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Chronic Suppurative Periostitis, Ostitis, and Sequestrum

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CLINICAL MEDICINE

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1 **Chronic Suppurative Periostitis, Ostitis, and Sequestrum.** Dec. 5, 1947, a 12 year old saddle mare was admitted to the Stange Memorial Clinic. On the dorsal surface of the third metatarsal bone, about 4 in. below the hock, was a large open wound from which a purulent exudate was draining. The leg was enlarged from the hock to the coronary band of the hoof, and at the location of the wound, the leg was almost twice its normal size.

The injury was one of long standing and had undergone several home treatments. It had originated as a bony enlargement, and 2½ months prior to being presented to the clinic the mare had kicked through the stall partition causing a lacerated surface wound. Most of the home treatment was given during this period and resulted in the formation of exuberant granulation tissue.

A 1:1,000 mercury bichloride pack was placed on the wound for the purpose of pre-operative skin infection. On the following day, the pack was saturated with a solution of 1:1,000 mercury chloride. Dec. 8, 1947, the original pack was removed and a new one put in place. On the succeeding day, the pack was again saturated with mercury bichloride 1:1,000.

The morning of Dec. 10, the mare was presented for radiological examination. The X-ray revealed an extensive periostitis and ostitis extending into the hock joint and causing an ankylosis of the tarsal bones, and an enlargement of the third metatarsal bone. On the dorsal surface of the bone, about 3 ot 4 in. below the articulation of the third tarsal bone and the third metatarsal bone, a sequestrum (see picture) with insecure attachments to the metatarsus was seen. Final diagnosis was chronic suppurative periostitis and ostitis with sequestrum and exuberant granulation tissue.

The mare was given 60 Gm. of chloral hydrate in water via stomach tube as a basal anesthetic. She was then restrained upon the operating table in the left recumbant position. The wound and wound area were cleansed with a 2 percent Ther-

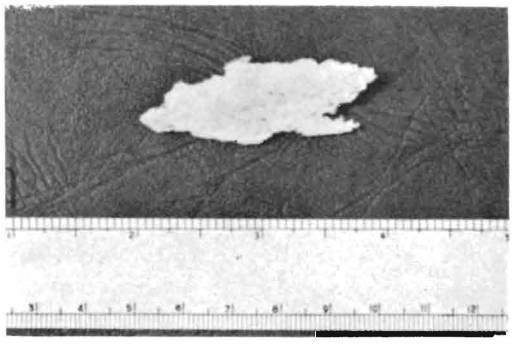

Fig. 1. Sequestrum removed from the dorsal surface of the third metatarsal bone where it was insecurely attached.

apogen solution. Local anesthesia was obtained by infiltration with 2 percent procaine in saline.

The exuberant granulation tissue was cut away and the sequestrum was easily removed with a forceps. The bone was then curetted to remove any roughness from its surface. Hemorrhage was controlled during the operation by the use of hemostats. A sulfanilamide pressure pack was placed over the wound to control post-operative hemorrhage.

The bandage was changed 4 hours later and a dry sulfanilamide pack was put in its place. This bandage was left on until the second day after the operation at which time it was removed and the wound examined. The wound at this time was observed to have a very healthy appearance. It was then repacked with sulfanilamide powder and rebandaged.

The following day the wound was again examined, and no suppuration could be detected. A sulfanilamide pack was then applied, and was changed on alternate days thereafter.

Dec. 19, 1947, the wound was examined. Healthy granulations were observed to be forming, and the sulfanilamide pack was replaced. The case was discharged from the clinic on Dec. 22.

—Oliver W. Whitcomb, '49

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2 **Lymphocytomatosis in a Bovine**

A Dexter cow, aged 3½ years, was admitted to Stange Memorial Clinic Oct. 27, 1947, with the history of a large swelling in the ventral abdominal region which had persisted for almost a month. No treatment had been given the animal. She was in poor condition and steadily losing weight.

A large firm swelling, extending from the left flank to the xyphoid cartilage, could be easily seen and palpated. The enlargement was hard and did not pit under pressure. The animal's appetite was good. Her respiration was slightly accelerated, her pulse normal, and her temperature 102.6°F. The cow died the night of Oct. 28, before a clinical diagnosis could be made.

The post mortem picture was very interesting. All of the gastric lymph nodes were greatly enlarged, some being as large as 15 cm. in diameter and showed the typical pale, yellowish, soft growth of a malignant lymphocytic tumor. The abomasum, pylorus, and several inches of duodenum were literally surrounded by enormously enlarged lymph nodes. Tumor cell masses up to 15 cm. in thickness were found on the lower left lateral wall of the abdomen. These infiltrations of tumor cells probably came via contact metastasis from the gastric growths. A contact metastasis had also occurred in the mesentery of a loop of jejunum as 2 pedunculated masses of tissue from 8 cm. in diameter were present at this site. The sublumbar and internal inguinal lymph nodes were greatly enlarged. Several of these nodes were 12 cm. in diameter.

Hematogenous metastasis had taken place to both right and left auricles. A pedunculated tumorous growth about 5 cm. in diameter was found attached to the opening of the coronary vein in the right auricle. The inner wall of the left auricle was infiltrated by a flattened tumorous mass about 6 cm. in diameter and 15 mm. in thickness. The right heart was atonic and markedly dilated.

No tumor involvement was seen in the spleen, liver, kidneys, lungs, mesenteric lymph nodes, or any of the lymph nodes anterior to the diaphragm. One would expect to find tumorous growths in the lungs, in as much as hematogenous metastasis could have carried the tumor cells from the right heart into the lung tissue. No satisfactory explanation can be offered for their absence. Perhaps it was only a matter of time before tumors would have metastasised to these locations.

The post mortem diagnosis given on the basis of necropsy findings was lymphocytomatosis originating in the gastric lymph nodes.

—A. Neumann, '49

Vibrio coli is suggested as the new name for the bacteria causing dysentery in hogs.