

# TRANSMISSION OF LEPROSY BY ANIMAL BITE

## REPLY TO: 'TUBERCULOID LEPROSY AT THE SITE OF A DOG BITE'

Sir,

We are writing this letter with reference to Garg's Letter to the Editor,<sup>1</sup> one of us (CMG), along with others, have reported a case of indeterminate leprosy developing 2 years following a dog bite.<sup>2</sup> The case has been followed and has now developed a classical tuberculoid lesion at the same site. Although there are several reports of the development of a leprosy lesion at the site of injury, (tattooing and vaccination), ours is probably the first case reported from a dog bite.

Is this just a coincidence? Or has the injury acted as a portal of entry for pre-existing lepra bacilli on the surface of skin, or was the animal perhaps harbouring the organism at the time of bite? In addition, the possibility of a preexisting leprosy lesion at the site of bite has to be considered.

The concept of man being the only reserver for *Mycobacterium leprae* is now changing. There are reports of occurrence of naturally acquired leprosy in chimpanzees,<sup>3</sup> Mangabey monkeys,<sup>4</sup> and armadillos.<sup>5</sup> Successful transmission of human leprosy to animals has been reported in chimpanzees, golden and chinese hamsters, cotton rats, mystromys, mice and armadillos.<sup>6</sup> There is no scientific reason to think that dogs may harbour *M. leprae*, but if more reports are made of leprosy lesions in human beings following dog bites, perhaps this possibility should be kept in mind.

C M GUPTA & R D BHATA

*Department of Leprosy*  
*Military Hospital*  
*Agra Cantt (UP)*  
*Pin-282 001*  
*India*

## References

- <sup>1</sup> Garg MP. Tuberculoid leprosy at the site of a dog bite. *Lepr Rev*, 1985; **56**: 260-1.
- <sup>2</sup> Gupta CM, Tutakne MA, Tiwari VD et al. Inoculation leprosy subsequent to dog bite. *Ind J Lepr*, 1984; **56**: 919-20.
- <sup>3</sup> Donham KG, Leininger JR. Spontaneous leprosy like disease in a chimpanzee. *J Inf Disease*, 1977; 132-6.
- <sup>4</sup> Meyers WM, Walsh GP, Brown HL et al. Naturally acquired leprosy in a mangabey monkey (*cercopithecus* Sp.) *Int J Lepr*, 1980; **48**: 495-6.
- <sup>5</sup> Walsh GP, Storrs EE, Meyers WM et al. Naturally acquired leprosy like disease in the nine banded armadillo (*Dasypos novemcinctus*). Recent epizootiologic findings. *J Peticolo endothel soc*, 1977; **22**: 363-7.
- <sup>6</sup> Binford CH, Meyers WM. Leprosy. In: *A window on leprosy*. Chatterjee BR, (ed) GMLF, Wardha, India, 1978; 154.