Abstract

A 10 year old American Quarter Horse mare was presented to her veterinarian with a history of stallion-like behavior and aggression. A diagnosis of granulosa cell tumor was made based on history, and the mare was referred to Auburn University for definitive diagnosis and ovariectomy. On trans-rectal palpation and ultrasound, the left ovary was enlarged and firm, measuring 7 cm, with no palpable ovulation fossa and a multicystic appearance. The right ovary was small and inactive, measuring 1.5 cm in diameter. A diagnosis of granulosa cell tumor of the left ovary was made based on history and characteristic ultrasonographic findings. Hormone analysis was pending at the time of admission.

Ovariectomy of the left ovary was performed using laparoscopy through a left paralumbar flank approach. Three 1.5 cm incisions were made in the left paralumbar fossa, the first caudal to the eighteenth rib, and the next two cranial to the tuber coxae, 6.5 cm apart on a vertical axis. After incision, cannulas were placed to aid instrumentation. The ovary was identified and a LigaSure™ electrocautery instrument was used to obtain hemostasis of and to transect the mesovarium. The two incisions cranial to the tuber coxae were connected and the ovary was removed. Following removal, histopathology confirmed the diagnosis of granulosa cell tumor.

In mares, granulosa cell tumors are the most common neoplasm involving the ovary. Tentative diagnosis of a granulosa cell tumor is commonly made based on behavioral history and trans-rectal palpation and ultrasonography findings. Diagnosis is usually confirmed with elevated blood testosterone (67% of cases) and inhibin (87% of cases). Recently, studies have indicated elevated anti-Müllerian hormone (AMH) may diagnose the presence of granulosa cell tumor with 98% accuracy. This case describes characteristics of a typical granulosa cell tumor presentation, with diagnostic and treatment options.

References