Research Paper Medical Science

CASE REPORT BEWARE OF ABNORMAL BEHAVIOUR: IT COULD BE RABIES!

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INTRODUCTION

Rabies occurs in more than 150 countries and territories. In India, about 15 million people are bitten by animals, mostly dogs, every year and need post-exposure prophylaxis. Since 1985, India has reported an estimated 25 000–30 000 human deaths from rabies annually. The latest figure projected from the National Multicentre Rabies Survey, conducted in 2004 by the Association for Prevention and Control of Rabies in India in collaboration with the World Health Organization, [1] is 20,565 deaths from rabies per year. Most animal bites in India (91.5%) are by dogs, of which about 60% are strays and 40% pets. The incidence of animal bites is 17.4 per 1000 population. A person is bitten every 2 seconds, and someone dies from rabies every 30 minutes.[2]

Introduction of effective vaccines against rabies have led to considerable reduction in cases of rabies which has become very rare and uncommon in Armed Forces settings. Any case of encephalitis due to rabies can be difficult to diagnose early due to low index of suspicion especially with poor history of dogbite especially after onset of encephalitis. Here we report a case of rabies in a serving soldier which presented as a case of abnormal behaviour in an operational area which could be missed since causes like alcohol and combat stress can produce this kind of clinical picture. This case also assumes importance because the patient had a short rapid downhill clinical course ending fatally.

CASE HISTORY

34 years old serving soldier posted in a northern theater was referred to a peripheral zonal hospital on 10th June 2013 at 0145 h with presenting complaints of fever and loose motions since last 2 days and vomiting and abnormal behaviour for last 24 hours. Fever was intermittent, moderate and was not associated with chills or rigors. He gave history of loose motions 5-6 times per day which were yellowish, watery and with no blood in it. He also had 2-3 episodes of vomiting containing digested food particles. Abnormal behaviour consisted of violent behaviour, more at the sight of water and he wanted to jump into river and end his life. He was posted on a picket that was located on an island mass in the middle of a river for more than a month. He used to consume alcohol 2-3 pegs three times a week but was not taking alcohol since last one month. History taking revealed that three months ago he was bitten by the dog of his neighbor while on leave. The bite was provoked and the dog's immunization status was unknown. He was bitten on his right popliteal fossa which he got treated at a government facility. He gave history of having been given 3 injections over a week after which his leave got over and he did not follow up his treatment and did not inform his unit about this incident. He could not give details about the dog's illness and other people bitten by the same dog. There was no history of weakness of limbs, paraesthesia, pruritus, diplopia, and blurred vision.

On the day of his admission he was conscious, oriented and afebrile. His vital parameters were within normal limits. He was found to be dehydrated and had coated tongue. There was no pallor, icterus, cyanosis, oedema and lymphadenopathy. Systemic examination revealed that CVS, per abdomen and chest were essentially normal. On examination of CNS his HMF were preserved and there was no focal neurological deficit. He had normal deep tendon jerks, muscle bulk and tone was maintained and his plantar reflexes were flexor. He had no ataxia, nystagmus and Rhomberg's sign was negative. He did not have signs of meningeal irritation. He was found to have severe neck muscle spasm when water was offered to him and threw the glass of water. The differential diagnosis entertained were delirium tremens, anxiety neurosis, psychiatry (Inv), cerebral malaria and viral encephalitis (? rabies). Lab investigations were carried out. Hemogram, LFT, USG abdomen, blood smear for malaria, CECT head and CSF were essentially normal. Psychiatrist examined him and opined that medical cause needed to be ruled out. Next day on 11th June 2013 he had developed altered sensorium, disorientation, aerophobia, hydrophobia, hallucinations, tremulousness and muttering delirium. He was put on antibiotics, antivirals, antimalarials and sedatives. On third day he had developed hypotension and had to be supported with inotropic drugs. He developed cardiac arrest and was declared dead at 0115 h on 12th June 2013, third day of hospitalization. Autopsy was advised to determine the exact cause of death.

Postmortem exam was conducted on 12th June 2013 which was essentially normal except that on histopathology, sections of cerebrum, cerebellum and hippocampus showed congestion, perivascular lymphocytic infiltrate and purkinje cells of cerebellum showed occasional cytoplasmic, round, eosinophilic inclusions (Negri bodies). Lungs showed features of aspiration pneumonia. The Brain tissue sent to NIMHANS Bengaluru was found to be positive by RT-PCR and Florescent antibody test (FAT) for Rabies virus thus confirming the diagnosis.

DISCUSSION

Roughly 36% of the world's rabies deaths occur in India each year. Even though the methods for the prevention of rabies are available in India, the awareness regarding these is lacking. The disease has been neglected because the deaths are scattered and never amount to the kind of a crisis that get other infectious and non-infectious disease epidemics the top billing. It is evident that there is a large gap in people's knowledge, attitude, and practices about rabies which needs to be addressed through measures like establishing a national rabies control programme as recommended by WHO.

Rabies is readily diagnosed when it presents in the classic furi-

ous form. The paralytic and atypical forms can pose significant problems in diagnosis, particularly when found in rabies-free countries in travelers who acquired the disease abroad. In a review of 60 cases of imported human rabies it has been reported that importation of infection while visiting endemic countries.3 India and Philippines are the leading contributors.3

The factors that can play a role in delaying the diagnosis of rabies in a number of cases are a low index of suspicion for rabies in countries where the disease has been eradicated for a long time, a negative history of animal bites or exposure to rabies and atypical clinical presentation of the disease. Clinical syndrome of rabies is complex and commonly confuses physicians.

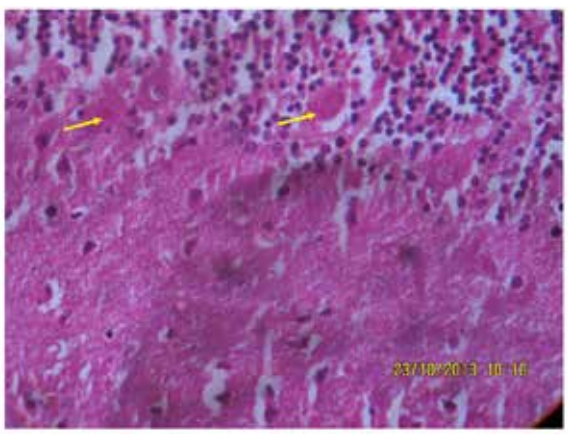


FIG-1 NEGRI BODIES

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