

**GLENDALE ANIMAL HOSPITAL  
C-SECTION POST-OPERATIVE INSTRUCTIONS  
and POST-OPERATIVE PUPPY CARE  
623-934-7243**

A cesarean section is major surgery to remove puppies from the uterus. Most dogs recover quickly from this procedure; however, if your dog was in labor for several hours before surgery was performed, her recovery may be slower, and she will need extra attention and help with her litter. Some dogs are natural “mothers” while other may be less enthusiastic.

**What should I expect during the mother's recovery period?**

The mother has been given an anesthetic that is eliminated from her body quickly. Most dogs have fully recovered from anesthesia by the time they arrive home. Complete recovery from anesthetic may take 2-6 hours, depending on the mother's physical condition at the time of surgery and her age.

During the recovery period, she must be restrained so that she does not fall and hurt herself or roll over and crush the puppies. The puppies should not be left alone with her until she is completely awake and able to stand on her own.

The mother should begin eating within a few hours after she is completely awake. Encourage her to eat and drink all that she wants but start slowly to be careful that she does not overload her stomach by eating too quickly. This can result in vomiting. Her food intake at this time should be about 1½ times her normal food intake.

By the third or fourth week of nursing, her food intake may be 2 to 2½ times normal.

The mother's temperature may rise 1°-2°F above normal the first 1-3 days after delivery, then it should return to the normal range. The normal range is 100°-102.5°F (37.8°-39.3°C). Your dog should not be given aspirin or other medications without consulting your veterinarian. If the mother's temperature goes above 104°F (40°C), she and her litter should be examined by a veterinarian for the presence of serious complications.

**When should the puppies begin to nurse?**

The puppies should be ready to nurse as soon as you arrive home. Although the mother may not be awake enough to nurse the puppies alone, you can assist by making the mother lie still so the puppies can nurse. If the mother does not have any milk at first, you may supplement the puppies for the first day or two. Make sure the nipples are clean and if needed use only clean water to wipe off any contamination.

There are several good commercial canine milk replacers available. **We advise using pre-mixed formula and diluting it with equal amounts of pure water to avoid constipation.** We do not like the powdered puppy formula as it often does not dissolve well. Nursing bottles are also available, made in the appropriate size for the puppies' tiny mouths.

Formula should be fed at the rate of 1 oz (30 ml) per 1/4 lb. (1/8 kg) of puppy weight PER 24 HOURS. That amount should be divided into 3-5 feedings. The average newborn, small breed puppy weighs 1/4 lb. (1/8 kg) at birth.

Another alternative is canned goat's milk that is available in most grocery stores. It should be fed at the above amounts but is not our first choice for milk replacement.

Although we prefer that puppies begin nursing immediately, a healthy newborn can survive nicely for up to 12 hours without nursing. However, if the newborn is weak, dehydrated, or chilled, nourishment must be given as soon as possible.

Plain, unflavored Pedialyte can also be given to puppies if they seem weak, are not nursing well or seem dehydrated.

### **How warm should we keep the room where the puppies are?**

A newborn puppy is not able to regulate its body temperature very well. As long as the puppies stay near their mother, the room temperature is not too critical. However, if they are not with their mother, the room temperature should be between 85°-90°F (29.4°-32.2°C). If the litter is kept outside, chilling or overheating is much more likely to occur. The newborns should be kept inside the house or garage, if possible.

### **Is a bloody vaginal discharge normal?**

A bloody vaginal discharge is normal for 3-7 days following birth. It may be quite heavy for the first 1-3 days and then begin to diminish. If it continues for longer than one week, the mother should be checked for the presence of infection. If she was spayed at the time of the surgery, there should be no vaginal discharge.

### **What does it mean if the puppies are crying frequently?**

Puppies should sleep or be nursing 90% of the time. If they are crying or whining excessively, something may be wrong. Uterine infections, inadequate milk, poor-quality milk, and infected milk are the most likely causes. The entire litter can die within 24 hours if one of these occurs. If you are not comfortable with the way the litter is doing, the puppies and the mother should be examined by a veterinarian.

An old “rule of thumb” for how often puppies should nurse is:

**1<sup>st</sup> Week of Life:** About every 2-3 hours

**2<sup>nd</sup> Week of Life:** About every 2-3 hours but not all through the night

**3<sup>rd</sup> Week of Life:** About every 4 hours but not around the clock

**4<sup>th</sup> Week of Life:** About 4 times daily and weaning is begun this week

### **When are her (mother) stitches removed?**

Removal should occur at 10-14 days after surgery.

### **When should the puppies be weaned?**

Weaning should begin when the puppies are about 3½ weeks old. The first step is to place a 50:50 mixture of water and milk replacer or milk in a flat pan. The puppies' noses should be dipped in this mixture 2-3 times per day until they begin to lap. Once lapping begins, a mixture of good quality dry puppy food mixed with water to make a mush can be placed on flat trays and the pups will usually walk in the mush, lick paws and start a natural attraction to the new food.

As they begin to eat the solid food, the water mixture should be reduced until they are eating only the solid food. Once they are eating solid food (usually about 6 weeks of age), the puppies may be placed in their new home. (Hills “a/d” is also a nice weaning food)

### **When should vaccinations begin?**

First vaccinations typically begin at 6-8 weeks of age. If your puppies were not able to nurse during the first three days of life, they will not have received proper immunity from their mother. In this situation, vaccinations should begin closer to the 6-week mark.