

the disease. In this connection it must be remembered that a diseased calf is one which harbours the germ of white scour, and that, just as with many other bacterial diseases, this abnormality may not be manifested by any pronounced symptom of disturbed health. Hence, in any outbreak of white scour it may be practically impossible to distinguish with certainty between the infected and the non-infected animals, although that is precisely what is of cardinal importance when one wishes to arrest the spread of the disease. In short, the difficulty in preventing white scour is just the same as that with which we have long been familiar in the case of other contagious diseases, such as glanders, tuberculosis, and pleuro-pneumonia.

CLINICAL ARTICLES.

A CASE OF CYSTIC CANCER OF THE LIVER IN A SHEEP.

By J. F. HODGSON, M.D., Ch.B.Vict., Deputy Medical Officer of Health, Halifax.

Cystic cancer of the liver is an exceedingly rare form of disease in man,¹ while cancers of any variety are uncommon in cattle and sheep.²

In the public slaughter-house at Halifax over 17,000 sheep are killed annually, yet during the last four years, for certain, only in one case has cancer of the liver been found. It must be borne in mind, however, that the chances are against a sheep with such a rapidly fatal disease ever reaching the slaughter-house, but still, I think, the figures show the great rarity of the disease.

In the case under notice the liver weighed 17 lbs., and was enormously enlarged. Only a very small portion of liver tissue was left, and this had on the surface the appearance of a coarse cirrhosis. The rest of the surface presented a very irregular bossy appearance. On section the small portion of liver tissue was seen to be cirrhotic and slightly fatty, while the rest of the organ was made up of nodular growths and cysts. In fact, the general appearance of the liver would almost lead one to think that it was composed of little else but cysts in a fibrous network. The newer growths were of a greyish yellow colour, of fairly firm consistence, and generally globular in shape. When these nodules got beyond the size of a cherry softening occurred, leading to the formation of cysts, which contained blood and debris. The cancerous walls of the cysts were well marked, and the spaces between

¹ Coats "Manual of Pathology," pp. 906, 907. Hale White "Tumours of the Liver in Allbutt's System of Medicine," vol. iv., p. 211.

² Walley's "Meat Inspection," p. 53.

them and the blood clots contained a thickish, slightly blood-stained fluid, which escaped on section.

The gall bladder and the bile ducts were free, but the glands in the portal fissure were affected.

The carcase was very little emaciated, and showed no signs of jaundice.

A microscopical section through a small nodule showed typical "cell-nests," epithelial in character, enclosed in a well-marked vascular network of fibrous tissue.

The entrails had been destroyed, so that it was impossible to make a careful examination for cancerous deposits in other organs. The liver is the organ most liable to secondary cancer, and the probabilities are that in this case the growths were of that nature.

I have to thank Mr J. K. Crawshaw, our Meat Inspector, for bringing this case to my notice.

MAMMARY TUMOUR IN A SOW.

By A. G. HOPKINS, B.Agr., D.V.M., Vancouver, B.C.

DURING the weaning period the mammary gland of a pure-bred Yorkshire sow was noticed to be increasing instead of decreasing in size at the posterior part. The use of a home-made irritant dressing tended to reduce it temporarily to the size and hardness of a baseball. As the sow approached another parturition, the gland again enlarged to a very great size, and again after parturition was over subsided to some extent, although it did not become as small as at the weaning period first mentioned.

The sow was approaching a parturition when the writer's attention was first called to her; therefore Nature was allowed to take its course, and eleven pigs were delivered. Their subsequent deaths were due to other causes, I believe, than the presence of the tumour.

The tumour impeded the sow's movements to a considerable extent, and its under surface became abraded from friction with the ground (as shown in the photograph). Six weeks after the parturition, removal was attempted with the knife and écraseur. The tumour on section showed a considerable amount of very firm tissue, enclosing many large pockets of an ill-smelling pus; the growth was well supplied with blood by one main vessel. The weight of the tumour after removal was estimated to be about 30 lbs.

After the edges of the skin had been brought together by sutures (an overplus of skin had to be removed) the sow was let up and was able to run around the barnyard, although stepping high with the hind legs, which had not become accommodated to the loss of the tumour.

The operators looked carefully over the wound site for fugitive portions of the growth, but were unable to find any. They were endeavouring to be as conservative as possible in the removal of the gland and teats, and deemed the growth completely excised, but subsequent events showed they were mistaken.

The coldness of the atmosphere (winter) and the surroundings