Colic associated with bilateral seminoma in a cryptorchid American Miniature Horse stallion R.A. Smith, L.K. Pearson, L.N. Wise, A. Tibary

Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Washington State

University, Pullman, WA

Equine testicular neoplasms are rare, likely due to the practice of early castration. Testicular tumors originate from germ cells, sex-cord stroma, or other cells. The most commonly reported testicular tumor in older (11 to 22 years, mean 16.5 years) cryptorchid stallions is seminoma. Most reported cryptorchid seminomas are incidental findings after cryptorchidectomy. Reports of testicular tumors as a differential for a colic syndrome, such as in this report, are few.

A 13-year-old bilaterally cryptorchid American Miniature Horse stallion was referred to the Washington State University-Veterinary Teaching Hospital for colic of 12 hours duration. Initial evaluation demonstrated normal heart rate, decreased gastrointestinal borborygmi, and a small volume of nasogastric reflux. Transabdominal ultrasonography revealed moderate small intestinal distention, thickened intestinal walls, and associated ileus. Two large masses of heterogenous echotexture were presumed to be the cryptorchid testes due to their location. Abdominocentesis, complete blood count, and serum biochemistry panel were consistent with chronic inflammation. Despite medical therapy with intravenous fluids and non-steroidal anti-inflammatories, the horse remained depressed and mildly painful with ongoing nasogastric reflux. Exploratory laparoscopy was performed and demonstrated a nonstrangulating compression of the jejunum by the right testis, which accounted for the clinical signs. Bilateral cryptorchidectomy was performed. The horse recovered uneventfully from surgery. Histopathology confirmed malignant seminoma in both testes. Further diagnostics to identify metastases were declined by the owner.

Often in clinical practice, differential diagnoses for colic overlook reproductive etiologies. In this case, the history of cryptorchidism assisted clinicians in making the decision to pursue surgical therapy for colic. This case presented several unique features not commonly reported: bilateral cryptorchidism in an older stallion, neoplasia of both retained testes, and presentation to the veterinarian for colic signs. This case also raised issues of welfare in cryptorchid stallions and reinforces the importance of client education to seek removal of cryptorchid testes.

Keywords: Equine; testes; neoplasia; pathology; laparoscopy; ultrasonography

Reference

Valentine BA: Equine testicular tumours. Equine Vet Educ 2009;21:177-178.