

MODULE 4

Understanding Normal Labor and Delivery

Learning Objectives

At the completion of this module, the breeder should be able to describe the stages of labor, recognize normal delivery patterns, assist when appropriate, identify signs of dystocia, and know when emergency veterinary intervention is required.

The Physiology of Labor

Parturition, or whelping, is the natural process by which puppies are delivered from the uterus. Although labor can seem dramatic, it is important to remember that it is a normal biological process that healthy bitches have successfully completed for thousands of years.

The breeder's role is not to manage every aspect of delivery but rather to monitor progress, provide assistance when necessary, and recognize when complications arise. Most bitches require very little help and instinctively care for their puppies immediately after birth.

Labor is traditionally divided into three stages. Understanding these stages allows breeders to distinguish normal events from potential emergencies.

Stage I Labor: Cervical Dilation

The first stage of labor involves the gradual dilation of the cervix and the onset of coordinated uterine contractions. As discussed in the previous module, this stage may last from six to twenty-four hours.

During Stage I labor, the bitch may appear restless, pant, pace, dig at bedding, or seek solitude. She may refuse food and repeatedly enter and leave the whelping box. Although contractions are occurring, they are generally not visible to the breeder.

The end of Stage I labor is marked by complete cervical dilation and the transition to active delivery.

Stage II Labor: Delivery of Puppies

Stage II labor begins when visible abdominal contractions occur and the first puppy enters the birth canal. This is the stage most breeders associate with whelping.

As contractions become stronger, the bitch may lie on her side, squat, or alternate between positions. Strong abdominal straining is normal during this stage.

Most puppies are delivered within thirty minutes of active contractions. Some puppies arrive surprisingly quickly, while others require several contractions before delivery is completed.

Both head-first and rear-first presentations are considered normal in dogs. Unlike many other species, breech deliveries are common and usually do not present a problem provided the puppy progresses normally through the birth canal.

The appearance of a fluid-filled sac at the vulva often indicates that a puppy will soon be delivered. Clear fluid is normal. Green discharge, however, indicates placental separation and should be followed promptly by delivery of a puppy.

If a puppy is not delivered within fifteen minutes of green discharge, immediate veterinary attention is necessary because the puppy's oxygen supply may be compromised.

Assisting During Delivery

Most bitches require very little assistance during whelping. In fact, excessive interference can sometimes create more problems than it solves. The breeder's role is primarily that of an observer who is prepared to intervene when necessary.

Once a puppy is delivered, the dam will normally tear open the fetal membranes, vigorously lick the puppy, stimulate breathing, and sever the umbilical cord. These maternal behaviors are critical because they help clear fluid from the puppy's airways, stimulate circulation, and encourage bonding.

Occasionally, especially with first-time mothers, a bitch may be slow to remove the fetal membranes. If the puppy remains enclosed in the sac, the breeder must intervene immediately. The membrane should be gently torn away from the puppy's face and body, and the mouth and nostrils cleared of fluid. The puppy should then be rubbed vigorously but gently with a clean towel to stimulate breathing and circulation.

Many experienced breeders become concerned when a newborn puppy does not cry immediately. It is important to remember that crying is not required for a healthy puppy. The goal is effective breathing. A puppy that is pink, active, and breathing regularly may never vocalize. Conversely, a puppy that is crying continuously may actually be distressed.

Umbilical Cord Management

The umbilical cord connects the developing fetus to the placenta and serves as the puppy's lifeline during pregnancy. Following birth, the dam will usually chew through the cord and separate the placenta from the puppy.

If she fails to do so, the breeder may need to intervene. Hemostats can be placed approximately one inch apart on the cord, leaving about one inch between the puppy's abdomen and the nearest clamp. The cord can then be torn between the clamps. Tearing rather than cutting tends to create less bleeding because it crushes blood vessels.

If bleeding persists after the hemostat is removed, unwaxed dental floss can be tied around the cord stump. The area may then be dipped in dilute betadine solution to reduce bacterial contamination.

Over the following several days, the umbilical stump will dry and eventually fall off. Breeders should monitor the area for swelling, redness, discharge, or signs of infection.

