CASE REPORT

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A case of eperythrozoonosis in Royal python (*Python requis*) in zoological garden in Ibadan, Nigeria

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Abstract
Eperythrozoonosis in Royal python reported. Clinical observations included dullness, paleness and jaundiced mucous membrane. Parasitological examination revealed rickettsiae, Eperythrozoon. Stressful condition associated with Royal python in captivity resulted in lower immunity and development of evident infection. Routine screening of Royal Python's prey to prevent transfer of ticks by contact is dvocated.

Keywords: Eperythrozoonosis, malnutrition, royal python.

Introduction:
Python of the Boa family is found in most parts of the tropics particularly in the open forest and grassland of West and central Africa (Fowler, 1986). The royal python (*Python requis*) however has been highly domesticated, can be easily handled and thus makes a pleasant pet (Causdale 1962). Consequently this species of python is found in zoological gardens in Nigeria. Eperythrozoon is a *rickettsiae* and are intra-erythrocytic parasites of domestic animals and some wild species namely deer, mule and elk and are the cause of Eperythrozoonosis, a disease condition characterized by anaemia, haemoglobinuria (Davis & Aderson 1971). Ticks which may transmit these parasites affects snakes in the wild. Incidence of their occurrence in captive royal python have been reported by Oje & Dipeolu (1983); Ajuwape *et al*., (2003). However, not much report has been made on the disease these ticks transmit on the royal python. This study reported a case of clinical Eperythrozoonosis in captive Royal python at the university of Ibadan Zoological garden.

Materials and Methods

Case history
A zoo keeper in charge of reptiles at the University of Ibadan Zoological garden reported a case of dullness and inappetence in a Royal Python at the zoological garden to the Veterinary Teaching Hospital of the University.

Clinical examination
Clinical observation of the Royal python confirmed the report of dullness and inappetence. Physical examination revealed the presence of ticks on the body (Plate 1) and examination of the mucous membrane of the oral cavity showed paleness with evidence of jaundice.
The Royal python was then screened for haemoparasite and helminth infection. Blood sample was collected with sterile needle at the lateral side of the midline of the Royal python. Thereafter, thin blood films were made on clean microscope glass slides and stained with Giemsa stain. The packed cell volume was also determined using standard procedure as described by Jain (1986). Fecal samples collected directly from the rectum, with sterile swab, were screened for helminthes by floatation technique (Cole 1986, Hasen & Perry 1991).

Results and Discussion
The PCV of the Royal python was 15 %. This explains the paleness observed during the clinical examination, since the volume recorded was below the normal PCV range of between 16% - 26% of Pythons (Boa family) as reported by Fowler (1986). Parasitological examination also revealed the presence of *rickettisiae* Eperythrozoon parasite adhering to the inner cell membrane of nucleated erythrocytes as shown in (Plate 2). These may be responsible for the anaemia observed during clinical examination. The presence of the ticks on the body of the snakes is in line with the observation of Ajuwape *et*

al. (2003), who had earlier reported the incidence of ticks (*Ambloymma hebraeum)* in Royal python in zoological garden. The ticks may have transmitted the rickettsiae Eperythrozoon parasite to the royal python.

In the natural habitat such as obtained in the wild, snakes when infested by ticks are not usually affected by parasites these ticks transmit. This may be due to the immunological competence of these snakes.

In captive snake, such as those in the zoological gardens, the immunological status may be easily affected due to restricted movement, coupled with stressful condition such as underfeeding and malnutrition. This thus suggest that regular screening of the Royal python for external parasites should be routinely done to prevent host vector contact and avoidable losses due to Eperythrozoonosis in endangered specie such as the Royal python.

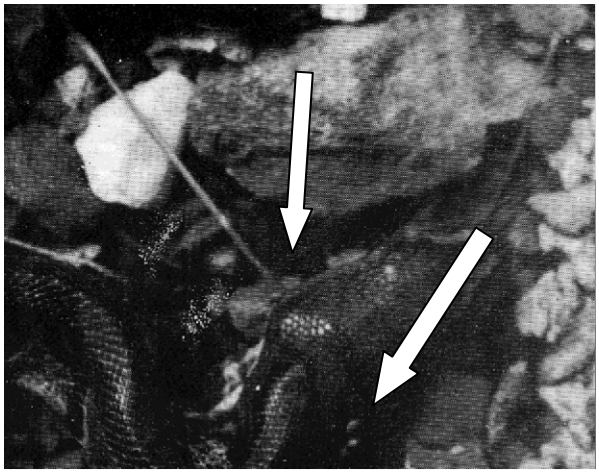

Plate 1: Photograph of ticks on the head (Mandibular area) of the Royal python.

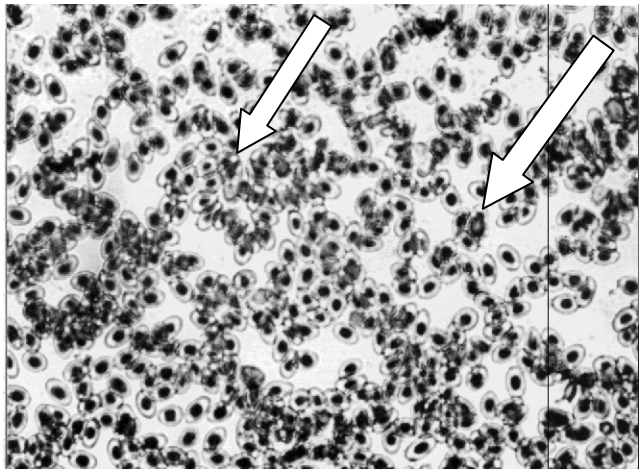

Plate 2: Microphotograph of rickettsiae Eperythrozoon adhering to the inner cell membrane of nucleated erythrocytes of royal python arrowed A, B and C.

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