



CASE PRESENTATION OF RECENT INCIDENTS OF RABIES IN MADURAI AREA

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Abstract :

In India lot of rabies cases are reported. In Madurai Medical College, Govt. Rajaji Hospital 5 deaths due to rabies have been reported from September 2010 to August 2011. Out of 5 cases, the diagnosis of rabies in 3 cases was confirmed by immuno fluorescent technique. These three reported cases of rabies have been discussed. Out of the three patients, one patient received 4 doses of Antirabies vaccine (ARV). But, human antirabies immunoglobulin was not given (HRIG). 2nd patient received only one dose of anti rabies vaccine and the 3rd patient did not receive any medication. The diagnosis of rabies was confirmed by direct immuno fluorescent technique of corneal impression smear. The reasons for the increased incidence of rabies in our area has been discussed.

Keyword :Anti Rabies Vaccine, Human Anti Rabies Immunoglobulin

Introduction:

Rabies is essentially a fatal viral disease, primarily acquired from the bite of rabid animal with only six cases of documented human survival.

Infection can be prevented with proper post exposure prophylaxis, as first pioneered by Louis Pasteur in 1885. While upto 50,000 people world wide die of rabies every year, only 61 cases of human rabies were diagnosed in the United States from 1990 through 2006, an average of approximately two per year. This low rate of human cases reflects the success of domestic animal control and vaccination programme.

Case reports:

Case I:

A 13/4 year old boy from Karaikudi was bitten by a rabid dog in his left hand. His wound was washed and debrided in a near by private hospital immediately. He was given 4 doses of Anti rabies vaccine (0,3,7 and 14th day) in addition to inj.Tetanus toxoid and antibiotics. Human antirabies immunoglobulin was not given to him.

23 days after dog bite, he was admitted at GRH Madurai with history of altered sensorium and inability to walk for 3 days duration. On clinical and historical evidence, he was diagnosed to have rabies meningo encephalitis.

Corneal impression smears were taken on 3rd day of admission and the diagnosis of rabies was confirmed by direct immuno fluorescent technique. He died of rabies on 30th day of dog bite.

Case 2:

A 9 years old boy from a village near Manappara had dog bite in his left leg for which he received only one dose of ARV and wound debridement was done followed by inj. Tetanus toxoid.

One year after dog bite, he was admitted with history of inability to walk and history of frequent fall of 4 days duration. His general condition deteriorated and he developed quadriplegia with respiratory paralysis. Direct immuno fluorescent technique of corneal impression was positive for rabies antigen. He died 5 days after admission.

Case 3:

A 32 year old male from Bodinayakanur a rural area was admitted with history of breathlessness, intolerance to water and air, and difficulty in swallowing. There was a history of dog bite 1 ½ months back for which he did not get any treatment. Corneal impression smear showed the presence of rabies antigen by direct immuno fluorescent technique. He died of rabies 3 days after admission.

Discussion:

Post exposure prophylaxis includes wound debridement, active and passive immunisation. Local wound debridement can reduce the chances of developing rabies by upto 90%.

According to WHO, human anti rabies immunoglobulin (HRIG) should be given to all patients with severe rabies exposure on the first day of post exposure treatment. (Severe exposure was defined by the WHO in 1992 as any transdermal wound at any site).

The HRIG should be infiltrated into and around the wound (20IU/kg). If any is left, the remainder should be administered by single intramuscular dose

followed by a complete course of anti rabies vaccination.

Possible reasons for the death of the patients:

Here, though the first patient was given antirabies vaccine, HRIG was not given to him. 2nd patient received only one dose of ARV followed by wound debridement. 3rd patient did not receive any medical attention.

These three cases were living in rural area. They were not aware of the consequences of dog bite and rabies. Since, they were living in a village, it will take a long time for them to go to nearby hospital (or) PHC. Since, they were on daily wages, they could not bring their children to the hospital in time for vaccination.

Conclusion:

Every instance of human exposure to bite by dog (or) other animals should be considered as rabid bite, and should be treated as a medical emergency. Irrespective of the class of wound, the combined administration of single dose of human antirabies immunoglobulin along with a full course of vaccine together with local treatment of wound is the best specific prophylactic treatment after exposure of man to rabies.

Awareness must be created among the public in rural area and people who are illiterate and must be educated about consequences of rabies, importance of wound debridement after dog bite and completion of full course of vaccination. Awareness must be created among medical personnel treating animal bite cases.

The most effective way of reducing the incidence of rabies is by programme of mass immunisation of dogs and elimination of stray and ownerless dogs.

Case No.	Date of dog bite	Date of admission	Date of Death
1	23 days back	17.01.2011	19.01.2011
2	1 year back	19.08.2011	23.08.2011
3	1 ½ months back	15.08.2011	22.08.2011

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