a case report:

Equine Pseudohermaphroditism

by

John Amdor*

A two year old mare of mixed breeding was presented for an examination of her genital system. The owner reported that the mare had undergone a gradual change of disposition with the onset of puberty. She had begun to tease other mares and would mount those in estrus. After dismounting, she would often kick the other mare. At the time of presentation her signalment resembled that of a stallion.

* Mr. Amdor is a senior student in the College of Veterinary Medicine at Iowa State University.

External examination of the mare revealed the presence of a large clitoris (3–4 in. long) which would engorge with blood and protrude from the vulva when she mounted other mares (fig. 1 and 2). The clitoris resembled the glans-penis of a stallion. A vaginal speculum was passed and it was found that the vagina ended blindly, with no evidence of a cervix. The mare had a normal appearing udder and papillae for a mare of her age.

Rectal examination revealed bilateral elliptical structures at the pelvic inlet, adjacent to the bladder. The absence of tubular genitalia beyond the vagina was also confirmed. A diagnosis of pseudohermaphroditism was made. It was decided to surgically remove the two structures at the neck of the bladder as they were believed to be testicular in nature and functional.

The surgical approach chosen was the same as is used to correct cryptorchidism occurring in the stallion. The mare was given a general anesthetic (Equithesin, JenSal), and placed in dorsal recumbency. The inguinal area was prepared for surgery.

The skin was incised parallel to the inguinal canals and the subcutaneous tissue beneath was divided by blunt dissection, exposing the fascia covering the external oblique muscles. The fascia and muscle was penetrated by blunt dissection.
one inch anterior to the external inguinal rings. The parietal peritoneum was penetrated with two fingers. The gonadal fold of the parietal peritoneum was grasped by inserting two fingers through the opening anterior to the canal. The gonads were then exteriorized and the attachments served with a White's emasculator.

The abdominal openings were closed with number 3 chromic cat-gut (Ethicon), using interrupted mattress sutures. The subcutaneous spaces were packed with strips of sterile, 3 inch gauze, fashioned into cones. The skin edges were brought into loose apposition with several simple interrupted sutures of medium Vetafil (Bengen). The packs were removed 48 hours later, and the skin incisions allowed to granulate without apposition sutures. The post-operative recovery was uneventful and the animal was discharged after 9 days.

The two structures removed were sent to the pathology laboratory for histological identification (fig. 3). Pathology report indicated that the structures were degenerate and atrophied testicular tissue. There was marked hydropic degeneration, and lumina of many seminiferous tubules contained hyaline masses.