Azoospermia in a stallion caused by a sperm granuloma
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The etiology of azoospermia in the stallion includes ejaculation failure,\(^1\) occluded ampullae,\(^2\) retrograde ejaculation,\(^3\) sperm granuloma,\(^4\) or primary testicular dysfunction.\(^5\) A 3-year-old Gypsy Horse stallion presented to the Texas A&M College of Veterinary Medicine for a breeding soundness evaluation. This stallion’s semen had been collected 8 months prior to admission and was found to be azoospermic. At presentation, physical examination was normal with the exception that the stallion was a unilateral cryptorchid. There was no history of illness or trauma to the scrotal testis. Two ejaculates were collected in an artificial vagina, but no sperm were identified in the semen. During both semen collections, the stallion demonstrated good libido and appeared to ejaculate normally (~8 urethral pulses/ejaculate; semen alkaline phosphatase >3000 U/L), indicating that fluid from the testis/epididymis was present in the ejaculate and that an occluded ampulla was unlikely.\(^5,6\) The bladder was catheterized to determine if retrograde ejaculation occurred, but no sperm were identified. The scrotal testis and epididymis were examined manually and by ultrasonography. No testis abnormalities were identified and the testis volume was 78 cc. However, a firm mass (~2 cm) was identified in the vicinity of head of the attached epididymis. Testicular biopsy was considered to rule out a primary testicular problem. Because of this stallion’s limited breeding value, the owners elected to have the stallion castrated bilaterally. Histopathology revealed normal spermatogenesis in the scrotal testis and a sperm granuloma in the head of the associated epididymis. Sperm granulomas can result from congenital (e.g., blind-ended efferent ductules) or acquired etiologies (e.g., trauma) and are more common in bulls, goats, and rams than stallions.\(^7,8\) The stallion in this report was young and had no history of trauma or illness; therefore, a congenital cause was considered most likely.

Keywords: Stallion, azoospermia, sperm granuloma

References