

IMPORTANT POINTS FOR MAKING DECISIONS ABOUT YOUR BITCH'S PREGNANCY:

Take this with you if/when you go to the emergency or referral hospital.

We typically have doctors available for immediate C-sections on:

(hours current as of 4/6/2020, may be subject to change)

Monday – Thursday 8 AM till 6 PM

Friday 8 AM till 5 PM

Saturday 8 AM till 4 PM

Sunday Noon till 4 PM

Holidays - varies

What do you do if you are at a clinic or hospital that you believe won't provide our level of care for your bitch and her pups?

1. Before you go to the emergency clinic, call ahead to be certain they can manage your bitch's dystocia.
2. You can share this information and discuss your bitch's treatment prior to starting her care.
3. You can leave. Unless she is already on the surgery table, you can leave and go to another hospital. Our doctor hours are normally Monday – Thursday from 8 am to 7 pm, Friday and Saturday from 8 am to 5 pm and Sunday from Noon to 5 pm. The hours may vary on holidays but we usually have a doctor on call on the holidays.

Reasons NOT to spay your bitch at her c-section:

1. Pregnancy is a uniquely thromboembolic event. This means she is more likely to form blood clots during late pregnancy and in the immediate post-partum period. All bitches, whether they have had a c-section or not, are at increased risk of developing blood clots. These clots, as in humans, can be life-threatening, particularly if they lodge in the heart or brain. If she were to be spayed at this fragile time, she is a greater risk of blood clots formed at the suture sites, increasing the risk of blood clots. This is the most common cause of death in the period shortly after a c-section.
2. The bitch shares 1/3 of her blood volume with her puppies. Only a small portion of this shared blood volume will pass to the fetuses. Most is left in the uterine lumen or in the uterine wall and vasculature. Over time, this blood will be resorbed by the bitch to replenish her blood volume.
3. During pregnancy, the blood flow to the uterus is expanded to support the pregnancy and placentas. When the blood vessels are ligated (tied off), her blood pressure is lowered. Some bitches as they recover from anesthesia and her blood pressure increases to normal, a blood vessel may leak or a suture may slip off, resulting in bleeding, which may either lead to the need for another interventional surgery, or if this is rapid and severe, she may

die prior to getting her back to surgery.

4. Additionally, all of the blood vessels in the broad ligament (where the blood vessels supporting the ovaries and uterus) need to be tied off. If any are missed, there will be bleeding and possible drop in blood pressure which can lead to death.

5. When she loses blood rapidly from the removal of the uterus and ovaries (if she is spayed), she will suffer a rapid drop in blood pressure, which is likely to lead to cardiac and/or respiratory compromise or crisis during the procedure, leading to death.

6. Depending on the surgeon and techniques used, performing a spay at the c-section will add at least 30 minutes to a c-section. This leads to a delay in her bonding to her pups and allowing them to nurse during this early and critical period when her pups need colostrum and energy.

7. Be particularly wary if the veterinary staff wants to do an en bloc c-section – where they remove the uterus in its entirety with the pups still inside. This is an almost certain death sentence for your valuable litter.

8. A second surgery for a spay is safer than a spay at c-section.

What and how does Veterinary Village provide great care to my bitch and their pups?

1. We do approximately 200 c-sections a year at our hospital and have for many years. Most emergency clinics do approximately 10% of this number of these procedures annually. While emergency/referral clinics are highly skilled at managing trauma cases and other urgent care cases, reproductive cases are not their fortes. We have learned a great deal from our breeders during the 38 years we have been in practice.

2. We have a doctor (DVM) dedicated entirely to your bitch's surgical procedure and a Certified Veterinary Technician (CVT) or DVM managing her anesthesia.

3. The doctor or CVT managing her anesthesia will use a state-of-the-art monitor that will monitor her heart rate and rhythm, her SPO2 (oxygenation of her blood), CO2 (exhaled carbon dioxide), respiratory rate, and blood pressure.

4. She will have a full blood panel including a CBC (blood count), chemistry panel and Protome/PTT (to assess her body's ability to clot blood), handle anesthesia and post-op pain medications.