Understanding Placentas

Each puppy has its own placenta. However, the timing of placental delivery is highly variable. Some placentas are delivered immediately after their puppy, while others may remain in the uterus until several puppies have been born.

It is entirely normal for two puppies to be delivered followed by two placentas. Breeders should not panic if every placenta does not appear immediately after its corresponding puppy.

Traditionally, many breeders have allowed the dam to consume placentas. While this behavior is natural, there is little evidence that it provides significant benefits. In fact, consuming multiple placentas frequently results in diarrhea and gastrointestinal upset. Many veterinarians recommend limiting or preventing placental consumption altogether.

Accurate record keeping is essential. Each puppy and placenta should be recorded so that retained placentas can be identified if necessary.

Record Keeping During Labor

One of the most valuable tools available to breeders is a detailed whelping record. During the excitement of labor, it is surprisingly easy to lose track of important details. A written record allows breeders and veterinarians to reconstruct events if concerns arise later.

For each puppy, the breeder should record:

- Time of birth
- Sex
- Color and markings
- Birth weight
- Presentation (head-first or rear-first)
- Placenta delivered (yes or no)
- Any abnormalities noted

These records become invaluable not only during the neonatal period but also years later when evaluating breeding programs and pedigree information.

Normal Rest Periods During Labor

Many breeders become alarmed when labor appears to stop temporarily. In reality, periods of rest are common, especially in large litters.

A bitch may nurse her puppies, sleep, drink water, and appear completely relaxed between deliveries. As long as she is comfortable and showing no signs of distress, these rest periods are usually normal.

The key factor is duration. More than two hours between puppies generally warrants veterinary consultation, particularly if additional puppies are known to remain based on radiographs.

Understanding the difference between normal resting and stalled labor is one of the skills that develops with experience.

Recognizing Dystocia

Dystocia is the term used to describe difficult or abnormal labor. Although most canine deliveries proceed normally, dystocia remains one of the most significant emergencies encountered by breeders.

Dystocia can result from maternal causes, fetal causes, or a combination of both.

Maternal causes include inadequate uterine contractions, exhaustion, pelvic abnormalities, or medical illness. Fetal causes include oversized puppies, abnormal positioning, congenital defects, or puppies that have died prior to birth.

Recognizing dystocia early can mean the difference between saving a litter and losing puppies.

Emergency Situations

Every breeder should be familiar with situations that require immediate veterinary attention.

Visible contractions that continue for more than four hours without producing a puppy are abnormal and should be considered an emergency. Likewise, active straining for more than thirty minutes without progress suggests that a puppy may be lodged within the birth canal.

Green or black vulvar discharge without a puppy being delivered within fifteen minutes is particularly concerning because it indicates placental separation. Once a placenta separates, oxygen delivery to the puppy is compromised, and rapid intervention may be necessary.

Heavy vaginal bleeding is never normal and requires immediate veterinary assessment. Similarly, any bitch that becomes weak, depressed, collapses, develops pale gums, or appears distressed should be evaluated immediately.

One of the most important lessons for breeders is that it is far better to seek veterinary advice too early than too late.

Completion of Labor

Labor is considered complete when all puppies have been delivered and the bitch appears comfortable and relaxed. She will typically settle with her puppies, allow them to nurse, and begin caring for them.

If radiographs were taken before labor, comparing the number of delivered puppies with the anticipated litter size can help confirm that labor is complete. If uncertainty exists regarding whether additional puppies remain, veterinary consultation is recommended.

The immediate postpartum period is often quiet and rewarding. However, the breeder's work is just beginning. The first twenty-four hours of life are among the most critical periods for puppy survival, and careful observation of both the dam and her litter is essential.

Key Points

- Most bitches require little assistance during delivery.
- The breeder should intervene immediately if a puppy remains enclosed in fetal membranes.
- Effective breathing is more important than crying.
- Umbilical cords should be monitored for bleeding and infection.
- Placentas may be delivered individually or several at a time.
- Detailed record keeping is essential during labor.
- Rest periods between puppies can be normal.
- More than two hours between puppies may indicate a problem.
- Green discharge without a puppy within fifteen minutes is an emergency.
- Active straining for more than thirty minutes without progress requires veterinary attention.
- Early recognition of dystocia can save both puppies and the dam.