

WILD PIG RABIES – A CASE STUDY FROM PATHIPPARA, MALAPPURAM, KERALA.RIJU P NAIR^{1*} AND E. A. JAYSON²^{1,2}*Wildlife Department, Kerala Forest Research Institute, Peechi 680653 Thrissur, Kerala***Abstract**

Human-animal conflict is a growing concern in today's crowded world. Zoonoses is a major issue that we always trying to skip from this. Human-wild pig conflict one of the major problem in the Malappuram District both as agricultural damage and collision with vehicles. Overcrowding of the stray dogs in the forest fringe area played an important role in transferring diseases between wild and domesticated animals. Here it is reporting one of the rare cases of Wild pig rabies with the details of area that it happened and also the victims included. The data were collected by the focus group discussion and the personal interviews.

Key words- human-animal conflict, Zoonoses, human-wild pig conflict, wild pig rabies.

Introduction

The wild pig is distributed in all forest ranges in the Malappuram District, including different types of plantations. It is a nocturnal feeder and chooses plantains, fallen coconut and tubers as its diet. The damage by wild pigs such as crop damage and human casualties were reported in the District, more in the places which are far away from the reserve forest. That is because they were selecting patches of bushes and other plantations for their survival. Human casualties by wild pigs mainly consist of wild pig-Vehicle collision and the direct attack by using their tusk and mouth. A wild pig bite is a rarely seen case in emergency departments. However, there seems to be a rise in the number of these kinds of injuries because of the increased number of wild pig population and the wide distribution. Proper wound care, tetanus immunization, rabies prevention and appropriate antibiotics should be administered to the survivors of wild pig attack (kose *et al*, 2011). The wild pigs can also act as an agent for zoonoses .They were the possible carriers of diseases between the stray dogs and the wild animals as they were keeping frequent contacts between them. Rabies virus (RABV), a member of the genus Lyssavirus in the family Rhabdoviridae is a neutropic virus that causes fatal encephalitis in warm-blooded animals. A virulent wild RABV strains. GD-SH-01 was isolated from the brain tissue of a rabid pig and its complete genomic nucleotide sequence was determined (Yongwen *et-al*, 2012). According to Jiang *et al* (2008) the first dog-associated outbreak of rabies in swine in China (Hunan province) has been diagnosed and the

relative virus isolated sequence analysis showed that the pig isolate was high nucleotide identify to local dog isolate. The increased population of wild pig was also increased the risk of crop damage as well as the zoonoses in the forest fringe areas.

Study area

The rare incident of wild pig rabies was reported from the place Pathippara (N11^o18'08.9" E076^o15'44.2") under Karulai Forest range, Nilambur municipality, and ward no. 13. The place is very close to the forest and wild pig had been there for a long past. The fringe of the forest is planted with teak which gives favorable homing situation for wild pigs.

Materials and method

After receiving the information about the pig attack on humans, the area was visited on 08th July 2014. During the visit, focus group discussion and the personal interviews with the victims were carried out. Details of rabies confirmation were collected by visiting Dr. Ramachandran senior veterinary surgeon Nilambur. Visit was also made to Panayangodu forest beat forest office under which the incident happened. Observation on the crops cultivating in the area and the locally used mitigation measures was also made.

Result and discussion

Wild pigs are now the common animal present everywhere in the Malappuram District irrespective of the forest land which is a great nuisance for the farmers due to their crop raiding habit. The local people in the area were already tolerable to the crop damage by wild pigs. The attack of wild pigs against human beings is a rare incident in the area. The wild sow first appeared in the house near to the teak plantation on 06/07/2014 where it damaged steel plates and other house hold materials including the dresses hanging outside. On its travel of 6km from the forest through human settlements it attacked four domestic cattle's from three different houses and also three persons namely Mr. Pokkar, Mr. Babu and Mrs. Mariyakutty, they were severely injured. Pokkar had lost his eight fingers of his hands in the attack of this pig (see figure-1) on his way to house from mosque at 6.30pm. Mr. John was attacked while he comes out of the house by hearing the sounds of cattle's at 7 pm, the mad sow charged at him without any provocation and he lost one of the finger from the left hand (see figure-2) and also he got injured on his right hand (see figure-3) while he is trying to take out his fingers from the mouth of the

pig. His wife Mariyakutty got severely attacked by the pig on her buttocks, legs and hands (see figure-4) while she was trying to get rid of the animal from the hand of her husband (See table-1 for details of victim). Based on the apple green fluorescence by conducting fluorescent antibody test the rabies case can be confirmed. FAT is considered as golden standard for the diagnosis of rabies as it is more sensitive (Daly et al, 2014) by using the same method Presence of rabies was confirmed from the Department of Pathology, College of Veterinary and Animal Sciences, Mannuthy, Thrissur. The all three person were provided with anti-viral vaccination and the hospital charges were paid by Kerala Forest and Wildlife Department. The animal waste dumped in the area attracting a number of stray dogs to the forest fringes and they were played a vital role for spreading diseases between wild and domesticated animals.

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Table-1 Details of the victims

NAME	AGE	TYPE OF INJUARY
Pokkar	64	Eight fingers were lost in the bite of mad pig.
John	62	Bite on both hands and one finger was lost.
Mariyakutty	57	Bite on the buttock, hand and legs.



Figure-1- Pig bite in the hand
finger



Figure 2 – Victim with Pig bite in the left hand



Figure 3-Victim with pig bite in the right hand finger



Figure 4- Pig attack in the hand

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