Why isn't my female pregnant? What can we do about it?

You did your homework – and had the perfect bitch in her best condition and found the ideal male to mate her to. You know the most common causes of missed breedings are poorly timed breedings and poor semen quality and/or quantity. But you know he had good semen; and her timing, based on progesterone levels (bred 2 to 3 days post-ovulation depending on semen type used), was just right. And yet, she is not pregnant. Why? And if you try to breed her again, what can you do differently to improve the chances she will carry a litter to term?

First, we need to determine if she conceived and lost the litter, or failed to conceive or achieve fetal placental implantation. If you don't have her ultrasounded, you won't know if she conceived or not. Without an ultrasound to confirm pregnancy (not a relaxin test or palpation – these do not assess for fetal viability), you may have a big piece of the puzzle missing. So when you are trying to justify the decision to do an ultrasound, this is the best reason to do so – this is not the place to scrimp.

If the ultrasound shows no pregnancy, and the semen and timing were good, then causes for failure to conceive or failure for fetuses to implant should be explored. These include:

1. Brucellosis
2. Herpesvirus
3. Bacterial infections in the uterus – low grade metritis, not rising to the level of a pyometra
4. Other bacterial and viral diseases that are not yet well characterized
5. Failure to complete the ovulation
6. Failure of the ovary to maintain progesterone high enough to support pregnancy (hypoluteoidism)
7. Uterine lining changes that interfere with maintained placental attachment
8. Genetic incompatibility – fatal genes
9. Inadequate maternal nutrition
10. Trauma, stress, anesthesia or drug and hormonal interference
11. Structural abnormalities causing failure of semen passage to the oviducts including male and female anatomical abnormalities
12. Hypothyroidism

Diagnostics and history should be used to determine if any of these may have played a role in failure to conceive or maintain the pregnancy up until 4 weeks of pregnancy. Testing may include blood tests for thyroid disease, Brucella, Canine Herpesvirus, progesterone testing, and ultrasound if not already completed. Uterine biopsy and cultures at about 60 days post-ovulation can be useful tools in determining if there are uterine changes that suggest poor uterine lining health. If no underlying cause for failure to conceive is found, surgical breeding may be considered to improve the chances of success at the next breeding.

If the ultrasound shows a pregnancy was achieved but not maintained, this can result in fetal resorption (prior to day 45 of pregnancy) or fetal death and/or abortion (fetal loss after day 45 of

pregnancy). This rules out poor timing, poor semen quality, or failure of semen to pass to the oviducts as causes for infertility. Causes of failure to maintain a pregnancy include:

1. Brucellosis
2. Herpesvirus
3. Bacterial infections in the uterus – low grade metritis, not rising to the level of a pyometra
4. Other bacterial and viral diseases that are not yet well characterized
5. Failure of the ovary to maintain progesterone high enough to support pregnancy (hypoluteoidism)
6. Uterine lining changes that interfere with maintained placental attachment
7. Inadequate maternal nutrition
8. Trauma, stress, anesthesia or drug and hormonal interference

A complete history should be taken. Diagnostics should include testing for brucellosis and Canine Herpesvirus. Cultures should be taken and antibiotics used if bacterial disease is suspected. Progesterone levels should be run serially if hypoluteoidism is suspected. The pregnancy can be monitored for viable fetuses with repeated ultrasounds. Whelpwise™ can be used to manage high risk pregnancies. Progesterone and terbutaline may be indicated if uterine irritability are shown to be putting the pups at risk. If no underlying cause is found, uterine biopsy and cultures at about 60 days post-ovulation can be useful tools in determining if there is a treatable underlying cause and to help with determining a prognosis for future fertility. Treatment for causes suspected or found should be initiated.