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BRIEF CASE REPORT

RABIES IN SQUIRREL AND OTHER WILD ANIMALS

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A 9 years old boy was bitten by a squirrel on middle of Rt. Index finger in Colombo, Sri Lanka on August 10, 2019. There was no bleeding, but a small piece of skin had peeled off. Doctors said it was a grade II exposure and superficial and began the 2 site Intra-dermal (ID) vaccination as Post Exposure Prophylaxis (PEP). The first dose was given on the same day on August 10th, two hours after the bite. The squirrel died same day by afternoon and head of the dead squirrel was sent to the lab at Medical Research Institute, Colombo, Sri Lanka for confirmation of rabies.

On August 13, the lab reported the squirrel as positive for rabies after doing Fluorescent Antibody Test (FAT) wide report no. H 898 dated 13/08/2019. Parents of the child went to the hospital again with the lab report and met the doctors. Doctors said the Rabies immunoglobulin (RIG) was not required because the wound was superficial and type II and the risk of side effects of the RIG is not worth taking. Hospitals in Sri Lanka do have the Human RIG (HRIG) as well, still they said no risk of anaphylaxis should be taken. So they administered the 2nd dose of the Intradermal (ID) vaccine without RIG, as it was due on the same day i.e. August, 13, 2019.

Worried parents shot a mail to the author in India saying "Dear doc could you please advise us if administering the RIG will be an extra precautionary measure and omit the slightest risk, because we can afford it and our concern is that the animal was positive for rabies".

Since we had a report of death due to rabies in Kerala, India, We advised the parents for Rabies Immunoglobulins (RIG) infiltration into the abrasions caused by the rabid squirrel bite since abrasions even without blood also have been reported to cause rabies in India. The RIG was infiltrated and patient was saved from probable risk of rabies and the parents from constant worry.

Discussion:

Rabies, a dreaded infectious disease, is invariably fatal once symptoms appear, although some survivors have occasionally been reported with functional deformities. Current estimates suggest that approximately 60,000 human deaths occur each year globally. Dogs are the most important reservoir for rabies and dog bites account for >99% of human cases. But the other animals/mammals need to be taken seriously as they may be infected especially in rabies endemic countries of Asia and Africa. Rabies in Monkeys, Languor and Himalayan Palm Civet has been reported by the authors as also in mongoose. Rabies in Squirrels, Rock squirrels, Pole Cat etc. has been reported from Sri Lanka. Woodchucks accounted for 93% of the 371 cases of rabies among rodents reported to CDC, USA. The woodchuck, also known as a Groundhog, is a rodent of the family Sciuridae, belonging to the group of large ground squirrels known as marmots that are also found in Leh & Ladakh region of India known as Himalayan marmot.

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Conclusion

In general Bites by all wild animals including Monkeys, Languor and Himalayan Palm Civet, squirrel, foxes, wild dogs, jackals, mongooses etc. should be treated as category III exposure. Even in category II cases of exposure to confirmed rabid animal; it would be safe / prudent to infiltrate the site of rabies exposure with RIG apart from vaccine administration. It would require only a small quantity of RIG, without any systemic injection .

This endorses the popular dictum in this 100% fatal disease – when in doubt/dilemma / fear, it is prudent to over treat than under treat to prevent rabies and protect the life of the patient. It would be reassuring not only to the victim and his/her family but also to the treating physician!

Acknowledgement

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