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A Case of Ergotism in the Bovine

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Steer with Sinusitis.

swelling, and the circle of skin was removed. A ¾ inch trephine opening into the frontal sinus was then made. As the bony plug was removed, a thick cheesy pus exuded from the trephine opening. The sinus was then flushed out as thoroughly as possible with potassium permanganate (1:5000 concentration) solution. Immediately following this, some Special Formula 17900 mastitis ointment (Upjohn) was injected into the sinus via the trephine opening.

The following day some pus was draining from the trephine opening. This was cleaned off and the sinus was again flushed with potassium permanganate solution (1:5000). Three ounces of BIPP (bismuth iodoform petrolatum paste) were injected into the sinus. It was observed that the animal had developed a profuse liquid diarrhea, which was thought to have resulted from absorption of toxic materials from the infected sinus. Two Kaobiotic bolets were administered orally to help control the diarrhea.

In the following three days the animal began to appear more alert, the appetite improved, and the diarrhea subsided. For three days the area of the trephine opening was cleansed, and the sinus was flushed with 1:5000 potassium permanganate solution.

After two more days of similar treatment, the animal was ordered home, since the area of the trephine was almost void of exudate, and the trephine opening was beginning to heal.

James R. Collins, '60

REFERENCES

1. Diseases of Cattle, Multiple Authors, American Veterinary Publications, Inc., 1956.

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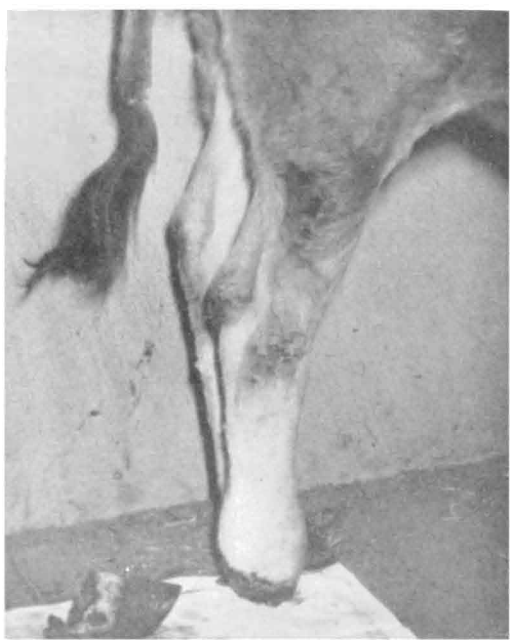
3 A Case of Ergotism in the Bovine.

Ergotism, or ergot posioning, is a condition caused by continued ingestion of feed containing ergot. The fungus is found growing on barley, wheat, and other grasses. Bluegrass, brome, and fescues have been suspected of being infected. *Claviceps purpurea* is the fungus most often involved, but probably other fungi produce ergot. The sclerotium (compact mass of hardened mycelium) of the parasitic fungus replaces the seed or grain.



Ergotism in a Bovine.

When the sclerotia are consumed over a period of time, toxicity is manifested in cattle by lameness in the early stages. The hind limbs are usually affected first. The seriousness of the disease depends upon the amount of ergot consumed. An indented line is noted at the junction of the

normal and diseased tissue. The part distal to this line becomes gangrenous and may slough off. The tail, ears, and limbs are the parts so affected. The cause of sloughing dry gangrene is attributed to the ability of ergot to stimulate the myoneural junctions of the motor nerve fibers of the parasympathetic nervous system. This results in contraction of the peripheral arterioles with loss of circulation to the distal part and gangrene of the extremity. Also, endothelial damage may result in thrombus formation with vascular occlusion and gangrenous necrosis.

On Feb. 12, 1959, a 500 pound heifer was presented to the clinic for diagnosis and treatment. It was noted that the right rear foot had sloughed at the pastern joint. Phalanges II and III had been sloughed. There was evidence of an indented line and beginning necrosis of the distal part of the tail. The patient appeared bright and alert. There was no history of ergotized grain, hay, or of fescue being fed. The heifer had been turned into a picked corn field with some other heifers. No symptoms of ergotism had been noted in the other heifers. Ergotism was diagnosed.

Treatment consisted of the application of a sulfanilamide pack to the stump of the limb and placing a special rubber boot over the pack and stump. The leg stump progressively dried and began to heal. On Feb. 22, 1959, the patient was dismissed.

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4 **Correction of Impaction of the Small Colon in a Shetland Pony by Means of a Laparotomy.** The small size of the Shetland pony presents problems in diagnosing and treating impaction of the cecum and colon. History and symptoms are similar to those presented by larger breeds of horses but the difficulty in performing a rectal examination limits the accuracy of diagnosis and effectiveness of therapy. An exploratory laporotomy offers a method by which this disadvantage can be overcome.

This is illustrated by a two year old Shetland mare, weighing approximately 300 pounds, that was admitted to the Stange Memorial Clinic on the evening of February 20, 1959. This mare was one of a large band of brood mares being wintered on dry hay. The owner had first noted colicy smymptoms 48 hours prior to admittance to the clinic. The pony was treated by the local veterinarian with injectable cathartics but no response was noted. When examined at the clinic the patient showed abdominal pain and tympany. She was depressed and stood with her head held very low. Often she would lie down and roll. Switching of the tail, stamping of the feet, and straining were noted. The abdomen showed marked distention and tympany. The mucous membranes were dark red in color. The respirations were shallow and rapid. Due to the small size of the animal it was impossible to perform a rectal examination.

Shetland with impaction.

A ⅜ inch diameter stomach tube was passed but only a small amount of foul smelling gas was expelled. One and one-half ounces of Turcapsol (Pitman-Moore Co.) mixed with one and one-half quarts of mineral oil was then administered via the stomach tube. One thousand ml. of Normal Electrolytes with 5% Dextrose (Jen-Sal) was administered intraven-