

## SEATO MEDICAL RESEARCH STUDY ON TREMATODES

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### Objective:

Cases of schistosomiasis due to *S. japonicum* have recently been discovered in the Mekong River area of Laos bordering N.E. Thailand (Most, 1966). Since any new focus of the disease in S.E. Asia is a cause for concern, an investigation on the epidemiology of the infection in N.E. Thailand was undertaken. This report gives the results of the initial survey.

### Description and Results:

Patients in the Ubol Provincial Hospital and villagers living between Ubol and the Thai-Laotian border were studied. All individuals were skin tested with an adults *S. mansoni* antigen according to the method of Kagan, et al (1961). An attempt was made to obtain MIF preserved stool specimens from all individuals skin tested. The stools of those individuals who showed a positive skin test, i.e., a wheal at least twice the size of the saline controls, were examined by formalin-ether concentration and sedimentation followed by the hatching of any miracidia that might be present. The results are shown in the following table.

	Number examined	Number skin test positive	Number parasitologically positive
Thai patients in Ubol hospital	43	3 (7.0%)	0
Laotian patients in Ubol hospital	6	4	1
Chongmek village	73	7 (9.6%)	1
Fangloom village	53	1 (1.9%)	0
Phiboonmangsa-harn village	98	8 (8.2%)	0
<b>Total</b>	<b>273</b>	<b>23 (8.4%)</b>	<b>2 (0.7%)</b>

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The four skin testive Laotian patients in the Ubol Hospital were suffering from splenomegaly of undetermined cause. In one of these patients, a 33-year old female, miracidia were found on hatching, and on many occasions S. japonicum eggs were seen in the concentrated stools. In the second parasitologically positive case, a 28-year old Thai female from Chongmek, several miracidia were seen by the hatching technique, and S. japonicum ova were found after repeated examination of the concentrated stool specimens.

It would thus appear from the results of this preliminary study that, while infections are present in this area of Thailand, they are very light, and that the hatching technique would seem the best method for their detection. Interpretation of the skin test reactions is difficult in view of the possible cross-reaction in people sensitized to bovine and other animal schistosomes. It is also probable that man is, at present, only incidentally infected and that the main cycle of infection is maintained by one or more animals in the area. However, there is a vast development program now being implemented in N.E. Thailand with construction of many dams for agricultural irrigation. This might well change the environmental conditions to favor an increase of human infection. In view of this, it would seem important to determine not only the true extent of the epidemicsity in man, but also the vector and possible animal reservoirs.

Publication: Desowitz, R.S., Harinasuta, C., Krustachue, M., Chesdaphan, C. and Jetanesen, S. (1967) Trans. Roy. Soc. trop. Med. & Hyg., 61, 153. Desowitz, R.S., Harinasuta, C., Krustachue, M., Chesdaphan, C., and Jetanesen, S., 1967. The results of a stool and skin test survey for schistosomiasis in villages near the Mekong River of North-East Thailand. Trans. Roy. Soc. Trop. Med. Hyg., 61, 153-154.

SEATO MEDICAL RESEARCH STUDY ON VENEREAL DISEASES

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**Period of Report:** 1 April 1966 — March 1967

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