Management of a Sertoli cell tumor in a stallion
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Equine testicular neoplasms are uncommon,\(^1\) possibly because most males are castrated early in life. Sertoli cell tumors, which arise from nongerminal cells in the seminiferous tubules,\(^2\) have been documented in stallions and are associated with destruction of testicular architecture and contralateral testicular atrophy.\(^3\)

A 23 year old Paso Fino stallion presented for progressive right testicular enlargement of two years’ duration, with recently noticed left testicular atrophy. At presentation, ultrasonography showed an enlarged right testis (7.0 x 10.3 x 7.6 cm), with normal echogenicity at the cranial pole and a small, hyperechoic left testis (2.9 x 5.8 x 3.6 cm), with a cranially located circular hypoechoic area. Semen was collected and evaluated to reveal 651 million sperm/ejaculate with 30% progressive motility and 50% normal morphology. Multiple testicular biopsy samples were obtained through lateral incisions on both testes. Examination revealed right testicular parenchymal collapse with decreased seminiferous tubule density and few progenitor cells in the cranial pole. Left testicular samples contained dense collagenous tissue consistent with fibrosis and no seminiferous tubules. Neither testis contained detectable spermatozoa. Treatment was postponed until after the 2008 breeding season. In October 2008, the stallion presented for continued right testicular enlargement (10.2 x 12.5 x 9.4 cm) and left testicular atrophy (2.5 x 4.1 x 3.6 cm). Right unilateral castration was performed to preserve potential fertility of the left testis. Examination of the right testis showed an unencapsulated, densely cellular mass replacing normal testicular structures which was histologically consistent with a diffuse Sertoli cell tumor. Four months after surgery, semen evaluation revealed 2.3-3.8 billion sperm/ejaculate with 70-75% progressive motility. Four mares were bred by February 5, 2009 with one pregnancy reported.

Sertoli cell tumors often cause unilateral testicular enlargement with concurrent contralateral atrophy.\(^3\) Descended and retained testes may develop Sertoli cell tumors\(^1\) and metastasis is rare.\(^3,4\) Testicular biopsy is a definitive diagnostic method, but is relatively insensitive. Unilateral castration of the affected testis offers the best prognosis for fertility.\(^5\)

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**References**