

SOUTH COAST VET CARE ~ ANIMAL MATTERS

Pregnancy and Whelping in the Bitch

Pregnancy in the bitch will last 63 days from the time of ovulation. So it is possible that she may appear to only carry the pregnancy for anything from 58 to 68 days from the time of mating.

Diagnosis of pregnancy can be by abdominal palpation from day 20 but is most accurate from 26–30 days. If the bitch is overweight or nervous, palpation can be disappointing. After 35 days, the embryo swellings become softer and more difficult to find. Ultrasound can be used from day 28 to detect embryos and can be used until whelping to monitor foetal viability. A laboratory blood test is also available between days 28 and 50.

In the first third of pregnancy, the bitch will not look greatly different and any signs of teat enlargement or weight gain to be treated as non-diagnostic. Regular exercise needs to be maintained throughout pregnancy but it should not be vigorous. The dietary intake of the bitch will need to be slowly increased to roughly twice her usual intake by the end of her pregnancy. It may also be necessary to feed her 2–3 times a day, due to the restricted stomach size.

Treat all signs of illness seriously – going off her food, being depressed etc. as they indicate a potential loss of pregnancy or at least putting developing pups at risk.

By the last third of the pregnancy, the bitch should be exposed to her whelping box and be sleeping in it by the last week. Preferably this should be in a quiet, warm place but somewhere that observation of her is easy. If she still wants to sleep on your bed then that is where she will have her pups! Buy a thermometer and begin to monitor her rectal temperature three times a day. (Normal temperature: 38°C - 39°C) over the last week. As the progesterone levels drop dramatically in the last 24 – 36 hours of pregnancy, you will see a brief drop in body temperature to less than 37°C. Over the last few days the bitch may have a clear mucoid discharge (the dissolving cervical plug) and milk may drip from the teats.

The drop of serum progesterone at the end of the pregnancy can be used as an aid in timing elective caesareans.

Long haired breeds should have the hair around the vulva clipped, tied or braided out of the way. Line the whelping box with newspaper and towels – something that is easily disposed of or washed. Have hot water bottles, heat lamps or heating pads ready and check ambient temperature of box room early one morning (between 4-6 am) to make sure hypothermia is going to be avoided. As with most things it is far better to be prepared rather than waking up to find dying puppies at 6 o'clock.

WHELPING

STAGE ONE of labour lasts 6-12 hours and begins with cervical dilatation. The bitch may become restless, seek seclusion, show strong nesting behaviour and have increased heart and respiration rate. Some bitches vomit, tremble or shiver and its not uncommon for them to go off their food. Mild uterine contractions begin and the first pup is presented at the cervix.

STAGE TWO is contractions can be observed. Uterine contractions become stronger and there maybe abdominal muscle contractions as well. The pup may be presented with or without rupture of the membranes. Usually the first sac ruptures as the pup passes through the pelvic canal with resulting clear liquid coming away to help lubricate the canal. Pups present with either head or tail first. Pups are normally passed with the second sac still covering them. The bitch will usually clear this away with her teeth and tongue. It is normal for the bitch to sever the umbilical cord and eat the placenta. Some bitches become very distressed at having their pups handled by owners and due care should be taken not to interfere too soon. If she does not start to clean the pups, then rub the pups with a towel, but keep showing her what you are doing and allow her to lick them as well. Pay particular attention to clearing the membranes away from the nose and mouth and keep the pups head down to allow mucous to drain. The interval between pups is usually ½ - 1 hour, but can be 2-3 hours. In large litters where the bitch is getting tired the interval between births at the end will lengthen.

THE FINAL STAGE of labour is the expulsion of the placenta – it usually occurs immediately after the pup, or within 5 – 15 minutes. Lochia is the green/red/brown discharge that comes away over the next 3-5 weeks. It is completely normal and represents the involution (closing down) of the uterus. This discharge is distinguishable from any discharge associated with infection due to the absence of odour and an otherwise normal bitch.

GENERAL INFORMATION

It is important that if you are concerned by anything you see you must ring the clinic immediately.

As a starting point the vet needs to see the bitch if:

- There is a failure to start labour on the due date
- There is a failure to progress from stage 1-2 or progress with stage 2
 1. greater than 4-5 hours before first pup
 2. greater than 2 hours between pups

VAGINAL DISCHARGE

GREEN DISCHARGE – this is observed after placental separation. It may be seen with or without small amounts of blood. It indicates that second stage of labour will soon be seen. If puppies are not seen within 2 hours, then veterinary attention should be seen.

SEROUS OR WATER LIKE DISCHARGE – indicates that parturition is starting. It may appear as a bubble or balloon protruding from the vulva. If there are no puppies for 2 hours then difficulty birthing may be occurring. Until it is obvious that there is a problem the birthing is quite normal.

A PURULENT DISCHARGE – always requires veterinary attention, more urgently if the bitch is obviously unwell.

BLOOBY DISCHARGE – in small amounts mixed with the green lochia is normal after birthing (even caesareans).

POST WHELPING CHECKS

Post whelping check of the bitch and puppies is beneficial. "Clean out shots" as such are not usually warranted. Suckling puppies will stimulate a physiological oxytocin release from the bitch anyway. Examining the birth 3 or so hours after the last pup has been born allows the vet to ensure that she has in fact finished and gives the opportunity to check the pups for the common congenital faults such as cleft palates and open hernias.

POST WHELPING AND CARE OF THE NEONATES

As mentioned before it is normal for the bitch to discharge lochia for 3-5 weeks but any fresh bleeding should be treated with concern. The bitch will frequently not be interested in food for 1 or more days – she should be encouraged with good quality food and only as a last resort go to her favourite treats. By the second week of lactation she will need to be eating 3-4 times her usual food intake. If on high quality balanced diet the addition of calcium is not warranted. There should always be free access to water. It may be preferable to have food and water outside the whelping box to allow the bitch to go out and walk around occasionally. If there is any sign of hysteria with the bitch being rough with the pups or trying to eat them – monitor her and the pups carefully. Some bitches will settle if they are isolated in a quiet area but it is usually necessary to seek assistance and sedate the bitch.

Daily weigh-ins to plot growth rate of pups helps identify any pups that need supplementation (not with cows milk) or if split feeding the litter is required. As a rough guide, a litter of quiet pups are probably eating enough – crying pups need food!

Weaning onto solid food should start at approximately 3 weeks. The lapping reflex is developed after chewing and so there is no point weaning a pup on milk or cereals. Begin with small quantities of semi solid food in shallow containers that the pups can walk through – messy but any extra will be cleaned up by the bitch. Once weaned and the bitch's milk is no longer needed, reducing her food intake will normally help dry up the milk. If necessary fast her for 24

hours, reduce her water intake and separated the pups for this period. Any painful swellings in the glands can be alleviated with the use of alternating warm and cool compresses.

It has been suggested that one third of all puppies die between birth and weaning. The mortality rate increase with maternal age (5 years or 6 litters). Simple hygiene, warmth, good diet, and reducing stress will help. Having the whelping box in a suitable position and being able to clean the lining of the box frequently is important. Fading Puppy Syndrome is the name frequently given to neonatal death. One single cause has not been identified but is probably partly due to hypothermia. Usually pups begin crying but soon go quiet. They have poor suckling reflex and thus reduced energy intake. Dehydration and starvation soon follows. Successful treatment is difficult and includes administration of fluids by a veterinarian, tube feeding and warming. These pups die quickly – there is no point of waiting till the next day to seek help if you think that the pups aren't going well.

RULES OF THUMB

1. birth weight doubles in 7 – 10 days
2. Weight should increase 6 – 10 times at six months.