

Letter from India



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Rabies is a major public health problem in India. Most patients are looked after by general physicians and infectious disease specialists. But sometimes the case is atypical and can come to a neurological department. I have encountered rabies on three such occasions, presenting initially as a neurological episode, with rabies being subsequently identified. It is a frightening experience.

Mary Warrell estimates that 30 000 people die annually in India from rabies (Warrell 2001). The Blue Cross, an Animal Welfare Organization, gives the same number. Seventy-five percent of the Indian population lives in villages and some are very remote. The stray dog population is very high and a large number of families keep pet dogs without immunising them. I personally estimate that there are at least 60 000 deaths annually, if not more, from rabies. Birth and death still go unreported, especially death, even though the law of the land demands this.

My very first encounter with rabies was in an Australian lady doctor working for the Theosophical Society here. She reported to me with restlessness and some agitation with mild fever. I put it down to a viral infection, as the main purpose of her consultation was pain in both her legs and the right hand. There was no neurological deficit. Two days later, she reported classical dysphagia of rabies. She then admitted that her pet cat had scratched her right arm and as a precaution she had taken the SEMPLE vaccine, 5 injections i.m.! (Normally, 14 injections are given into the anterior-abdominal wall.)

The second encounter was even more disastrous. The patient in question, a young man aged 24 years, developed painless quadriplegia and areflexia. The residents informed me that they had confidently diagnosed the Guillain-Barré syndrome. In large public hospitals in India, such patients are admitted to an open general ward. The residents asked me to see this patient on my ward round, which was a regular teaching session. To test any respiratory dysfunction, we either make the patients count rapidly or use the Wright peak flow meter at the bedside for forced expiratory volume. We first became suspicious when the young patient refused to accept the peak flow meter, and when water was offered he pushed it aside in anger. He then gave a loud shriek and we knew he had rabies. As it turned

out, he had been bitten by his pet dog (not immunised) in a suburban town, 2 months earlier.

The third encounter was with a lady aged 55 years who had a generalised convulsion and was admitted to my unit. The resident medical officer of our hospital alerted us that she, as a keen dog lover, dealt with dogs and had two mongrels. We set this aside and attended to her seizures. Twenty-four hours later, when the nurse presented her with a drink of water along with her tablets, she pushed this aside violently.

In all these three cases, rabies was not suspected initially, but was later diagnosed and confirmed by corneal smear antibody test. Purists may not accept this method, but in a vast country like India this is a quick and efficient method when the likelihood of the clinical diagnosis is very high. In many cases, the dogs are available, sacrificed and NEGRI bodies demonstrated. All three patients had miserable deaths.

I learned a number of lessons from these experiences, and those of others. Firstly, preventive medicine must be given the highest priority as opposed to curative medicine. Even in developed countries, life-style changes would improve the health of the nation. Infectious diseases take a high toll in developing countries. Rabies is absolutely preventable. A good start has been made in India: in the city of Jaipur (State of Rajasthan), the ABC (Animal Birth Control) programme of sterilising dogs to reduce the population has been so successful that no rabies cases have been reported for a year now; in Chennai (formerly called Madras, State of Tamil Nadu) the ABC programme is 75% successful thus far.

Secondly, in unusual presentations such as a behaviour disorder, intellectual changes of reasonably rapid onset, an atypical Guillain-Barré Syndrome, at least in India, rabies must be kept in mind. Neurologists may be the first to be referred such cases: rabies is not an exotic disease in my country.

Finally, the production of tissue culture rabies vaccine from the Pasteur Research Institute, Conoor, South India (a National Institute), has just been announced. This will be available, hopefully at cost price and even free at public hospitals. It goes without saying that all exposed individuals, and those in high-risk groups, must be vaccinated. The stray dog population must also be reduced by humanitarian methods.

References

Warrell M (2001) Rabies Encephalitis. *Practical Neurology*, 1, 14-29.