CHOCOLATE TOXICITY IN A DOG
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ABSTRACT

Animals of all ages are susceptible for chocolate toxicity affecting many organ systems. The case presented here is of male German shepherd aged 4 years was accidentally encountered with chocolate toxicity with excessive salivation, vomition, diarrhoea, restlessness and incoordination like systems. The dog was treated symptomatically using rehydrated fluids, atropine sulphate and dexamethasone along with other supportive medication immediately. The dog was recovered completely within week of post treatment.

Key words: Chocolate toxicity, rehydrated fluid, German shepherd

The majority of animal poisonings are accidental and acute in nature and occur near or at the animal owner’s home. Feeding human foodstuff to pets may also prove dangerous for their health. There is an unlimited number of agents by which exposed animals may become poisoned, and for the most part, which specific agents are involved in animal poisonings will be dependent upon what is available in the animals’ environment, the potential or inclination for the animal to be exposed to the agent, the amount of agent to which the animal is exposed, and the individual sensitivity of the animal to the effects of the agent (Gupta, 2007). Nowadays, the most common agents involved in animal exposures are rodenticides, chocolate, pharmaceuticals, glycols, metals, pesticides, plants, miscellaneous agents.

Case history: A male German shepherd aged 4 years weighing 20 kg was attended with a history of restlessness, incoordination, excessive salivation vomition, panting and minor tremors (muscular). The owner was aware of the fact that the pet had consumed large amount of chocolates. The owner had tried to induce vomition in dog by saturated salt as per the advice by veterinarian.

Diagnosis and Treatment: On clinical examination the oral mucus membrane was normal. Rectal temperature was normal (102°F), but there is vomiting, diarrhea, and uncontrollable urination was noticed. On inquiry it was found that the dog had consumed half box of chocolate kept at home while the owner was out. The case was diagnosed as chocolate toxicity. Immediately ingestion, vomition was induced in dog administering saturated salt solution (400 ml). The fluid therapy was initiated immediately by administering ringers lactate (500 ml i/v) and 5% dextrose normal saline (500 ml i/v). Atropine sulphate was administered @ 0.045

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mg/kg body weight and injection dexamethasone @ 2ml i/v three times at 12 hrs interval. Supportive treatment with antacid (Inj. Rantac) @ 2ml and multivitamin inj. Tribivet @1.5 was administered three days. Along with this treatment oral administration of syrup liv-52@10ml twice a day for 10 days to normalize the digestive dysfunction.

The most common victims of theobromine poisoning are dogs (Gwaltney, 2001). Chocolate is one of the most commonly known toxins affecting dogs. Chocolate is made from cocoa, and cocoa beans contain caffeine and a related chemical compound called theobromine. Both these compounds are members of drug class called methyxanthine. Most poisonings from methyxanthin occur as a result of chocolate ingestion Dogs metabolize theobromine much more slowly than humans. In dogs, the half-life of theobromine is 17.5 hours. Theobromine LD50 is about 1000 mg/kg in humans. In cats 200 mg/kg and in dogs 300 mg/kg – in other words, dangerous at a far lower dose clinical symptoms of theobromine poisoning can persist for 72 hours (Gwaltney, 2001). Even small amounts of chocolate can cause vomiting and diarrhea in dogs. These can progress to cardiac arrhythmias, epileptic seizures, internal bleeding, heart attacks, and eventually death. Baker’s chocolate and dark chocolate are reported to be more toxic than milk chocolates. Here, thus a case of chocolate toxicity was managed successfully. Hornfeldt (1987) also reported that there is no true antidote for chocolate toxicity and should be treated symptomatically, if the dog is not treated timely then the animal may die due to cardiac arrhythmias.

A case of chocolate toxicity was successfully treated. Perhaps, to the more discriminating habits and appetites, cats account for only 11–20% of reported animal exposures to potential toxicants, which is three times less frequent than dogs. The cats are independent and restrict less to a definite space. Consequently, they are more susceptible to become victims of poisoning when tasteless and odorless toxic agents are mixed with tasty foods. Some food may cause only mild digestive upsets, whereas, others can cause severe illness, and even death in pets. Knowing what agents have the potential to be involved in serious toxicoses should allow veterinarians to better educate their clients on means of preventing animal poisonings through the appropriate use of household products and the removal of potential hazards from the animals’ environments.

REFERENCES

