventually she turned the corner and started to get better. We still had several months of close oversight and bottle feeding ahead of us, but we all made it and Anna is now a very happy, healthy member of the herd. Not to mention a very special member of our family!

We massaged Anna's body and exercised her legs to help build strength.

We helped Anna learn to stand, balance and eventually walk.

Intense interaction was necessary to save Anna and may be necessary for some critically ill crias

The vet may need to shave the cria's neck to insert a catheter port so that you can run IV fluids at home.

Abigail

Despite her owner's best efforts, Abigail had started to crash. When she got here, she was motionless and looked very, very sick. Her eyes were "scrunched" tightly shut and the expression on her face was one of discomfort and delirium.

The vet ran IV fluids in the office, ran bloodwork, started her on the Naxcel regimen and sent her home with us with IV fluids. When we received the bloodwork results, the CBC was normal, but the chemistry panel showed elevated levels of kidney and liver enzymes.

The IV fluids were prescribed to flush Abigail's system of the toxic substances while we gave the premature organs a chance to mature and begin functioning fully. We ran 100mls of fluids every 2 hours (the same as for Anna) around the clock, for about 4 days. Abigail arrived just as Anna was beginning to improve (Anna was about 2 weeks old) so Anna and Abigail took up residence together and helped each other along.

A baby diaper, with a slit cut for a tail is ideal for an indoor alpaca. If the floors are slick, wrap the feet with a little vet wrap for traction.

Abigail began to perk up quickly with the administration of fluids. She still kept her eyes closed, or almost closed all the time. We began to examine her eyes more closely and with the vet concluded that her eyes were not fully developed. They were very strange looking, in that the pupils had 4 lobes like a 4-leaf clover. Over the next few days they slowly changed into the typical alpaca pupil shape and she finally was able to open her eyes widely and see clearly.

After a couple of days Abigail was much stronger and able to move around pretty well, despite badly bent legs that looked like they would never straighten out. This apparently was a part of her prematurity; her legs have straightened out and are fine now.

After a couple of weeks, Abigail and Anna were running races around the house and ready to get outside a little. Abigail went home with her owners, Steve and Sheila Hall of Corley Mill Farm. She is a very happy and normal little cria now who enjoys a very special place in the hearts of her "family" at Corley Mill.

Premature cria care requires a little extra work, the help of a vet, and a strong commitment to the life of your cria. But isn't this what we are here for? We have taken these beautiful and gentle animals onto our properties and into our care. They warm our hearts, enrich our lives, and provide a living for us; in turn we agree to provide for their needs and to be there to help them when they cannot help themselves.

After all, what could possibly be more satisfying than looking out the window and seeing the precious little face of a cria that you helped save? Whatever we need to do for them, it is always worth it.

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About the Author

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