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### THE TREATMENT OF TAPEWORM INFESTATION WITH DICHLOROPHEN

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The City of Germiston accomodates about 1,100 adult male Natives in its municipal compound, where they are housed and fed. These Natives vary in age from 16 to 70 years, and are employed as labourers in the various municipal departments.

The presence of numerous tapeworms and roundworms has often been observed on inspections of the compound latrines, but it is practically unknown for a Native to complain of or seek treatment for worm infestation. It would appear that intestinal worms are regarded by them as commonplace and of no particular significance. Mass treatment for tapeworms had previously been suggested, but owing to difficulties from lack of a suitable vermifuge, dietetic restrictions, differing working hours, and the almost certain non-cooperation of the prospective patients, it was never seriously entertained.

2 : 2'—Dihydroxy—5 : 5'—dichlorodiphenylmethane (Dichlorophen) is known to be an effective taeniocide in dogs<sup>1, 2</sup> and sheep<sup>3</sup> and a proprietary veterinary preparation (Dicestal) has been available for some years. It is well tolerated, even in large doses. A supply of purified Dichlorophen for medical trial was made available by the manufacturers, and it was decided to use this on patients who were willing to undergo treatment. No fasting before treatment, or purgation, was involved and when this was made known volunteers were freely forthcoming, although at first there had been reluctance in trying the strange *muti*. Preference was given to those claimed to be suffering from tapeworm infestation, although it is more than probable that some claims were fictitious.

At midday on Saturday, when the labourers had ceased work for the week-end, 44 volunteers were weighed and given Dichlorophen in a dosage based on 1 × 0.5 g. tablet per 16 lb. body-weight. The tablets were consumed in a single dose on the spot, followed by a draught of water. Minimum and maximum doses

were 7 and 12 tablets respectively. Patients were kept under observation until the Monday morning.

At the following week-end the trial was repeated with a further 34 volunteer patients.

The results are shown in Table I. It has never been suggested that Dichlorophen is an effective ascaricide, but the results in the treatment of tapeworm are considered satisfactory. The weakness of the trials, of course, lies in the fact that we could not establish

TABLE I. RESULTS

	1st Trial	2nd Trial
Total number of patients .. .. .	44	34
Tapeworm voided .. .. .	13	10
Tapeworm and Roundworm voided .. .. .	7	4
Roundworms alone .. .. .	—	—
No result .. .. .	24	20

the previous presence of tapeworms, and the volunteers can only be considered as more or less random samples. The improvement in general health of some of the cases who voided tapeworms has been striking, particularly one young man who produced a tangled mass of tapeworms and roundworms which could scarcely be contained in a quart measure. None of these cases had reported a recurrence of tapeworms 5 months after treatment.

Ill effects observed are shown in Table II. The 3 slight urticarial eruptions that occurred faded in each

TABLE II. ILL EFFECTS

	1st Trial	2nd Trial
Total number of patients .. .. .	44	34
Diarrhoea .. .. .	8	3
Abdominal discomfort .. .. .	3	4
Urticarial eruption .. .. .	1	2
No ill effects .. .. .	32	25

case within 24 hours, without treatment. Abdominal discomfort reported was said to be mild and transient.



In both trials no patient failed to report for work on the Monday morning.

#### SUMMARY

The taeniocidal value of Dichlorophen in 78 Native volunteers in a municipal compound is described.

The previous presence of tapeworm in the patients was not established, and voiding of tapeworms in 23 cases is considered a satisfactory result.

No preliminary starvation or any other preparation was required; no purgation was given.

Apart from diarrhoea and mild abdominal discomfort

in a small number of patients, the only untoward effects were 3 cases of slight urticaria which faded without treatment in 24 hours. No working time was lost by any patient.

The subsequent improvement in general health of some of the patients has been striking.

I am indebted to Maybaker (S.A.) (Pty.) Ltd., for supplies of Dichlorophen.

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