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Balantidiosis in White Rhinos

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The Incidence of Balantidium coli in India among cattle and buffaloes has been reported from Assam, Orissa Madras and Pubjab (Biswas and Kannge, 1959; Patnaik, 1960) David, 1965, Gill and Kwatra, 1972) causing Balantidiosis with clinical symptoms of diarrhoea and dysentry (Patnaik, 1965 and David, 1967) It is also reported in monkeys (Kuowles, 1928, Ali Khan. M.G. et al 1981).

In the past various compounds like carborsone, Lucarsone, Deouinol, Flagyl, Entero Vioform, copper sulphate, stoversal, Neoviospt and hexachlorethane were used by various workers (Patnaik, 1960, David et al. 1966) with varied results.

The present investigation relates to the Occurrence of Balantidiosis among white Rhinos at Nehru Zoological park, Hyderabad, A.P. with some observations on the efficiency of certain drugs on the control of Balantidiosis.

CASE REPORT

A pair of white Rhinos native of Aftrica were brought to Nehru Zoological Park, Hyderabad. A. P. in the month of May, 1975. Both male and female Rhinos developed symptoms of diarhhoea and the faeces on examination was found to be positive for cysts as well as trophozotes of Balantidium coli. Clinically they showed the symptoms of foetid diarrhoea with mucus, loss of appetite, weakness and emaciation.

The following drugs were tried

1. Neftin 200 mg. tab. 30 tab. B D. for 2 days (without any Improvement).
2. Steclin boluses 8 B.D. along with guaxaline. 10 tab. B.D. for 10 days with no improvement.
3. Erythrocin 10 capsules plus sulphamezathene 5 g. tables, 3 tabs. B D. for 3 days gave some improvement In the condition but the faeces did show the presence of B. Coli cysts.

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TABLE-1 Showing the details of the stool tested microscopically antibiotics administered and details of Male White Rhinoceros

Sl. No.	Antibiotics administered in Feed/Jaggery balls.	Date of Administration	Date of Examining the stools M/C	Results of the stools tested	Consistancy of the stool	Apetitle of the Animal
I.	NEFTIN TABLETS 200 Mgs 30 Tabs. B.d.	27.8.75 to 28.7.75.	27. .75	-Ve for any helmithic ova	Loose watery	Poor.
II.	STECLIN BOLUS 8 B.D.	1.9 75 to 11.9.75	28.7.75	+ ve for strongle	-do-	Poor.
	QUZXALINE BOLUS. 10 B.D.		4-9-75	+ ve for B. Coli Cysts and Trophozoites	Loose and watery	Poor.
			8 9-75.	-ve.	Loose and watery	Poor.
			9-9-75	+ + + for B' Coli Cysts	-do-	Poor.
III.	ERYTHROMYGINE TABLETS 10 B.D.	12-9 75 to 14.9.75	15.9.75	+ ve for B Coli Cysts.	Slightly better	Appetite improving
	Sulphamezathine 5 gm. tab. 3 B,D.	14-9-75 to 16-9-75		-ve	Stool-loose again	-do-
			17-9-75	-ve for B. Coli Cyst.	-do-	-do-
IV.	DEQUINOL TAB 10 Tab daily	24.10.75 to 27.10.75	23.10.75	+ + for B. Coli Cyst and Trophozoites	Loose	Better
			30.10.75	+ ve -do-	consistandcy of the stool is much better	-do-
			6-11-75	- ve	Consistancy of stool returned to normal	Better

TABLE II Showing the details of stool tested microscopically, antibiotics administered and other details of Female White Rhinoceros

Sl. No.	Antibiotics Administered in Feed/Jaggery/Balls	Date of administration	Date of examining the stool M/S	Results of the stool tested	Consistancy of the stool	Appetite of the animal	Remarks
I.	STECLIN BOLUS 8 Bd + Quaxalive Bolus. 10 Bd.	8-9-75 to 9-9-75	4-9-75	+ve forB. Coli Stool Normal		Good	
			8-9-75	-ve for B. Coli Loose		Complete off feed from 6/9 to 8/9	
II.	ERYTHROMYCIN TABS 10 Bd Sulphamezathine 5 gms. tab. 3 Bd	10-9-75 to 13-9-75	10-9-75	+ + + for B. Coli Loose Cyst., Trophozoits		Appetite Improving from 10/9	
			12-9-75	+ -do-		-do-	
III.	DEQUINOL TABS 10 Tabs daily	24-10-75 to 27-10-75	23-10-75	+ + + -do-	Loose watery	Appetite good	
			30-10-75	+ B. Coli	Consistancy normal	-do-	
			6-11-75.	-ve	-'-'	-do-	

4. Dequinol 10 tablets daily for 4 days. It gave better results when compered to the above mentioned drugs as there was improvent in appetite, consistency of faeces beeing normal and the faeces was negative for the Balantidium coli cysts after one week of the administration of the above drug.

Although Balantidiosis is not so serious condition in animals, under certain conditions it may cause severe diarrhaea and dysentry. The disease may sometime be ove - shadowed by the usual conventional diseases which cause diarrhoea in animals. However, in the present study the white Rhinos showed symptoms of diarrhesa with clinical manifestation. Out of the several drugs tried, only Dequinol gave promising results. These Observations are in agreement with those of David and Mathew 1966.

SUMMARY

Several usually available drugs either singly or in combination were tried for the contol of Balantidiosis in white Rhinos. Dequinol was found to be more efficacious than other drugs.

Tables no. 1 and 2 show the details of the stool of the rhinos (male and female) examined and the antibiotics administered from time to time. The details of the consistency of the stool before and after administration of various drugs are also given.

From the above details, it is clear that the drug found effective was Dequinol only. Of course, Erythromycine + Smz has given satisfactory results but the stool examined on 23.10.75 i.e. after six days of administration of the above drug has again shown very heavy infection i.e. +++ and after use of Dequinol i.e. on 6.11.75 the stool for both the animals was found to be negative and the consistency of the stool remained normal for a long time.

REFERENCES

Ali Khan. M. G. Khan, A. M. Dattart R R. (1981) Live-stock Adviser. 6:39.

Biswas, G. and Kanngo, K. 1959) Proc. Indian Sci. Congr. 46 Medical and Veterinary section. Part-III.

David, A. (1965) Ind. Vet. J. 42: 883

David, A, and Mathew (1936) C. John. (1966). Ind. Vet. J. 43: 269

David. A. (1967). Ibid. 44: 1077

Gill B. S. and Kwatra, M. S. (1972). Ind. Vet. J. 49: 1273.

Knewies. R. (1928). An Introduction to Medical Protozoology. Thacker. Sptink and company, Calcutta.

Patnaik. B. 1960. Indian J. Vet. Sci. 30:213

Patnaik B. 1963. Ind. Vet. J. 42: 624.