

## **New and recurrent hemorrhagic anovulatory follicles in tropical jennies**

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A group of eight mature, cycling jennies were examined regularly via transrectal ultrasonography during various trials characterizing reproductive behavior in donkeys in a tropical environment. This communication describes hemorrhagic anovulatory follicles (HAF) in two jennies. In April, the first of these donkeys developed a 42.75-mm diameter presumptive preovulatory follicle, which developed an internal structure typical of a HAF. This ovarian structure remained ultrasonographically evident for 37 days and grew to a diameter of 68.6-mm before beginning its regression. The interovulatory period of the cycle characterized by the HAF (19 days) was shorter than the preceding cycle (25 days) and two subsequent cycles (23 days each) that followed during this study. This jenny continued to return to normal behavioral estrus each cycle. The progesterone concentrations measured on Mondays, Wednesdays, and Fridays during the cycle dominated by the HAF were not different from those of the presumably normal ovulatory cycles of this jenny. Six months later, this same donkey again produced a presumptive HAF of 37.6-mm in diameter. On this occasion during which the HAF persisted, the interovulatory interval was lengthened to 42 days. A progesterone profile is not available for this cycle. Another jenny with no previous history of HAF development, despite monitoring of many cycles, developed a presumptive HAF in February on day 22 after her previous ovulation. This structure reached a diameter of 46.4-mm. This jenny had received 75 $\mu$ g of cloprostenol (0.3 mL Estrumate™) on day 7 of the cycle. The HAF persisted until the time of writing on day 29 after ovulation. The average interovulatory interval for preceding cycles in this donkey was 24 days. Again, no comparative progesterone profile is available for this case. These observations confirm that HAFs may occur and recur in donkeys. This may be a spontaneous occurrence without any treatment intervention, as in the first jenny described, or may follow administration of prostaglandin, which has previously been described as a risk factor in mares. Including these and other donkeys monitored for several different experiments, this group has followed approximately 210 cycles in 25 donkeys over a period of 2 years without encountering other cases, suggesting that occurrence of HAFs in tropical jennies is rare.

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