

INFESTATION OF ROYAL PYTHON (*PYTHON REGIUS*) WITH TICKS *AMBLYOMMA HEBRAEUM* IN IBADAN ZOO, NIGERIA

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Abstract

Tick infestation in royal python is reported. Clinical signs included dullness and inactivity evident in reaction to it's prey.

Parasitological examination revealed *Amblyomma hebraeum*. Epidemiological investigation showed WAD goat with external parasite within the reptile area.

Introduction

The Python/Boa Family is found in most part of tropics. It is a highly domesticated pet and can easily be handled (Cansdale 1962). Snakes are commonly infected by ticks more importantly the hard bodied ticks (Fowler, 1986). However, under captive condition, ticks usually exert a lot of burden on their hosts being carriers of disease causing pathogens (Soulsby 1982, Radostits *et al.*, 2000). These ticks also produce focal ulcerating skin lesions at the point of their attachment to the skin (Fowler, 1986).

Amblyomma hebraeum (bont ticks) occur frequently in warmer part of South, Central Africa and is parasitic in many domesticated and wild mammals. The young stage also attacks birds (Soulsby, 1982). *A. hebraeum* is a three host tick that usually attaches in the perianal and genital region of it's host and may produce bad wounds. These ticks are also very resistant to dipping especially in adult stage (Ojeh and Dipeolu, 1986 Soulsby 1982).

It was a common theme that parasites of wild animals were so perfectly adapted to their host that under natural condition they would not cause disease (Davis and Anderson, 1971). This phenomena must have informed the reason why there is a dearth information on the incidence of *A. hebraeum* in royal python.

History and Clinical Examination

A zookeeper in charge of reptiles at the University of Ibadan, Zoological Garden reported at Veterinary Teaching Hospital of the University that the royal python was very dull and inactive. This dullness was evident in the reaction of the royal python to its prey when fed.

Observation revealed that the royal python preferred a secluded corner and when approached by the handler it did not put any resistance as it normally does. Physical examination of the snake revealed massive tick infestation on the head and other parts of the body.

Samples of ticks were removed from the python and placed in the universal stocked with cotton wool for further laboratory investigations.

Tick Epidemiology

Within the reptile's apartment a West African Dwarf WAD goat was seen about 2 meters away from the cubicle of the royal python. This WAD goat was supposed to be the prey of the large python, which was the neighbour of the infected royal python. This WAD goat was usually kept there 2 days prior to feeding of the large python.

Examination of the goat revealed an engorged tick on the head in the occipital area. This ticks was picked for further laboratory investigation. Blood sample was also collected from the jugular vein of the goat into vacutainer tube containing sodium salt of ethylene diamine tetracetic acid (EDTA) anticoagulant for complete haemogram and parasitology as described by (Paris *et. al.*, 1982, Cole 1986 and Jain 1986).

Treatment

All the tick on the body of the royal python were hand picked and the snake relocated to another cubicle. The entire cubicle was fumigated with an organophosphate insecticide, Diazintol R (Animal Care Nigeria) at a concentration 162mg in 8 litres of water. The exercise was repeated 2 weeks after while the royal python was returned to the cubicle 40 days after.

Result

Representative of ticks isolated from the royal python/WAD goats were identified to be *Amblyomma hebraeum* (Koch 1844) using morphometric and morphologic characteristic as described by (Gait 1977 and Soulsby, 1982). Examination of blood sample of the WAD goat revealed no haemoparasites and haematological parameters were within normal range for WAD goats (Oduye 1976 and Adulugba and Joshua 1991).

Discussion

It is not uncommon for ticks to infest snakes but those in captivity are usually severely affected due to restricted movement coupled with quick and successive reinfestation.

In this report it was observed that the royal python was weak and anorexic which agrees with Turner and Short (1972) who observed that heavy tick infestation causes sufficient worry to interfere with feeding which may subsequently lead to loss of weight.

Radostits *et al* (2000) also reported that blood sucking ticks causes loss of whole blood with resultant macrocytic hypochromic anaemia in affected animals.

The observation in this report showed that ticks can be transferred from reptiles preys to the reptiles themselves. Therefore screening of the prey for external parasites should be instituted to minimize transfer by contact. This will serve to prevent avoidable huge financial losses due to external parasites infestation in rare captive species such as the royal python.



Fig. 1: Photograph of Tick *Amblyomma hebraeum* (Koch 1944 on the head (mandibular area) of royal python (Bilaterally located)

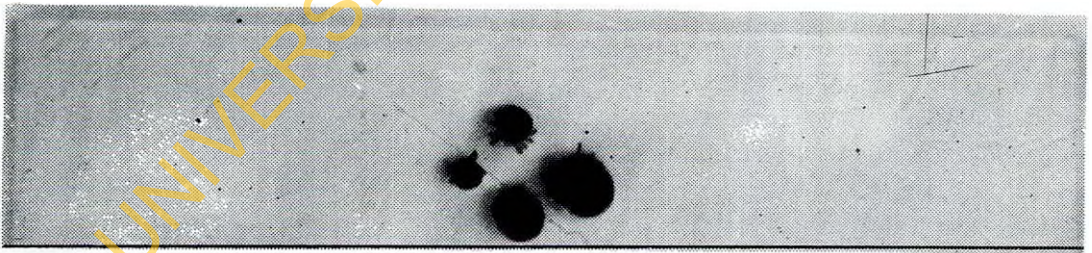


Fig. 2: Photograph Tick *A hebraeum* (male) under hand lens

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