

Right-sided inguinal hernia in a Hereford bull calf

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A four-month old intact Hereford bull calf was presented to the Purdue University Large Animal Hospital with a history of scrotal swelling noted by the owner for approximately two weeks. Upon presentation the scrotum was palpated followed by an ultrasonographic examination. The scrotum was not painful on palpation. Loops of bowel along with two testicles could be palpated and observed with ultrasonography within the scrotum. The right inguinal ring was found to be enlarged on palpation and the diagnosis of a right-sided inguinal hernia was made. Routine bilateral castration of the bull calf along with closure of the right inguinal ring was performed under general anesthesia. The surgical approach revealed an indirect inguinal hernia through an enlarged right inguinal ring. Inguinal hernias in bulls can be classified as either indirect inguinal hernias or direct inguinal hernias. Indirect inguinal hernias occur as the result of abdominal viscera passing through the inguinal ring and into the vaginal cavity usually due to an enlarged ring. Indirect hernias most commonly occur on the left side and are not considered to be hereditary in nature. Direct inguinal hernias result from disruption of components of the body wall near the inguinal ring following trauma. When the musculature and peritoneum near the inguinal ring are torn, viscera which exit through the resulting abdominal rent pass retro-peritoneally through the inguinal ring and into the space around the spermatic cord in the neck of the scrotum.¹ Some bull calves may be born with unilateral or bilateral inguinal hernias; these cases are by definition congenital.² Cases of non-congenital inguinal hernias are rarely reported in bull calves of this age. This case highlights the importance of placing inguinal hernias on a differential list when considering causes for scrotal swelling in bull calves.

Keywords: Bull calf, inguinal hernia, beef cattle

References

1. Riddell MG: Developmental anomalies of the scrotum and testes. In: Wolfe DF, Moll HD, editors. Large animal urogenital surgery. 2nd ed. Baltimore: Williams and Wilkins; 1999. p. 283-291.
2. Wolfe DF, Rodning SP: Diagnosis and management of inguinal hernia in bulls. In: Anderson DE, Rings DM, editors. Current veterinary therapy: food animal practice. 5th ed. St. Louis: Elsevier; 2009. p. 356-359.