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Short Report

# Mebendazole in the treatment of mice experimentally infected with *Schistosoma mansoni*

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Recently, AL-WAILI (1987) reported the treatment with mebendazole of 2 patients with *Schistosoma haematobium* infection. The dosage used was 1 g/d of mebendazole orally, given in 2 equal doses. After 10 d no *S. haematobium* eggs were detected in the urine.

This report describes results obtained in mice experimentally infected with *S. mansoni*. Female Swiss outbred mice (about 20 g) were infected subcutaneously with 100±10 cercariae. After 45 d, groups of 10–12 mice were treated for 5 d, by gavage, with mebendazole at doses of 100 and 500 mg/kg/d.

After 7 d from the beginning of treatment the animals were killed and their livers and mesenteric vessels perfused. Oograms were prepared from intestinal fragments. The techniques have been described by PELLEGRINO & KATZ (1968).

As can be seen in the Table, no activity was detected judged by worm numbers and distribution. No dead worms were found in the liver and the oograms were unchanged.

Differences in susceptibility of *S. haematobium* and *S. mansoni* to different schistosomicides has already been reported. The best-known example is trichlorphon, which is very active against *S. haematobium* in experimental and natural infections, but only slightly active against *S. mansoni* (KATZ *et al.*, 1968).

**Table. Schistosomicidal activity of mebendazole (*per os*) in mice experimentally infected with *Schistosoma mansoni*. The mice were killed and examined 7 days after the beginning of treatment.**

| Treatment schedule mg/kg/d × days | Mean no. of worms recovered | Percentage of worms in Mesenteric vessels | Liver |
|---|---|---|---|
| 500×5 | 48·3 | 93·2 | 6·8 |
| Control | 31·5 | 94·3 | 5·7 |
| 100×5 | 21·8 | 83·0 | 17·0 |
| Control | 8·6 | 84·9 | 15·1 |

In conclusion, mebendazole did not show activity against experimental infections of *S. mansoni*, and further experimental and clinical studies must be made on *S. haematobium* infections to confirm its value in their treatment.

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