

of the prepuce, and the fingers inserted to manipulate the enlargement. It was found to be too large to draw into the wound, which was accordingly enlarged to 5 or 6 inches before the growth could be properly examined. The latter was then drawn out of the abdomen and found to be a huge prostate, with the much smaller bladder lying on its antero-superior aspect. It was found to be so well circumscribed, except as it lay along the urethra, that it was decided to remove it. It was accordingly dissected out, leaving a small slit of the urethra about three-quarters of an inch long, the hæmorrhage being easily controlled with Spencer Wells forceps and silk ligatures. The abdomen was not explored further, as there was no reason to expect other tumours. The urethra was accordingly sutured with close interrupted sutures of very fine silk, and the abdominal wall closed similarly with one row of buried sutures, including muscle and peritoneum and a superficial row through the skin. It was then dried, with ether, and sealed with collodion. The disinfectant used for the instruments after boiling was 1 in 40 carbolic acid, and the wound was sponged with 1 in 500 chinol solution. The patient appeared to be doing excellently during the next twenty-four hours, but during the following twelve hours he got gradually weaker, and died about forty hours after operation.

A *post-mortem* examination was made on 3rd April. The operation wounds appeared to be healing beautifully, including the urethral wound, and incidentally it was noted how remarkably rapid the healing process of aseptic wounds may be. We were surprised, however, on examining the liver to find two tumours in it. One was as large as one's fist and weighed 11 ounces, while the other was about the size of a hen's egg and weighed 2½ ounces. They were both very soft in consistence, in marked contrast with the prostatic tumour, which, on weighing, was found to be 28 ounces.

The tumours were all fixed in a fresh condition, and sections cut in the College pathological laboratory, and Sir J. M'Fadyean, on examination microscopically, pronounced the prostatic tumour to be adenoma and the hepatic tumours adeno-carcinoma. So far as one could judge by their histology, there was no relationship between them.

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## ECHINOCOCCUS CYST IN THE BRAIN OF A HORSE.

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PARASITIC cysts in the brain of the horse are of very rare occurrence, and the following instance which came under my observation recently is therefore worth recording.

The mare from which the specimen about to be described was obtained belonged to the type of heavy vanners, and was aged nine years. She was the property of a carting contractor, and had been in his possession for three or four years, during which time she had been continuously at work in a light lorry. Until the day on which

she was destroyed no symptoms of illness and no departure from the normal had been observed.

Briefly the history of the case is as follows: In the early morning the mare had been sent to the shoeing forge, and during the process of shoeing the smith reported that he had experienced considerable difficulty in raising and holding up the limbs on the right side. This, at the time, he attributed to stubbornness, and it caused some surprise as the mare had previously been thoroughly docile. On leaving the forge her gait was observed to be staggering and uncertain, and she fell to the ground several times in the short walk of less than a quarter of a mile to the stable. Seen an hour later in a loose-box, she presented a heavy, sleepy appearance, with her head depressed and eyelids drooping; both pupils were dilated. Pulse, temperature, and respirations were normal. She had very little control over her limbs, however, and any attempt to alter her position involved considerable risk of a fall. A full dose of opening medicine was administered, and was followed by two-drachm doses of potassium iodide.

When examined in the evening the mare was stretched on the ground, completely unconscious and unresponsive to sound or touch. Both pupils were widely dilated, the temperature was subnormal ( $98^{\circ}$  F.), and the pulse irregular and so weak that it could scarcely be counted. The respirations were noisy on account of vibration of the alæ of the nostrils. Convulsive spasms of the muscles, especially those of the limbs, occurred at irregular intervals. There appeared to be no prospect of recovery, and after consultation with the owner the mare was destroyed by the intrathoracic administration of hydrocyanic acid. The head was removed for examination.

The writer was not present when the brain was removed, and, as it had been handled rather roughly, the relations of the cyst which was discovered cannot be given accurately. It was quite clear, however, that it was situated on the left side of the brain, mainly within the lateral ventricle, but partly encroaching on the structures immediately posterior to the ventricle. The surface of the ventricle was roughened and raised slightly in irregular patches of a pink colour, presenting an appearance like that which would be produced by an inflammatory exudate. The cyst was irregularly ovoid, and its greatest measurements were  $2\frac{1}{2}$  inches long by  $1\frac{3}{4}$  inches in breadth (64 mm. by 42 mm.) It was very tense, and on incision a greenish-yellow turbid fluid escaped. Its strong fibrous wall was lined by a fine, cream-coloured, lace-like structure, thin folds of which projected into the interior of the cyst. Examination of the fluid under a low power gave negative results. A small piece of the lining membrane examined under the same magnification showed small cyst-like bodies (.8 mm. in diameter), rupture of one of which permitted the escape of a number of heads or scolices of a tapeworm, bearing the closest resemblance to those of *taenia echinococcus*. In view of the rarity of the condition it appeared to be desirable that the identity of the parasite should be established with certainty. For that purpose, therefore, the cyst was handed to Dr J. H. Ashworth, of the Natural History Department, Edinburgh University. He reported that it was undoubtedly a cyst of *echinococcifer* (*taenia echinococcus* (von Siebold)).