

## New Advances in Artificial Insemination

Technology seems to advance faster than ever before. Today we have medications and technology in the veterinary world that continues to be the cutting edge of medicine. One such tool is the **endoscope**. The endoscope began to be used in the human surgical field several years ago and has become the main technique used for abdominal, cardiac, and exploratory procedures. Colonoscopy has become a routine screening to adults to aid in early detection and treatment of colon cancers and polyps. The veterinary world is following just behind with endoscopes now being used for canine and feline spays, equine upper gastro-intestinal tract diagnostics, and for canine artificial insemination. One of the challenges to updating to endoscopic medicine is the high cost. Unfortunately each procedure typically takes a different endoscope and each endoscope can cost thousands of dollars.

In previous columns, I have discussed many of the steps to help insure success in your breeding operations (*see the Kennel Spotlight, April/May'08 issue*). Thanks to the endoscope, we now have even better options. **Trans-cervical insemination**, is the newest and most cutting edge procedure available today for breeding success. The process is really quite simple, progesterone values are measured starting at approx. 7 days from visible signs of a heat cycle (swollen vulva, bleeding vaginally). Progesterone values enable us to know the exact day that the female has ovulated. Once it has been determined by a series of progesterone values that the time is right for insemination, the awake bulldog is placed on the exam table and the vaginal endoscope (a machine approx. 10" in length and about as big around as a pencil) is inserted into the vagina until the cervix is visible on the computer monitor. Once the cervix is located, a small flexible plastic catheter is then inserted through the endoscope and then through the cervix and the semen is then flushed through the catheter and into the uterine horns. This places the semen in the exact location that a surgical insemination would, but eliminates the anesthesia required as well as eliminates the need for an additional surgery to breed the animal. Once the insemination is completed, the endoscope can be removed and an exact due date can be scheduled. The benefits of this procedure versus surgical insemination are very clear, however, not all dogs can be trans-cervically inseminated. Larger dogs present difficulty due to the increased length of the vaginal canal and keep us from reaching the cervix. Our endoscope allows us to do this type of insemination on most bulldogs and smaller breeds. Trans-cervical insemination is not for everyone but can prove to be an incredibly useful tool for increasing breeding success in many kennels and preventing any additional surgeries required for insemination.

Feel free to contact us with any questions regarding trans-cervical insemination at All About Pets (417) 442-PETS (7387). Samuel L. Harkey, DVM