

Anatomical Studies, No. 38: On an Urethral Diverticulum in a Kid.

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THE above specimen, Routine No. 6468 (Path. Book 12,448) was kindly sent by the Government Veterinary Officer, Grahamstown (Mr. R. Paine, F.R.C.V.S.) to the Director of Veterinary Services. "The goat (2 months of age) is said to have been born with this abnormality, . . . The urine collected in this dilatation, and the owner had at times to relieve the kid by pressing the accumulated contents out". (Minute V. 6/958/31 of 3/3/32 accompanying specimen.) See Fig. 1.

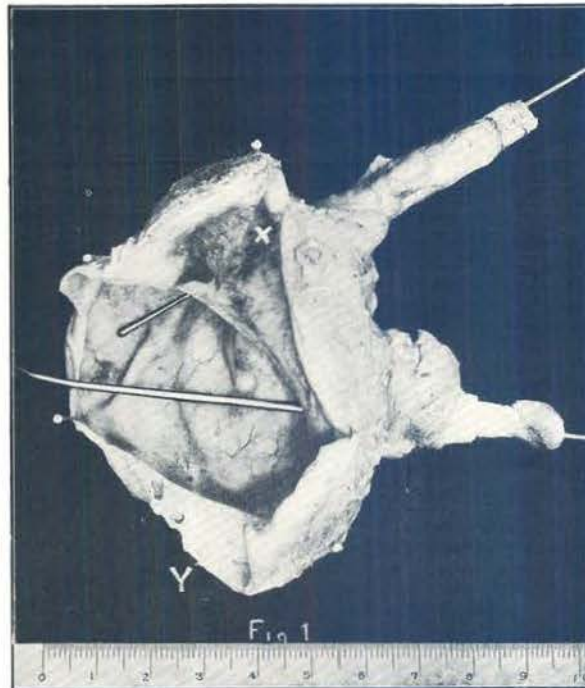


Fig. 1.

Externally all that could be seen was the pouch. On opening this, the capacity was ascertained to be approximately 30 c.c. Further, a shelf-like projection partially divided the cavity into an upper and lower portion. The former possessed a thick wall (0.75 cm.) of which the interior was rough, while the latter had a thin (0.2 cm.) smooth inner surface. As will be noted in Fig. 1 it was possible to insert probes into the urethral canal both caudally towards the bladder and cranially towards the exterior, both these openings being beneath the shell-like projection.

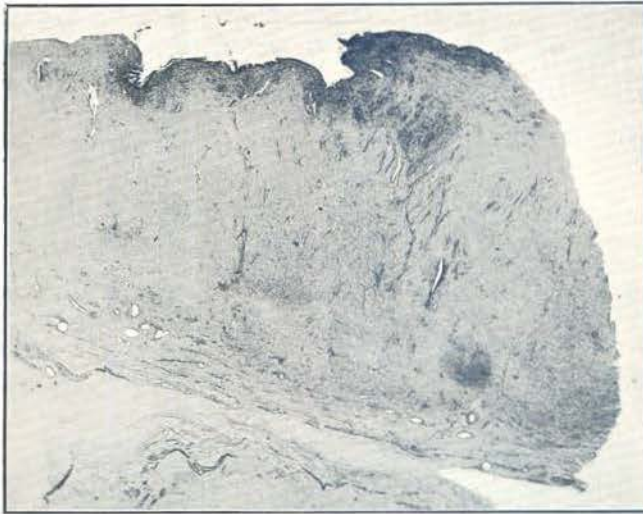


Fig. 2 ($\times 8$).

Histologically, sections cut from the thickened wall at X, i.e. above the "shelf", showed an absence of epithelium and marked inflammatory changes. See Fig. 2. Preparations made from the thin portion of the diverticulum, e.g. at Y, showed the normal urethral epithelium. See Fig. 3.

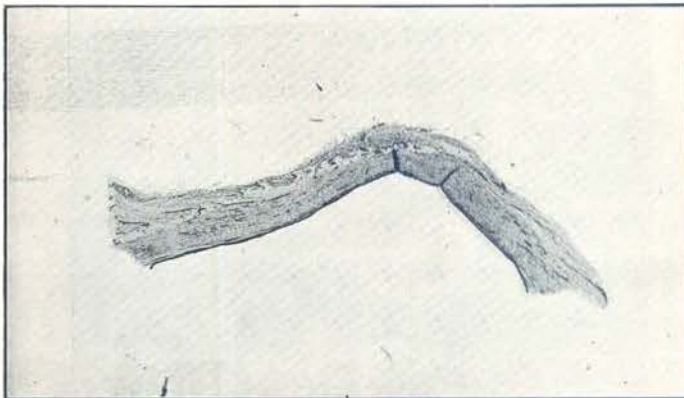


Fig. 3 ($\times 8$).

From the above it would appear that originally there was present a diverticulum. In this, urine collected, and probably as a result of the pressure exerted by the owner (as described in paragraph 1), rupture of the sac occurred dorsally with resulting inflammatory changes. According to Hope Carlton (1932), the "explanation offered of the congenital diverticulum is that at birth there is a flap-like obstruction where that part of the urethra which arises in the cloaca joins with the part which was formed in the external genitalia. It is supposed that in a few hours increasing urinary pressure overcomes this obstruction, but there is left a tiny potential diverticulum." Later (e.g. in middle age in man) this sac may become a clinical entity.

In conclusion we desire to thank Dr. Thomas and Mr. Jackson for their assistance.

REFERENCE.

- HOPE CARLTON, C. (1932). Diverticulum of the male urethra. *British Med. Jl.* No. 3712, pp. 376-377.