Cystic ovarian disease with inappropriate lactation in a doe
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Cystic ovarian disease is a cause of reproductive failure in ruminants. The incidence has been reported as high as 12% in goats and cattle.\(^1\) In most cases, follicular cysts can be treated with gonadotropin releasing hormone (GnRH)-induced luteinization followed by luteolysis with prostaglandin in 10 days. Medical therapy with GnRH is reported to have an 80% success rate.\(^2\) It can be difficult to discern the exact etiology of inappropriate lactation in goats.\(^3\)

A seven-year-old intact female pygmy goat was presented displaying persistent signs of estrus and aggressive behavior for the past year. This doe was never exposed to a male. On the physical examination it was noted that the udder was well developed, produced a milk-like substance, but was not palpably abnormally warm. Transrectal ultrasonography revealed round anechoic structures >10mm on both ovaries. A progesterone assay was performed and a concentration of 0.63 ng/ml supported the diagnosis of cystic ovarian disease. Human chorionic gonadotropin (1500 IU) was administered to induce luteinization of the cystic follicles.

A month after treatment there was no significant improvement in the doe’s condition. The udder engorgement and milk production persisted. Male-like behavior included urine marking, snorting, and spitting at her owners. Transrectal ultrasonography revealed that the cystic structures on both ovaries persisted. A serum sample was submitted to measure anti-Mullerian hormone, inhibin, progesterone, and testosterone levels. The results helped rule out a possible granulosa cell tumor. Ovariectomy was recommended due to failure of the medical treatment. During the procedure multiple cystic structures were discovered on both ovaries. The ovaries were submitted for histopathology and the diagnosis of cystic ovarian disease was confirmed. Following surgery, the doe’s udder regressed in size and was no longer productive. The aggressive, male-like behavior subsided.

This case revealed that ovariectomy should be considered in refractory cases of persistent estrus in pet goats.

Suggested references