The purpose of this note is to call attention to two reports of a mycobacterial infection in cats of which there are abstracts in this issue. Previously, it seems, no such infection other than tuberculosis has been reported for this animal. One report is from the Auckland area of New Zealand,[1] the other from the Sydney area of Australia.[2] In both instances several animals with the infection had been brought to the attention of veterinarians within a very few years. Whether

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[1]BROWN, L. M., MAY, C. D. and WILLIAMS, S. E. A non-tuberculoid granuloma in cats. New Zealand Vet. J. **10** (1962) 7-9.

[2]LAWRENCE, W. E. and WICKHAM, N. Cat leprosy: Infections by a bacillus resembling *Mycobacterium lepraemurium:* Australian Vet. J. **39** (1963) 390-393.

or not it is confined to these particular areas cannot be said; according to a leprologist in Darwin,[3] if the condition exists in that region it has not come to his attention. In both instances attempts to cultivate the causative agent had been unsuccessful.

Histologically, the sections of a single block of a skin nodule from New Zealand seen by us[4] resemble essentially the lesion of murine leprosy consisting basically of massed histiocytes and multinucleate cells formed by fusion of histiocytes, all with abundant, lightly-staining cytoplasm massed with acid-fast bacilli. A skin nodule from Australia (one of four paraffin blocks received),[5] is of very different nature. The prominent feature is a tendency to fusion of large irregular cells with abundant cytoplasm into syncytia of similar irregularity.

This condition would doubtless be relegated to the same category as the mycobacterioses of various other animals and birds that have been reported, were it not for the findings of experimental inoculations in rats done by Lawrence and Wickham. The infecting agent quickly became adapted to that animal, ultimately causing generalized infection and death; in guinea-pigs only local lesions were produced.

Specimens of the skin lesions of first and second transfer rats were also supplied; in the latter the bacillus had apparently become completely adapted. In the spleen the parenchyma is almost completely replaced by the lepromatous lesions, but the central areas of necrosis usual in rat leprosy lesions are completely lacking; the bacillus load is simply amazing. Nothing like this lesion was ever seen in any of the rats inoculated with the strain of *M. lepraemurium* used for some years in our laboratory.

No attempts to transfer the infection directly to uninfected cats, young or old, have been reported. The rat-adapted bacillus failed to infect young kittens. Whether or not that was because of a change of infectivity for the cat as a result of the adaptation cannot be said. It has been suggested[6] that it might be of interest—if that has not already been done—to attempt to infect cats directly with strains of rat leprosy. The possible interest in the electron microscopy of these lesions has led to one inquiry[7] as to the possibility of obtaining a strain or strains of the cat mycobacteriosis. Although it might be difficult to transport such material, when encountered again, even by air, it might be very well worth while to make the attempt.

—H. W. Wade

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[3]Hargrave, J. C., personal communication.

[4]Kindly supplied by Dr. William H. Feldman, chief, Laboratory Research in Pulmonary Diseases, Veterans Admiinstration, Washington, D. C.

[5]Kindly supplied by Dr. W. E. Lawrence, of the Department of Veterinary Pathology, University of Sydney.

[6]Experiment suggested by Dr. William H. Feldman.

[7]By Dr. Tamotsu Imaeda, of Caracas, Venezuela.