

LETTER TO THE EDITOR

COMMON SOURCE ATTACK OF *S. MANSONI* IN A SAUDI FAMILY

Sir:

For many years, schistosomiasis has been endemic in Saudi Arabia, which is mostly a desert country situated near two of the world's major schistosomiasis areas: the valleys of the Nile and of the Euphrates. Studies have shown that, in recent years, most schistosomiasis infections probably were acquired in highly endemic areas lying in the southwestern region of Saudi Arabia (1, 2). The infection rates of *Schistosoma mansoni* and *Schistosoma haematobium*, the two commonest types, vary from 50% in Gizan to 5.0% in Majnaah (3). A recent study at the Diarrhoea Control Centre, Dammam, examined 938 stool specimens from patients of all ages coming from the area. *S. mansoni* was found in 42 (4.5%), of these specimens. This report is a case study of a common source family outbreak of *S. mansoni* in a Saudi family residing in the Eastern Province. The family had visited a schistosomiasis-endemic area in the southwestern region.

Six family members from Dammam, who went for a holiday in August, reported with diarrhoea in October 1983. They had spent a month at Beljarashi, a southwestern city bordering Yemen Arab Republic and situated approximately 2,000 feet above sea level. All six patients had gone swimming at least three times in the Al Habaga and Reja Al Janabin Rivers. Each time, they had swum for about an hour, and later complained of itching followed by development of a rash all over the body. Upon returning home, all six had diarrhoea, abdominal pain, nausea and vomiting. Three of the young brothers (P-1, P-2 and P-3) were brought to the out-patient clinic of the Diarrhoea Control Centre, Dammam from October 23-25. One (P-3) had a fever, and was transferred to the fever hospital, Dammam for admission. *S. mansoni* ova were detected from the stool of two (P-1 and P-2). When questioned, the boys' father mentioned that three of his nephews also had been swimming with his sons, and he brought them in for tests. All three (P-4, P-5 and P-6) had *S. mansoni* ova in their stools. For logistic reasons, stool examinations were not done on other family members. All five patients positive for *S. mansoni* had a history of diarrhoea for 6-15 days, with abdominal pain and vomiting. Only one patient,

(P-1) was moderately dehydrated. All passed loose, mucoid stools and showed WBC's and RBC's in the range of, respectively, 30-70 and 2-30 per H.P.F. examined. At least four showed a significant number of macrophages. Stools of two (P-4 and P-6) also contained *Trichomonas hominis*, *Entamoeba histolytica* and *Escherichia coli*.

The patient (P-3) who was negative for *S. mansoni* had been treated two weeks before coming to the clinic with an anti-bilharzia drug. In one patient (P-2) who complained of occasional diarrhoea and abdominal pain, *S. mansoni* was detected from stool three times, approximately one and three months apart.

All six patients showed the characteristic trematode infection with cercarial dermatitis (swimmer's itch) within 24 hours of each exposure. This was followed, in 45-60 days, by the toxemic phase, characterized by enteritis, with bloody stool, abdominal pain, nausea and vomiting. Only one patient (P-2) developed acute intestinal disease, with dysentery, anorexia, and weight loss. He also showed *S. mansoni* ova in his stool, even on a third examination after three months.

References

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