5. She will also have an EKG, screened by a board-certified cardiologist prior to the start of her anesthesia.

6. She will have an IV catheter to provide her with IV fluids, critical for her to have safe anesthesia and surgery. **NO C-SECTION SHOULD BE DONE WITHOUT IV FLUIDS.** This IV catheter will also provide us with a way to administer emergency drugs during and after the procedure if needed.

7. She will have a tube in her trachea, to deliver the oxygen, gas anesthesia, and to keep her airway open and protected against possible vomiting. No pregnant bitch should have anesthesia without an endotracheal tube. The weight of the puppies on her diaphragm compresses her lungs and makes breathing difficult. Good blood flow and oxygenation of

her blood is critical to healthy pups when they are born. Brachycephalic dogs in particular are at risk of their airway closing when they are on their backs, in the position required for the surgery.

8. She will receive oxytocin during the procedure to aid in bringing in her milk as well as to minimize blood loss from the placental attachment sites in her uterus.

9. We average 1 team member per puppy. They are a highly trained and efficient team, helping you to produce better outcomes. They will manage their immediate post-delivery recovery, using careful suctioning techniques, heat, oxygen, and other methods if indicated. They also will manage their umbilical cord care, plasma administration if indicated, weight and identification. Your pups will be placed in our "PuppyWarmer" incubator and oxygen chamber while your bitch's surgery is completed and she is recovering.

10. We induce our girls with Alfaxan and maintain their anesthesia on Sevoflurane for the most rapid recoveries for your bitch and her pups. Propofol is another safe anesthetic agent.

11. We perform as much pre-op prep as possible to minimize time from the start of anesthesia to the time the first pup is born. This usually takes approximately 10 minutes with an average of an additional 1 minute per pup for delivery time. Rapid delivery of the pups leads to more successful outcomes.

12. We do not scrub the nipples but instead use an occlusive drape. This helps the pups to better find their mother and nurse more successfully.

13. Unless the circumstances are dire, we do not recommend spaying her at c-section. The need to spay at this time is very rare. The recommendation to routinely spay at C-section will not be made by our doctors.

14. In most cases, only 1 incision is made into her uterus to minimize scarring and maximizing her future ability to have a nice sized litter.

15. We close the uterus with a special surgical pattern to minimize post-op scarring which could lead to smaller future litters.

16. All of our girls go home on post-op pain medications to improve her ability to lactate and her maternal skills. We use a non-steroidal anti-inflammatory which we have done for over 20 years safely. We do not use opiates as they may alter her mental state and make her clumsy around her pups.

17. If indicated, she will also go home with medications appropriate to improve her milk production and maternal skills.

18. If indicated, we are prepared to provide plasma and other appropriate medications for supportive care to her pups.

19. We have very detailed instructions on post-op care of your bitch and how to raise your pups.

20. We will also help you to help your puppies nurse on mom before you are sent home if you request.

21. In a pinch, we will provide your puppies with a box and heat source to travel home in.
22. Your bitch will be able to walk out to your vehicle by the time she is ready to go home. We don't like to send you out the door till mom is alert and walking.
23. All of this takes a lot of staff, training, planning, and drugs and supplies. Quality pays.
24. DON'T LET THEM SPAY YOUR BITCH AT C-SECTION – EVER!

Questions for evaluating your bitch indicating the need for Emergency C-Section:

1. Has the bitch been in hard labor (abdominal pushing) over 2 hours on the first or 1 hour on subsequent pups?
2. Did the bitch initially show good abdominal contractions and stop without producing a puppy?
3. Is there is green vaginal discharge PRIOR to the delivery of the first puppy? Is there a yellow colored vaginal discharge indicating meconium & fetal distress?
4. Does the bitch seem distressed? Frantic? Sick? Weak or unable to stand? Tremoring? Repeated vomiting?
5. Is this labor pattern different than her previous ones?
6. Has the bitch been unwilling or unable to eat and/or drink for over 12 hours?
7. Has WhelpWiseR indicated there is a problem with fetal heart rates (<160 BPM) or uterine contraction patterns?
8. Have any pups been born dead?
9. Did a previous ultrasound or radiograph suggest there could be a problem? (low heart rates on ultrasound or pups without visible heartbeats?) (Malpresented or very large pups)
10. Is a pup palpated on vaginal examination and in an unusual position or not progressing through the birth canal?
11. Did her temperature drop to 98 degrees and rise to normal (over 101.0) and stay there more than 4 hours?
12. Has her pregnancy exceeded 63 days?
13. Does she appear to have a very large or very small litter?
14. Does she have a previous history of dystocia?
15. Is she a breed at risk for maternal or fetal causes of dystocia?
16. Does she have unexplained or unusual discharge from her eyes?
17. Is she having weak or non-productive contractions with multiple puppies left?
18. If oxytocin and/or calcium has been used, has there been a minimal or no response?
19. Do you or veterinary staff member have a feeling that something is going wrong? Trust your/their intuition.

