





Case Study: Feline Dystocia and Cesarean Section at Port City Veterinary Referral Hospital

Presenting Problem

Marigold, a young Oriental Tabby, was presented to the Emergency Department at Port City Veterinary Referral Hospital on August 19, 2024, due to a kitten being stuck in her birth canal during labor. Marigold's foster family reported that she had been acting normally until the previous night when they noticed a sac protruding from her birth canal at around 2:00 AM. The situation had not changed by morning, prompting the visit to our hospital. Marigold displayed no signs of pain, but her condition warranted immediate intervention.

Care Team

Dr. Brandon Silva, Dr. Ella Pittman, Dr. Robert Hillman

Patient Overview

Patient: Marigold Species: Feline Sex: Female

Age: Estimated 1 Year **Breed:** Oriental Tabby

History

Marigold has a history of previous litters and was otherwise healthy, with no reported allergies or medications. Her vaccinations were up to date, and she had been eating and drinking normally until labor began.

Physical Examination

Upon presentation, Marigold was quiet, alert, and responsive but exhibited signs of anxiety. She was mildly dehydrated with tacky mucous membranes and a capillary refill time of less than 2 seconds. Notably, a kitten's tail and a small, yellow-clear sac were protruding from her vagina. Her cardiovascular exam revealed an intermittent gallop rhythm without a detectable murmur, and she was tachypneic with increased breath sounds bilaterally



Diagnostic Tests

An abdominal point-of-care ultrasound (POCUS) was performed and showed that Marigold had at least four kittens remaining in her uterus, with heart rates of around 180 beats per minute. Blood gas analysis indicated metabolic acidosis with respiratory alkalosis. No thoracic effusion was noted on the ultrasound.

Assessment

Marigold was diagnosed with dystocia, which is quite unusual, likely due to a stuck kitten. Given the risk of complications from further labor and the potential for additional kittens to become stuck, it was recommended that Marigold undergo an immediate cesarean section.

Dr. Brandon Silva

Surgery

Marigold was prepped for surgery and a lumbosacral epidural was performed by anesthesiologist, Dr. Ella Pittman. A routine ventral midline celiotomy was performed, and the gravid uterus was exteriorized. Nine kittens were milked through an incision in the uterine body and successfully resuscitated by our surgery and ICU teams. The uterus and ovaries were removed via an ovariohysterectomy.

Dr. Robert Hillman & Dr. Ella Pittman

Postoperative Care

Marigold was monitored closely during her recovery. She received Gabapentin 50 mg/mL for pain management, to be administered every 8-12 hours as needed. Marigold was discharged with detailed instructions on kitten care, including bottle-feeding protocols, as there was concern about her ability to nurse all nine kittens effectively.



Discharge Instructions

Marigold's surgical incision should be rechecked in 10-14 days with her primary care veterinarian. Careful monitoring of both Marigold and her kittens for any signs of weight loss, decreased appetite, vomiting, lethargy, or inability to nurse was recommended. Detailed guidance on orphan kitten care was provided to ensure the health and well-being of the entire litter.

Exercise

Marigold can regulate her activity level. Provide a guiet, stress-free environment for her recovery.

Diet

Feed Marigold a high-quality kitten diet to support her energy needs during nursing.

Medication

Gabapentin Soln 50mg/mL: Administer 1mL (50mg) by mouth every 8-12 hours as needed for pain. Begin tonight at 8 PM.

Monitoring

Watch for signs like weight loss, decreased appetite, vomiting, lethargy, or difficulty nursing. If any issues arise, contact your veterinarian.

Kitten Care

Nest Box

Keep the kittens together in a box with tall sides to prevent them from climbing out. Line the box with towels and a disposable diaper. Use a heating pad under half of the box to keep them warm.

Feeding

- Supplement only if Marigold isn't producing enough milk. Use kitten formulas like KMR or Just Born.
- Feed every 2-3 hours during the day. Let them sleep at night.
- Ensure no air is swallowed during feeding and gently rub them after to "burp" them.

Weight Monitoring:

Kittens should gain 0.25 to 0.35 oz daily. Track their weight using a postal or kitchen scale.

Assisting with Urination/Defecation:

Gently rub the genital area with a cotton swab or tissue to stimulate urination. Monitor stools for signs of diarrhea.



Outcome

Marigold recovered well from the surgery, and all nine kittens survived, including the one initially stuck in the birth canal. The foster family was instructed to follow up with their primary care veterinarian and to contact Port City Veterinary Referral Hospital with any concerns.

Client Communication

The humane society representatives were kept informed throughout Marigold's treatment and were provided with comprehensive discharge instructions. The foster family expressed gratitude for the successful outcome and the thorough care provided to both Marigold and her kittens.

Conclusion

This case highlights the importance of timely intervention in cases of feline dystocia and the successful outcome that can be achieved with a coordinated approach involving diagnostics, surgery, and postoperative care. Marigold and her nine kittens were able to return home to their foster family, where they will continue to be monitored and cared for during their recovery and development.

