

and the deworming was carried out to all the pups and the mother on the 15th day itself. On day 30, coprological examination showed that the *A. caninum* eggs decreased by 100%.

Pups and kittens are often infected by transfer of larvae from their dams in utero or via milk (*A. caninum*, *Toxocara cati*, and to a lesser extent, *T. canis*) (Burke *et al.*, 1985). Van Heerden *et al.* (1994) noticed *A. caninum* in the faecal matter in the free ranging African wild dog and also in captive born 3-month old pup. In the present study also trans mammary transmission of *A. caninum* is conferred. Doses of 7.5 and 10mg/kg of closantel (an injectable salicylanilide) had a marked anthelmintic effect on adult stages, removing 99 and 98%, respectively (Guerrero *et al.*, 1982).

References

- Burke, T.M. and E.L. Roberson (1985).** Prenatal and lactational transmission of *Toxocara canis* and *Ancylostoma caninum*: experimental infection of the bitch before pregnancy. *International Journal of Parasitology* 15: 71-75.
- Guerrero, J., M.R. Page and G.A. Schad (1982).** Anthelmintic activity of closantel against *Ancylostoma caninum* in dogs. *Journal of Parasitology* 68(4): 616-619.
- Soulsby, E.J.L. (1982).** Helminthes, arthropods and protozoa of domesticated animals. 7th ed. The ELBS and Bailliere Tindall, London.
- Thienpont, D., F. Rochette and D.F.L. Venparijs (1986).** Diagnosis Helminthiasis by Chronological Examination 2nd edition.
- Van Heerden, J., J. Boomker, D.G. Booyse and M.G. Mills (1994).** The wild dog (*Lycan pictus*): a new host for *Ancylostoma caninum*. *Journal of South African Veterinary Association* 65(1): 18-19.

ACKNOWLEDGEMENT

The co-operation rendered and facilities offered during this study by Director, Arignar Anna Zoological Park, Vandalur and Dean, Faculty of Basic sciences were thoughtfully acknowledged.



VET BRIEF

ZOOS' PRINT JOURNAL 21(1): 2142

A CASE OF MOUTH ROT AND HELMINTHIASIS IN A SPECTACLED COBRA *NAJA NAJA*

M.G. Jayathangaraj¹, S. Ramesh¹, S. Abdul Basith¹ and R. Rajarathinam²

¹Department of Wildlife Science, Madras Veterinary College, Chennai, Tamil Nadu 600007, India

²Deputy Director, Chennai Snake Park, Rajbhavan Post, Chennai, Tamil Nadu 600022, India

Stomatitis is a clinical condition that has been documented in reptiles. One such case in a Spectacled Cobra (*Naja naja*) was encountered at the Chennai Snake Park, Chennai and the details are discussed in this paper.

A captive reared cobra was reported to be anorectic for four days at the Chennai Snake Park, and after proper manual restraint it was examined. Froth was observed at the commissures of the mouth and on examination of the oral mucous membrane, erosions were noticed in the buccal mucosa with moderate congestion. A sterile swab was applied on the oral lesions and was placed in Amies medium with charcoal in polystyrene tube. Faecal samples were obtained for laboratory examination. Treatment with enrofloxacin injection at 10mg/kg body weight I/M (for a total of 4 injections) once in 48hrs, vitamin C injection at 200mg/kg body weight I/M twice a week, and vitamin A injection at 11,000units/kg body weight I/M once, were recommended. Tube feeding along with administration of pyrantel pamoate at 8mg/kg body weight, orally once, with repetition on the 16th day was also suggested.

The culture examination of the swab revealed *Bacillus* species and faecal examination revealed eggs of *Strongyloides* and *Strongyle* species (+++) in this snake.

The mouth rot may have occurred due to injury, subsequent to the swallowing of mice / rat with sharp teeth. Mader (1996) quoted encountering stomatitis in reptiles and if stomatitis is not properly attended, it may lead to glossitis in association with trauma and ultimately, the snake may lose its teeth through trauma or infection. However, no injury was observed in the tongue of this cobra. Administration of fluoroquinolones in snakes as carried out in this snake was in agreement with the reports furnished by Fowler (1986). Wallach and Boever (1983) stated that in case of mouth rot, the affected reptile will reveal anorexia (as encountered in this captive reared snake) and exudates associated with gingiva. In the cobra under study, frothy and thick exudation was noticed. Though parasites are frequently found in the mouth including the regurgitated nematodes and flukes, no such parasites were encountered in the oral region. But the evidences of helminths encountered warranted the usage of anthelmintics, as carried out. Though mouth-rot in this cobra was due to *Bacillus* species infection, Fowler (1986) quoted that in reptiles, generally several gram negative bacteria are associated with stomatitis. The therapeutic suggestions adapted in this serpent yielded satisfactory results.

REFERENCES

- Fowler, M.E. (1986).** *Zoo and Wild Animal Medicine*. 2nd edition. W.B. Saunders Company, Hong Kong.
- Mader, D.R. (1996).** *Reptile Medicine and Surgery*. W.B. Saunders Company, Tokyo.
- Wallach, J.D. and W.J. Boever (1983).** *Diseases of Exotic Animals-Medical and Surgical Management*. W.B. Saunders Company, Tokyo.

ACKNOWLEDGEMENT

Authors wish to thank Central Zoo Authority of India, Chairman of Chennai Snake Park Trust, Dean, Faculty of Basic Sciences and Dean, Madras Veterinary College, Chennai for the support extended.

