Vet's Corner: Anovular cows revisited

The November 2007 Vet's Corner article reported that anovular cows have lower Conception Rates than cows that resume ovulation within 40 days of calving. Recent research conducted by Dr. Paul Fricke, U of Wisconsin, indicates that anovular cows also have a high rate of **double ovulation** on the first service following a low progesterone postpartum period; and higher **Early Embryonic Death** rate 33-61 days after service.

The standard definition of an anovular cow is when a cow has low blood progesterone and doesn't resume cycling during the first two months after calving. Since it is not practical to blood test cows for progesterone, the herd health veterinarian has used rectal palpation or transrectal ultrasound to detect the presence of a functional CL to identify anovular cows. In normal herds, 24-28% of cows are not cycling at 65-75 days in milk as determined by Ultrasound or serum Progesterone tests.

When anovular cows are put into a Timed Artificial Insemination protocol after the first TAI:

Anovular cows had 31% CR vs. 52% CR for cycling cows,

And anovular cows had 18% EED at 33 – 61 Days vs. 6% EED in cycling cows. In herds, with low CR and high EED rates, palpation or ultrasound for a functional CL could be performed on cows that have not exhibited estrus signs, twice at 47-53 and 54-60 days postpartum before going on TAI. If anovular cows are identified and kept out of TAI, some repro problems could be avoided.

In another study, Anovular cows were diagnosed at 45 DIM and placed on TAI. On the first ovulation 36% had multiple ovulations and on the second ovulation, multiple ovulation rates dropped to a normal rate of 8%. Breeding anovular cows on the first ovulation from a TAI service could result in a significant increase in twinning rate. The combination of twinning and low body condition that is commonly associated with anovular cows can create life threatening metabolic problems on the next calving. We also know that the abortion rate for cows diagnosed with twins is three times greater than for single pregnancies, so there is another connection between anovular cows and higher abortion rate.

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