

## North American Blastomycosis

by J. E. B. Graham and R. J. Ketchell\*\*

NORTH AMERICAN Blastomycosis is a chronic fungus disease causing granulomas, abscesses and ulcerations of the lungs, skin and other organs. It is caused by *Blastomyces dermatitidis*, a yeast-like fungus whose source in nature and means of transmission are unknown.

The fungi causing human and canine infections are morphologically and serologically identical. The disease has been fairly widely reported in humans in the southeastern United States and the Mississippi valley, and to our knowledge has a similar distribution in dogs. The disease has been previously reported in humans in Canada (1). There is no record of a Canadian case report in a dog. In dogs, the systemic disease is more frequently seen than the cutaneous form and this case report follows the systemic pattern.

### SYMPTOMS AND COURSE

On November 8, 1957, a male spaniel-type dog, two and one half years old was presented with the history of having been 'off color' several weeks and for several days having been constipated, depressed and unsteady in its gait. The appetite was good, the temperature was 102.6, and the urinalysis showed a specific gravity of 1.035, albumen negative and a urine bilirubin of three plus. There was pain shown when the abdomen was palpated under the costal arch. There was no evidence of external lymph gland enlargement, of skin lesions or of a cough. Three days after ad-

mittance the ataxia developed into a marked incoordination. The head was held down and attempts were made to push the head into corners. Pupil dilation was normal. The incoordination was lessened in three days. The temperature remained moderately elevated (102.2-103.2) till November 20 when it went to normal and then to subnormal on November 21.

Dyspnea became marked November 15 and on this date the accompanying radiograph was taken. This film gave a 'ground glass' appearance with considerable obscuration of the heart shadow. With the diffuse consolidation and the symptomatology, a tentative diagnosis of toxoplasmosis was made. The possibility of transmission to human infants was explained to the owners who decided to leave the animal hospitalized. Despite the most rigorous antibiotic and supportive therapy, the animal died November 21.

### NECROPSY

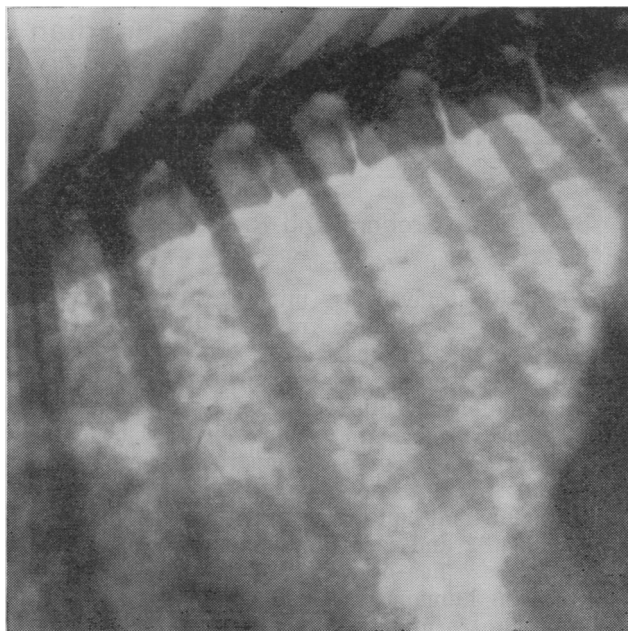
No skin lesions were present. The bronchial and mediastinal lymph nodes were enlarged. The lungs had numerous nodules from one millimeter to one centimeter in diameter. A grey, purulent exudate was present in these nodules. There was a small amount of similar exudate in the terminal bronchi. The liver contained several small nodules resembling those in the lungs. The spleen had two small similar nodules.

### HISTOPATHOLOGY

Various specimens were sent to the Ontario Veterinary College and a diagnosis of Blastomycosis was made.

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#### DISCUSSION

The symptoms in this case were puzzling and although the granulomatous nature of the disease was suspected, the final diagnosis was only made by histopathological examination after death. The history revealed that the dog had spent the previous summer in

Manitoba and had suffered a heavy tick infestation. This fact may or may not be significant in the transmission of the disease.

#### REFERENCES

1. Merck Manual, 8th. Edition. Merck & Co. Inc. Rahway, 1950. Merck Veterinary Manual. 1st. Edition, Merck & Co., Inc., Rahway, 1955.

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### Training Course in Bacteriology

Dean M. St. A. Woodside, Acting President, University of Toronto, announces that the University will offer a new course to train bacteriologists for the health services commencing on September 12th, 1958. This course is made possible by the receipt of a Federal Health Grant allocated to the Province of Ontario. The course, which will prepare university graduates for the Diploma in Bacteriology of the University of Toronto, will be given in the School of Hygiene, and will be under the direction of Dr. A. J. Rhodes.

The course will be of about nine months' duration and will consist of lectures, seminars, and laboratory exercises in systematic bacteriology, systematic virology, public health bacteriology, medical mycology, medical parasitology, and statistical methods.

There is at present a serious shortage of trained bacteriologists in public health, hospital, university and veterinary laboratories. It is hoped that the provision of this academic course will help to alleviate this present shortage in Ontario and elsewhere.