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CAPILLARIA HEPATICA IN MAN — FOLLOW-UP OF A CASE

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In July 1957 there was published in this *Journal*[1] the case history of a young girl (F.G.) affected by *Capillaria hepatica* infestation. The case was the fifth to be reported in world literature, and the first to be recorded in South Africa.

The diagnosis (suggested by Dr. L. Sagorin, of Durban) was made by liver biopsy. Only 2 of the other 4 known cases at that time had been diagnosed in life, and both had died, the one in 4 weeks and the other in 2 years, of fibrosis of the liver. A follow-up of our case F.G. was promised.

Once the diagnosis had been established in the patient F.G., the problem of therapy arose. In searching for a 'specific' form of treatment which might benefit her, we reviewed the previous cases. As they had all ended fatally, we felt that the drugs used in them could be regarded as

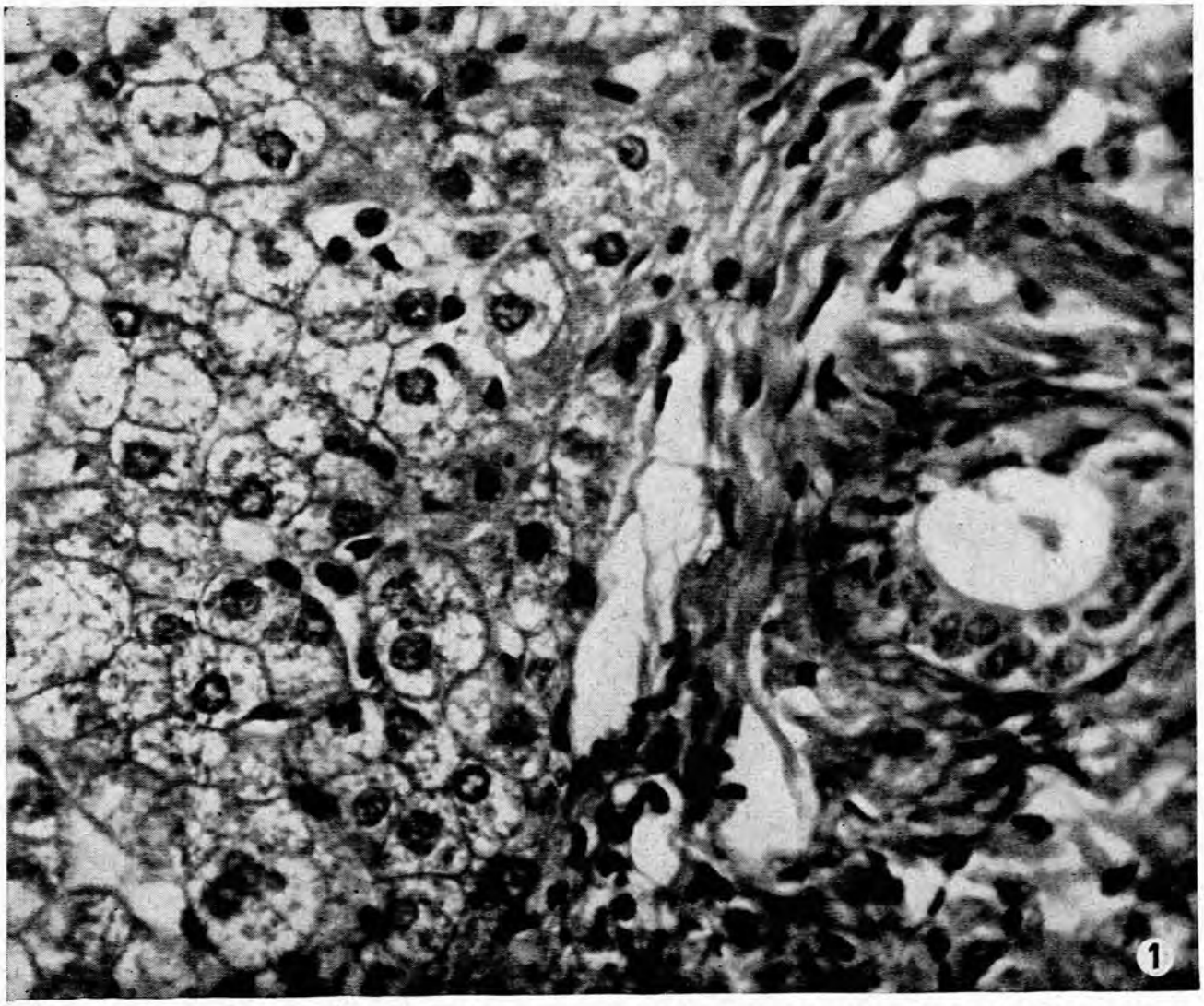

Fig. 1. Patient F.G., February 1959. Liver biopsy showing recovered and normal cytology. The ova have apparently all disappeared, for none were seen on serial section of the biopsy.

ineffective against *Capillaria hepatica* and in this way chloroquine, emetine and hetrazan were excluded. Long courses of antibiotics had already been given to F.G. without obvious lessening of the primary signs of pyrexia and eosinophilia. Antibiotics could therefore also be excluded, except as ancilliary therapy.

Because of certain similarities in the clinical and histological picture of our case to visceral bilharziasis—the eosinophilia, the fibrosis about the ova—it was decided to use antimony in a direct effort against the parasite. The child was extremely ill, with swinging pyrexia, and emaciated to a degree. The apparently least toxic of the antimony preparations was therefore sought and triostam (sodium antimonyl gluconate) decided upon. This preparation had been reported[2-4] as being effective against *Schistosoma haematobium* and *S. mansoni* and the trypanosomes, but we could find no record of its use against trichinella.

