Exposure to Rabies in School Precincts: History Repeats Itself

Rabies is endemic in India and bites by stray dogs are common causes of human disease. Here, we describe an incident where children were exposed to rabid dog bite within the school premises.

On 15 September, 1992, a stray dog entered the premises of St. Jude's High School, Dehu Road (approximately 30 km from Pune), when the children were having their lunch during the afternoon recess. On being teased, the dog randomly bit 8 children and tried to run away. The dog was stoned to death by the staff of the school. The carcass of the dog was sent to the Veterinary Disease Investigation Section at Aundh, Pune from whom a piece of brain was made available to us.

The children were bitten mainly on the lateral surface of the thighs. Teeth marks were seen in majority of the bites. One was bitten on the fingers. Wounds of the victims were washed with Dettol and soap water and a dose of tetanus toxoid was administered in a local hospital. Three doses of sheep brain antirabies vaccine were also administered subcutaneously.

Examination of impression smears of the dog's brain by Seller's stain(1) showed

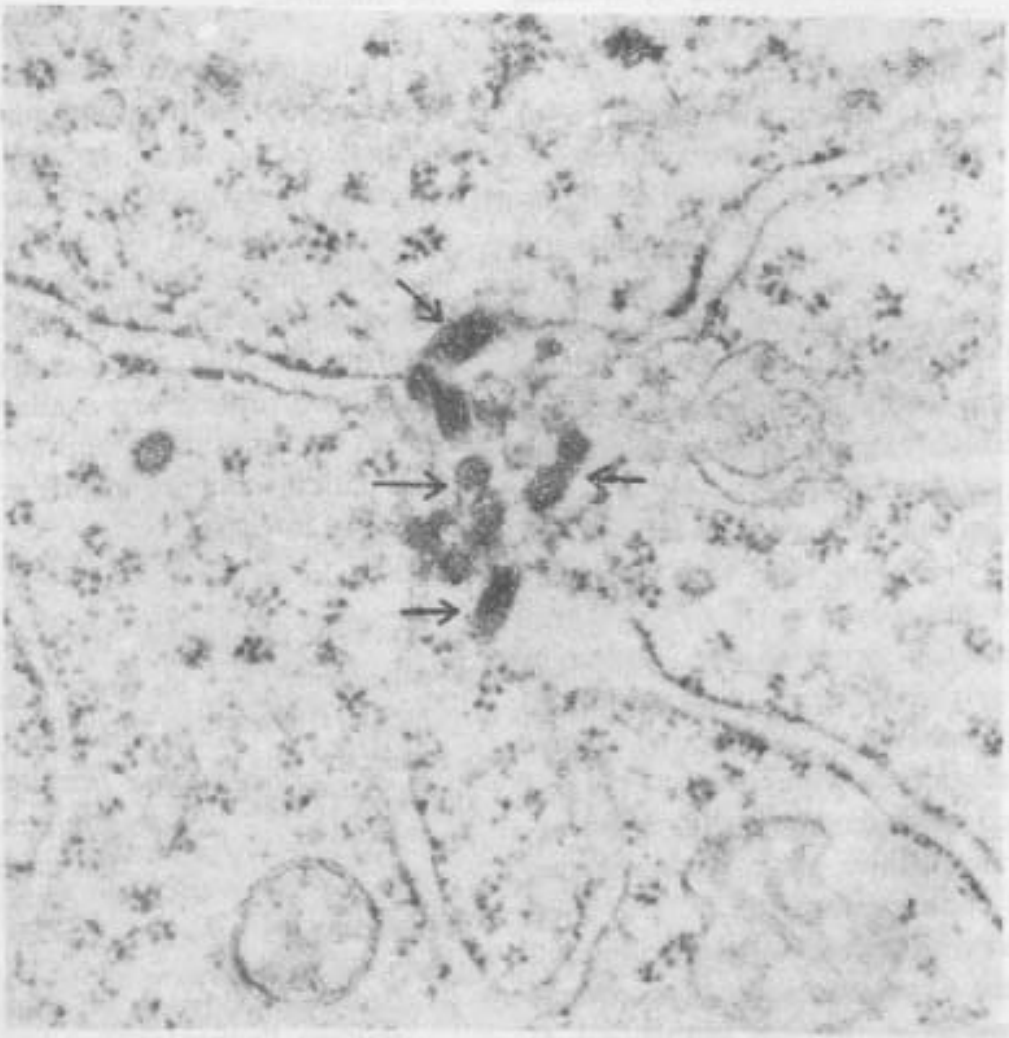

Fig. Electron micrograph of mouse brain showing rabies virus (arrow) in the endoplasmic reticular region of neuron. Magnification 50,000 X

many Negri bodies. The indirect immunofluorescence (IF) test(2) was also positive. When the specimen was inoculated intracerebrally into 3-day-old mice they became sick after 9 days. Rabies virus antigen could be demonstrated by IF test in the brains of sick mice and Rhabdoviruses could also be demonstrated in the mouse brain preparations by electron microscopy(3) (*Fig.*).

The incident described here is reminiscent of a similar situation that occurred in school precincts of the Jayakwadi irrigation project in Maharashtra(4) reported in 1975. These episodes illustrate that children are at risk of exposure to the rabid dog bite at school and emphasizes a need for vigilance by the school authorities.

The children bitten by the rabid dog could not afford the tissue culture vaccine, considered as ideal in such situations for post exposure prophylaxis(5). This further emphasizes the need for a cheap, safer and effective rabies vaccine. Fortunately, to date, none of the victims of rabid dog bite described here have developed rabies.

M.V. Joshi,
S.R. Prasad,
Naseem Shaikh,
L.V. D'Lima,
M.A. Sreenivasan,
National Institute of Virology,
20-A, Dr. Ambedkar Road,
Pune 411 001.

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Positioning of the Lower Limbs in Acute Paralytic Poliomyelitis

Acute paralytic poliomyelitis continues to plague the infants and young children of our country. It is estimated that every day 500-700 new cases of paralytic poliomyelitis occur and for every one paralytic case, there are 20 subclinical cases(1). Involvement of lower limbs is by far the commonest. The outcome of the disease depends on age(2), immunization status and severity of the initial paralysis(3).

Treatment includes proper positioning, physiotherapy and regular follow up once in 2 to 4 weeks either till recovery is complete or for a period of 2 years. Gravitational pull on the affected weak muscles is known to impede recovery(4). Hence, proper positioning of the limbs during the stage of acute paralysis is of paramount importance(4). This, however, is difficult in young children since the child changes its posture frequently even when asleep.

At the Department of Pediatrics, J.J.M. Medical College, Davangere, we are using a simple device for positioning the paralysed lower limbs during the acute stage. Tying of both legs together by using a handkerchief