Bilateral testicular Sertoli cell tumors in an American Paint Horse
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Testicular neoplasms are infrequently reported in stallions, and Sertoli cell tumours are extremely rare. Between the ages of 6 and 16 years old a healthy American Paint Horse (APH) breeding stallion was collected for breeding purposes. The number of progressively motile and morphologically normal sperm (PMMN), in billions by year by collection was: in 2005 0.0945 PMMN, 0.823 PMMN, in 2008 0.188 PMMN, in 2009 0.128 PMMN and 0.066 PMMN, respectively. In 2015 the stallion was sold, and in November a breeding soundness examination (BSE) was performed. Findings included an elevated respiratory rate (30 rpm), and a body condition score of 8.5/9. He displayed normal libido. In two semen collections spaced one hour apart he ejaculated 0.078 PMMN, and 0.061PMMN billion sperm. His testes were small and soft bilaterally and measured LxWxH cm and volume (cm$^3$) as: left 9x5x5.7, (256.5); and right 8.2x5x5.6, (229.6), respectively. His calculated daily sperm output was 4.85 billion sperm. An ultrasound evaluation of his testes showed bilateral hypoechoic areas with the right testis having an oval lesion measuring 20.1 x 17.7 cm, and left having the entire central region abnormal surrounded by testicular parenchyma. The stallion was classified as unsatisfactory due to oligospermia, spermiostasis (36% and 28% detached heads) and bilateral testicular neoplasia. In January 2016 the stallion was castrated and the testes submitted for histopathology, which showed bilateral sertoli cell tumors. This is the first report of bilateral Sertoli cell tumors in a stallion along with reported semen parameters. From the history it is not possible to ascertain the onset of the testicular neoplasia but the tumor tissue grossly replaced a large portion of the testicular parenchyma and may be responsible for the stallion’s low sperm production.

Suggested references