



Cheryl Lopate, MS, DVM

Diplomate, American College of Theriogenologists

Benefits of ovulation timing:

- Litter size and pregnancy rate will be highest if the bitches are bred within their fertile window.
- You maximize the use of the male (not breeding too early or too often) increasing the number of sperm delivered during the fertile period (also increasing litter size).
- You have a known due date so you don't have to monitor the bitches for long periods waiting for labor to start or go to work or to sleep only to get home or wake up to find puppies being born unattended (which also increases fetal mortality)
- If the bitch has a singleton, we have some idea when it will be safe to do a C-section. Progesterone is unlikely to drop in mid - large breed bitches, so determining the maturity of the fetus depends on ultrasound examination, which is an inexact science (more of an art form) and leaves open the possibility that the fetus may not be in a safe window to be delivered and will die after birth from prematurity.
- If the bitch develops a problem during her pregnancy (i.e. gestational diabetes or a uterine infection - which we see clinically many times a year) we need to know when it is safe to terminate the pregnancy with viable fetuses, if we have no timing, we cannot do this accurately. Again making fetal mortality higher at delivery.

No one plans to have a singleton or a problem pregnancy, but when you have one, you are stuck with it. And in order to have a successful outcome, ovulation timing is critical.

Also, some comments on the benefits of a pregnancy ultrasound:

- Confirms pregnancy so there is no question about false pregnancy and subsequent overfeeding of a bitch that 'appears' pregnant but is not
- Gives us an idea about litter size so we can manage the bitch's diet appropriately - bitches with large litter have very different caloric needs compared to bitches with small litters. Overfeeding and underfeeding the bitch can result in overfeeding or underfeeding the fetuses. This can result in whelping problems (pups too big to be delivered easily, uterine inertia, inadequate pelvic size due to excess vaginal fat; or health problems in the puppies from being starved or overfed in utero)
- Lets us assess whether there are any resorbing fetuses and helps us deal with any inflammation we might diagnose at mid pregnancy thus preventing further fetal loss during pregnancy.
- Lets us pick up mucometra and hydrometra (2 common pathologic conditions) early and deal with them before they turn into pyometra.

Ovulation is time consuming and expensive to do, but when you have a problem pregnancy without timing, it is much more expensive than what ovulation timing would have cost and certainly much more costly in fetal lives lost. If you can produce a few more puppies per litter, save a few puppies per litter or raise healthier puppies then the benefit greatly outweighs the cost.