The recommended total dosage of triostam for schistosomiasis is from 15 to 20 mg. per kg. body-weight. As the expected weight of a girl of 18 months is 10 kg., the dosage to be given in bilharzia would be 200 mg. In view of the relatively greater toxicity of *Capillaria hepatica* and the risk of fatal outcome if the treatment was not effective it was decided to double this total quantity, and eventually a total of 380 mg. was given intravenously in 7 daily injections, beginning with a pilot dose of 20 mg. in 0·55 c.c. of solution and continued with 6 injections of 60 mg. in 1 c.c. of solution. No reaction was noted of nausea, vomiting or urticarial rash.

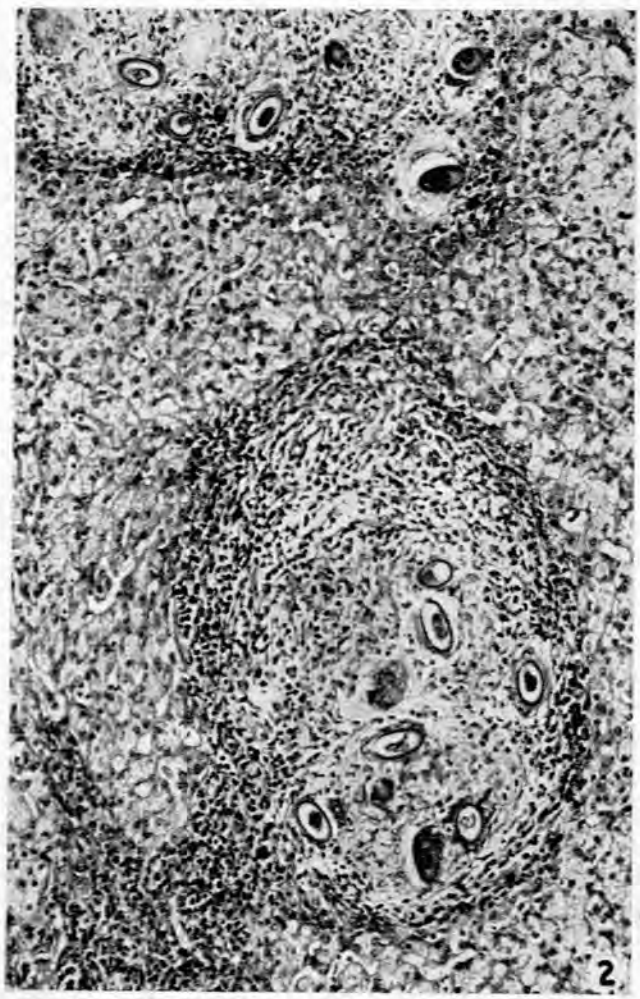

Fig. 2. Same patient (F.G.), July 1956. Periportal lesions contain numerous ova of *Capillaria hepatica*. A severe chronic inflammatory lesion with fibrosis encloses the granuloma.

As reported in our earlier paper, the child 10 months after the course was very well indeed. It appeared that our attempt at 'specific' therapy with antimony had succeeded. The patient reported by Otto *et al.*[5] had, however, remained in good condition for 2 years before dying of cirrhosis. It was decided therefore to make no claims until a further liver biopsy could be obtained. We were fortunate in having most cooperative parents, and the child was submitted to a second laparotomy for inspection and biopsy of the liver on 11 February 1959. This was again performed by Mr. J. G. O. Hamman, of Vanderbijlpark, to whom our thanks are due, and revealed a liver of normal size and with a normal surface. None of the yellow-grey nodules noted at the previous exploration were present, and no fibrosis was seen. A section of the liver was taken and submitted for histology. The report (Dr. W. G. Wilcocks), dated 19 February 1959, was as follows: 'Sections of this liver biopsy show the presence of some periportal fibrosis, though this is not very marked. No other significant pathological changes have been observed in the sections examined.' Fig. 1 is a photomicrograph of the biopsy (February 1959), and may be compared with Figs. 3 and 4 of the first article on the case,[1] which were photomicrographs of the biopsy taken in July 1956. Fig 3 of the first article is here reproduced (Fig. 2).

The child, now 4 years and 10 months old, is in excellent health. She is of normal height and weight for her age, bright and active, and shows no signs on clinical examination of the severe illness through which she passed 3½ years ago.

It will be recalled that the full syndrome of *Capillaria hepatica* infection in man includes eosinophilia and hyperglobulinaemia. A comparison of the blood findings at the height of the illness and at the present time is as follows:

	1956	1959
Cephalin cholesterol ..	Positive	Slight flocculation after 48 hours
Thymol turbidity ..	20 units	5 units
Thymol flocculation ..	Positive+++	Negative
Takata Ara	Positive	Negative
Gamma globulin ..	4·4 g.%	0·9 g.%
Eosinophilia	78%	4%

SUMMARY

A follow-up on a case of *Capillaria hepatica* infestation in man is presented 3½ years after treatment.

The child is now in excellent health.

The liver is normal macroscopically, with minimal periportal fibrosis on microscopy.

The blood findings are normal.

Of the 5 cases recorded in world literature up to 1958, our patient alone has survived.

It appears that the use of antimony as a 'specific' form of therapy has been successful.

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