

surface of the skin will become encrusted. Still later the lesion will rupture forming a crateriform ulceration discharging a scanty amount of yellow pus. Finally the lesion will heal leaving a hairless cicatrix. Internal lesions have not been reported in the horse, but one case of pulmonary sporotrichosis in the ox is on record. (2)

Laboratory diagnosis of sporotrichosis consists of the isolation and identification of fungus. All ordinary laboratory media will grow the fungus, but some are more desirable for the isolation of the culture than others. The ones of choice are Sabouraud's agar, potato, carrot, and an acid-dextrose-yeast-extract agar used by Yegian, Diran and Kurung. (3) The best culture growth is achieved at 30° C. (slightly above room temperature) rather than at the usual 37.5° C.

The peritoneal inoculation of mice, rats or hamsters using a suspension of the suspected material usually results in death in from 5 to 75 days. Evidence of a generalized peritoneal infection and an orchitis in males (particularly in hamsters) is usually demonstrated upon autopsy. A Gram stain of a direct smear from one of the lesions will show the typical Gram positive, cigar-shaped conidia present among the cells of the exudate. This is a distinguishing feature of the disease as is the observation of branched filaments on the margin of a growth colony when viewed under the microscope.

The medicinal treatment of sporotrichosis is usually based on iodine therapy of one form or another. Intravenous administration of sodium iodide has been used most extensively but the oral administration of potassium iodide or a direct swab of tincture of iodine may be employed. Response to the iodine treatment is noticed in a very short time but complete recovery will most likely take quite some time. Surgical excision of the encapsulated abscesses has been used but reoccurrence of the abscesses was noted some time later. The operators, in this particular case, then administered a course of potassium iodide per orum in conjunction with surgical excision, and obtained an apparent recovery. (4) Until a more extensive study of the disease has been

conducted a guarded prognosis should be made.

Little is known of the immunological aspect of sporotrichosis. The disease is of little economic importance due to its rarity and has, therefore, received only a small amount of scientific study.

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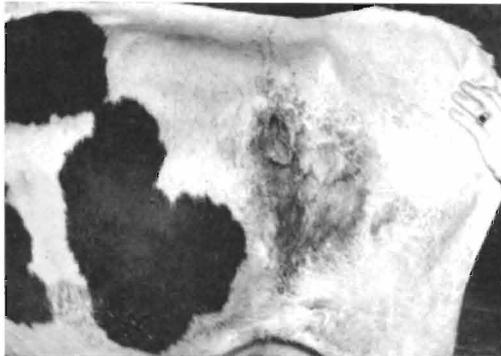
—J. R. Olson, KSC '45

2

**Rumen Fistula.** On Oct. 22, 1946, a Holstein cow was admitted to Stange Memorial Clinic. The owner had found the animal bloated 8 days before and at that time he had tapped the rumen with a butcher knife. The wound in the abdominal wall did not heal so the owner sought professional aid for the cow.

The cow was given routine care and no treatment was begun until Oct. 28, because the granulation tissue forming in the wound was deemed too friable to hold the necessary stitches. A period of 6 days was allowed to elapse so the newly formed granulation tissue would be better organized. The cow was placed in the stocks and the area surrounding the fistula was shaved, washed, defatted with ether, and 70 percent alcohol plus tincture of iodine applied. The anesthesia was induced by paravertebral-lumbar anesthesia. Complete anesthesia of the area was obtained.

The fistula was enlarged and the necrotic tissue removed. The rumen was dissected away from the abdominal wall for about 4 in. and then it was found that it could not be completely dissected away. The rumen was closed at that point using chromic catgut sutures. A sterile gauze pack was placed between the rumen and skin. The skin was then sutured using linen tape.



Patient with rumenal fistula as presented to the clinic.

Twice during the next 4 days the pack was removed and sterile packs were replaced in the wound. Bipp paste was applied to the wound surface. The cow ate, defecated, and exercised normally.

On Nov. 3 the fistula broke open again. It was thoroughly cleaned with a 1:3,000 solution of potassium permanganate. The contents of the rumen spilled out through the fistula with each rumen contraction.

The treatment for the next 3 days consisted of flushing the wound daily with B. K. solution and applying Bipp paste to the wound surface. On Nov. 7 the stitches were removed from the skin and all necrotic tissue excised. Sulfanilamide powder was dusted on the area. For the next 5 days the treatment was the same, namely cleaning the wound daily with B. K. solution and dusting the area with sulfanilamide powder.

Seventeen days after treatment had begun the patient was discharged. The fistula had not entirely closed but was reduced to about  $\frac{1}{2}$  in. in diameter. The owner was told, at that time, that the fis-

tula would probably close entirely. However, if it did not close within 3 months, he was to bring the animal back for further treatment. The 3 months elapsed and the owner did not return with the animal so it is presumed that the fistula closed entirely within that period.

—A. Neumann, '47

### 3

**Chronic Proliferative Endocarditis.** On January 27, 1947, a female German Police dog, age 5 years, was admitted to Stange Memorial Clinic.

She had previously been treated by 2 veterinarians for pleurisy and bronchitis. An accompanying letter from one of the veterinarians stated that she had shown some improvement, but she would not eat and she had a persistent dyspnea.

Upon admission the dog's symptoms were: depression, emaciation, dyspnea, and a weak heart action. She was immediately given 1.5 gr. of digifolin to stimulate her heart.

On January 28 she was X-rayed. Little was seen other than a forcing upward of the thoracic organs by some body fluid. Bismuth subnitrate, 15 gr., was given that night, and a number 11 capsule of bismuth subnitrate was administered the next morning. Another X-ray revealed a constriction of the esophagus at the sixth thoracic rib which would not allow the bismuth capsule to pass into the stomach. A stomach tube was passed and the dog was given as aqueous solution containing 3 oz. of dextrose, and 2 oz. of liquid peptone.

The possibility of diaphragmatic hernia was discounted, for if this had been the case, some bismuth would have been entrapped in the herniated portion of the intestine; however, no bismuth was retained in the scope of the X-ray other than in the esophagus.

On January 30, a biopsy was made on the thoracic cavity. The needle was inserted between the sixth and seventh ribs, after disinfection of the area, and 300 cc. of a bloody fluid was withdrawn. A