If the answer to any of these questions is yes, you very likely need to get to a veterinary hospital as soon as possible and request that your bitch should proceed to emergency surgery unless they can immediately correct any cause for dystocia.

Below are some helpful tips for you to consider when deciding if you want to free-whelp your bitch at home, plan a c-section with our experienced team, or find an emergency clinic to help you with a potential difficult birth (dystocia).

Why should I plan a c-section? How do I make this decision?

1. Breed – if you have a breed that is likely to need a c-section – Brachycephalics including Bulldogs, French Bulldogs, and Pugs and other Bully breeds, Bernese Mountain Dogs, Greater Swiss Mountain Dogs, and Pembroke and Cardigan Welsh Corgis.
2. A very large litter – more than 9 pups.
3. A small litter – 1-2 pups.
4. Highly valuable pups such as litters conceived from a frozen semen breeding and limited semen availability.
5. Evidence on puppy count x-rays that she is likely to have a dystocia.
6. Health conditions – if your bitch is sick, has a vaginal stricture, or former pelvic fractures.
7. More puppies go home and stay alive when born by planned c-section. The data below is from Dr. Paula Moon's study at Cornell Veterinary School.

Time after delivery Puppy survival by C-section Puppy survival by vaginal birth

0 hours 92% 86%

2 hours 87% 83%

7 days 80% 75%

General information regarding Emergency Care:

If you contact us during open hours (M-T 7-8, F-Sat 7-6 & Sun noon-6), we can arrange for an unplanned c-section promptly. Most emergency clinics will look at your pregnant bitch and see one stable patient – they neglect to consider the health and wellness of their unborn pups. They often will try to delay a c-section, either because they don't see the urgency of providing an immediate c-section or because they have other cases competing for their care that seem less stable.

You need to advocate for your bitch and her litter. If you want an immediate C-section, make your request known before you arrive. If you arrive at the emergency clinic KNOWING you want a c-section, be clear with the doctor and team so they will move you to surgery more quickly. They may have to call in an emergency surgeon. They need to plan ahead. Help them with your goals. If they cannot or will not meet your needs, find another hospital that will.

You may find that waiting for us to open is a better alternative.

Some emergency clinics will try to persuade or force you to spay your bitch at her c-section. Some will hold your bitch hostage, telling you they won't do a c-section unless you consent to a spay/ovariohysterectomy. They consider any bitch that needs a c-section to be of

inferior breeding quality and not worthy of another pregnancy. They don't understand high quality breeders and purpose-bred litters.

Many of the c-section cases they see are for unplanned pregnancies and they fear another. They may consider it a "favor" to spay her. Your alternative at this time if you don't want another pregnancy is to ask them to do a tubal ligation instead of a spay.

The doctors at the emergency clinic don't see the harm in removing her blood-engorged, normal uterus. In reality, there are huge risks in spaying at this time. There is an enormous blood loss from blood normally trapped in her uterus. Her uterus is taken out and thrown in the trash. This puts an already anemic bitch (a normal condition at a full-term pregnancy) at increased risk of becoming more anemic, needing a blood transfusion, or worse developing a fatal condition known as DIC (Disseminated Intravascular Coagulation). During the spay, the blood flow to the uterus is much greater than it will be 3 months later, making the risk of the sutures slipping and allowing for internal bleeding and death.

The doctors may justify their push to do a c-section by using clips instead of sutures or laser blade. There is NOTHING they can do to minimize the blood loss suffered by removing the uterus.

In short, DO NOT ALLOW THEM TO SPAY HER AT C-SECTION. Yes, bitches don't need their ovaries to lactate. But they do need to live to go home and need to stay alive to raise their puppies.

Dr. Marty Greer, JD