A 9 year old intact male Old English Mastiff was referred to the Washington State University Veterinary Teaching Hospital for evaluation of a perineal mast cell tumor as well as breeding soundness examination (BSE) and semen cryopreservation. During the BSE a mass was detected via ultrasonography in the right testicle. Semen was collected and cryopreserved on two separate occasions prior to surgical removal of the perineal mass and both testicles. The initial progressive motility of the two ejaculates was 75% and 80%, respectively. The post-thaw motility was 45% and 50%, respectively. After castration, epididymal sperm were collected using the float-up technique and evaluated for motility, concentration, and morphology. The motility of extended semen from the left epididymis was 50% and the right epididymis was 0%. Concentration, determined via hemacytometer, and percent normal morphology were 34.5 million sperm/mL and 27% for the left epididymis and 4.0 million sperm/mL and 1% for the right epididymis, respectively. Histopathology confirmed the perineal mast cell tumor and diagnosed the testicular mass as a Sertoli cell tumor. Sertoli cell tumors affect variable ages and breeds, are rarely malignant, and are more common in cryptorchid testes. They result in increased estrogen levels in up to 39% of cases. No feminization or signs of a paraneoplastic syndrome were observed in this dog. This case highlights the importance of regularly scheduled BSE in all breeding males as the dog’s overall semen analysis fell within normal parameters and did not demonstrate the pathology of the right testicle, which was only apparent upon ultrasonographic examination and comparison of the extragonadal sperm reserves.

Keywords: Canine, epididymal sperm, ultrasonography, neoplasia

References: