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Sulfanilamide in Wound Healing

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of the joints of the legs. Had this been a fully developed fetus, the operation might have been more difficult. A condition of chronic laminitis was aggravated at this time, but no further report of the case was received.

Conversation with a local stallion owner revealed he had observed two similar cases the previous year. The mares had been purchased and then forcibly bred, only to find that they were pregnant at the time as evidenced by abortion. In this dystocia forcible breeding was a benefit, but it is not usually the case. Careful examination by a competent veterinarian before breeding mares in which history is obscure may minimize such losses.

--- J. W. Wilson, '42

3 Lymphatic Leukemia in Bovine.

Leukemia in our domestic animals is not a rare occurrence, although some practitioners have never encountered a single case. Late in August, 1941, five clinical cases of leukemia were encountered by the Iowa State College ambulatory clinic, all in the same herd and within a five month period. The herd consisted of twenty-three females and two males of the milking shorthorn breed.

The cow which prompted the client to call for veterinary service is the one shown in the accompanying cut. Enlargements were first observed by the owner in March, 1941, but at that time no other clinical symptoms were noticed. The cow, 7 years of age, when first observed by the ambulatory clinician, was very weak and emaciated, and showed a rather uniform enlargement of all the superficial lymph nodes. A blood count showed the white cells to number 120,600 per cubic mm., and the red cells 3,640,000 per cubic mm. The differential count showed a high percentage of immature lymphocytes.

A diagnosis of lymphatic leukemia was made, and the client informed of the hopelessness of the case. Upon questioning the client, two more cases of leukemia were found to be present in the herd. Both were in good flesh, but one showed a much greater enlargement of the superficial lymph nodes. A blood count from this cow showed the white blood cells to number 88,600 per cubic mm., and the red blood cells 4,020,000 per cubic mm. It was also learned that a cow having similar enlargements had died from tympanites two weeks previous to the call, and that another had been sold on the market one month before.

One week following the original call, a post mortem examination was held on the first cow. All the lymphatic tissue showed marked increase in size. The prescapular and prefemoral lymph nodes were about six inches in length, and the spleen was greatly enlarged, being about 30 inches long, 12 inches wide, and 4 inches thick. The cut surface showed the splenic corpuscles increased in size up to 2 cm. in diameter. The wall of the rumen and the diaphragm showed marked edema, and were undergoing necrosis, probably due to a circulatory disturbance.

It was noted that of the five cases, two were by the same sire and two were out of the same dam.

--- H. E. Held, '42

4 Sulfanilamide in Wound Healing.

A large purebred collie was admitted to the Glendale Small Animal Hospital, Glendale, California, having an ulcerated area circumscribing the left eye. The history was the following: the dog had belonged to a professional trainer
who had abused him, and beat him across the eye with a heavy, studded collar. The Humane Society took the dog from the trainer and gave him to the present owner. A similar wound around the right eye had healed, but the wound on the left eye failed to respond to treatment and remained in a raw condition for a period of one year.

A month of treatment with 5 per cent tannic acid, boric acid spray, mercuriochrome dusting powder, pellitol, and boric acid-urea powder failed to bring about any indication of healing.

After these agents failed to get results, a new preparation was suggested. Twenty-five grain sulfanilamide tablets containing sodium bicarbonate were ground in a mortar and 2 grains of urea were added. This powder was dusted on several times a day.

In three days the ulcer had become a dry wound and in a week the edges had begun to granulate. Then granulation tissue appeared in the center of the denuded area. Three weeks after this treatment was started, the area was completely covered with new skin, and the patient was sent home.

-C. H. Burnham, '42

Equine Dermatitis. On the morning of June 14, 1941, Dr. L. E. Smith of Jefferson, Iowa, was called in consultation by a neighboring veterinarian to observe a rather unusual skin condition in a group of horses. The client had lost one animal, had four more with lesions, and had two animals that were not affected.

The lesions consisted of vesicular eruptions on the muzzle, eyelids, and legs which were developing toward necrosis and subsequent sloughing. The inflamed areas were swollen and traumatized due to an intense pruritis. The necropsy revealed a severe stomatitis, gastritis and hemorrhagic to necrotic enteritis.

After questioning the client it was discovered that the affected animals had been grazing in a different pasture than those that were not affected. An inspection of the pasture showed a short, half-dead growth of alsike clover that was covered with innumerable small brownish-black fungus colonies. This growth was later identified as the fungus, Uromyces trifolii, by a plant pathologist.

The lesions were treated with white lotion, and the owner was advised to keep his horses out of the clover pasture. When we saw the animals a few days later, they were recovering nicely.

In searching for the etiologic factor for the above condition, one finds two possible explanations. First, a luxurious growth of a fungus that has been previously suspected as being pathogenic was present on the clover. This suspected pathogenicity, however, has never been substantiated by experimental evidence. Secondly, alsike clover is known to contain a photosensitizing agent which, when ingested, will cause this type of lesion in the unpigmented areas of the skin if the animals are exposed to sunlight. It will also produce superficial sloughing of the mucous membranes of the lips and the tip of the tongue, vesicles on the mucous membranes within the mouth, and general digestive disturbances. This latter explanation would be quite plausible in grey horses or in dark horses with white points or markings, but this particular group were bays and blacks.

Whether this skin disease was due to fungus poisoning or to photosensitization is debatable, but in either case the treatment would be essentially the same, that of local wound treatment and a change of pasture.

-M. W. Karber, '43

“Clay Pigeon” Poisoning in Swine.
The latter part of June, 1941, one live and two dead pigs, weighing about thirty pounds each, were presented at the Diagnostic Laboratory, University of Minnesota, for the diagnosis of a herd problem.

A history of sporadic illness resulting in death in a short time was obtained. The pigs were permitted to run on pasture. The losses, in two weeks, had been fifteen pigs from a group of forty. Mature animals running with the pigs showed no signs of disease.

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